



**The World Bank Group**  
**Social Protection and Labor Global Practice**  
**Europe & Central Asia Region**

## **PORTRAITS OF LABOR MARKET EXCLUSION 2.0**

### **Country Policy Paper (CPP) for Poland**

**Lead Authors:** Frieda Vandeninden and Karolina Goraus-Tanska

**Project team:** Aylin Isik-Dikmelik (Team Leader), Mirey Ovadiya (Team Leader), Sandor Karacsony, Karolina Goraus-Tanska, Natalia Millán, and Frieda Vandeninden

**July 2017**



Public Disclosure Authorized

Public Disclosure Authorized

Public Disclosure Authorized

Public Disclosure Authorized

© 2017 International Bank for Reconstruction and Development / The World Bank  
1818 H Street, NW  
Washington, DC 20433  
Telephone: 202-473-1000  
Internet: [www.worldbank.org](http://www.worldbank.org)

The findings, interpretations, and conclusions expressed here do not necessarily reflect the views of the Executive Directors of The World Bank or the governments they represent. The World Bank does not guarantee the accuracy of the data included in this work. The boundaries, colors, denominations, and other information shown on any map in this work do not imply any judgment on the part of The World Bank concerning the legal status of any territory or the endorsement or acceptance of such boundaries.

The European Commission support for the production of this publication does not constitute endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

#### **Rights and Permissions**

The material in this work is subject to copyright. Because the World Bank encourages dissemination of its knowledge, this work may be reproduced, in whole or in part, for noncommercial purposes as long as full attribution to this work is given.

Any queries on rights and licenses, including subsidiary rights, should be addressed to the Office of the Publisher, The World Bank, 1818 H Street NW, Washington, DC 20433, USA; fax: 202-522-2422; e-mail: [pubrights@worldbank.org](mailto:pubrights@worldbank.org).

Photos: © World Bank  
Cover design/layout and editing: Nita Congress

## Acknowledgements

This report was produced by a World Bank team co-led by Aylin Isik-Dikmelik (Senior Economist) and Mirey Ovadiya (Senior Social Protection Specialist) including Frieda Vandeninden (Economist), Karolina Marta Goraus (Economist), Natalia Millan (Economist), and Sandor Karacsony (Economist).

This report is one of the twelve country specific papers produced under a joint European Commission (EC) World Bank and Organisation for Economic Cooperation and Development (OECD) project and applies a joint methodology on country specific cases as developed in OECD-World Bank (2016). This report would not have been possible without the financial and technical support of the EC's Directorate General of Employment, Social Affairs and Inclusion. Katalin Szatmari (Policy Officer, Directorate C1-Social Investment Strategy), led the efforts from the Directorate General of Employment, Social Affairs and Social Inclusion. Herwig Immervoll (Senior Social Policy Economist, ELS/SPD) led the OECD team to undertake the activities under the project in six countries. The European Commission team included Suzanna Conze (Policy Officer, formerly Directorate C1-Social Investment Strategy), Manuela Geleng (Head of Unit, Directorate C1-Social Investment Strategy), Ioana-Maria Gligor (Deputy Head of Unit, B5-Employment), Georgi Karaghiozov (Policy Officer, Directorate C1-Social Investment Strategy), Dora Krumova (Programme Manager, B5-Employment), Katharina Muhr (Policy Officer-Directorate C5-Employment), Raya Raychinova (Program Assistant, B5-Employment), Alexandra Tamasan (Policy Officer, formerly Directorate C1-Social Investment Strategy), Georgios Taskoudis (Policy Officer, C4-Employment), Miriam Toplanska (Policy Analyst, Directorate C1-Social Investment Strategy), and Iva Zelic (Policy Officer, Directorate C5-Employment). The OECD team included James Browne, Nicola Düll, Rodrigo Fernandez, Daniele Pacifico, and Céline Thévenot. The team is grateful to the EC and OECD teams for the close collaboration exhibited under this project.

Andrew D. Mason (Practice Manager, Europe and Central Asia Social Protection and Jobs Practice), Arup Banerji (Regional Director, European Union) and Cem Mete (Practice Manager, Europe and Central Asia Social Protection and Jobs Practice) provided overall guidance to the study. Peer review comments were received at various stages from Christian Bodewig (Program Leader), Aline Couduel (Lead Economist), Victoria Levin (Senior Economist), Matteo Morgandi (Senior Economist), Cristobal Ridao-Cano (Lead Economist), Victoria Strokova (Economist), Ramya Sundaram (Senior Economist); and Trang Van Nguyen (Senior Economist).

The team benefitted from extensive interaction and consultations with representatives of Ministry of Family, Labor and Social Policy and Public Employment Services. In particular, the team would like to thank, Malgorzata Sarzalska, Tomasz Jegier, Monika Siergiejuk, Aleksandra Jawornicka-Nowosad, and Maciej Banaś, who provided guidance, data and specific inputs towards the finalization of the report.

Finally, the team is grateful to Eurostat for the provision of the EU-SILC micro data used in the analysis in this report.

## Contents

Acknowledgements .....	3
1. Introduction.....	6
2. Country context: The Polish labor market .....	7
3. Understanding employment barriers – A framework.....	16
3.1 Population of analysis: Individuals with potential labor market difficulties .....	17
3.2 Employment Barrier Indicators .....	21
4. Results of the analysis: Portraits of labor market exclusion in Poland.....	26
5. Priority groups in the Polish labor market.....	33
6. Policies and measures targeting the employment barriers of priority groups .....	39
6.1 Framework and approach .....	39
6.2 Overview of activation and employment support programs and policies .....	40
6.2.1 Institutional and policy context.....	40
6.2.2 Overview of ALMP programs.....	45
6.3 Activation and employment support policies vis-à-vis priority groups’ needs .....	51
7. Conclusions and Policy Directions .....	59
References.....	62
Annex 1. Advantages and disadvantages of the EU-SILC Data.....	66
Annex 2: Definitions of Employment Barrier Framework Indicators.....	68
Annex 3: Latent Class Analysis results of EU SILC 2013 respondents who are out-of-work or marginally employed .....	71
Annex 4. Latent Class Analysis model selection for Poland .....	76
Annex 5. Categorization and Definitions of Labor Market Programs based on Eurostat.....	79
Annex 6. Detailed list of labor market services and measures: Typologies, spending, and coverage for Poland.....	80

## Tables

Table 1. Characterization of the target population and working-age population, according to barrier indicators (percent) .....	24
Table 2. A cross-country comparison of barriers faced by the target groups .....	25
Table 3. Employment barriers faced by excluded groups in the Polish labor market.....	27
Table 4: The priority groups’ employment barriers and characteristics.....	34

## Figures

Figure 1: Employment (ages 15 to 64) in Poland and EU-28 .....	8
----------------------------------------------------------------	---

Figure 2: Unemployment (ages 15 to 64) in Poland and EU-28 .....	9
Figure 3: Unemployment among the population (ages 15 to 64), by education level .....	10
Figure 4: Activity rates by sex and age in Poland (POL) and EU-28.....	11
Figure 5: Part-time employment as a percentage of total employment by sex, EU member states, and 2015.....	12
Figure 6: Temporary employees as a percentage of total employees, EU member states .....	13
Figure 7: Long-term unemployment rates by voivodships as of September 2016.....	14
Figure 8: At-risk-of-poverty and in-work at-risk-of-poverty rates in EU member states, 2015 .....	15
Figure 9. Population by sex and age in 2015 and projection for 2050, Poland.....	16
Figure 10: The composition of the working-age population in Poland (left) and out of work (right).....	19
Figure 11. Labor market attachment status of working-age* population, Poland and other EU countries under study (percent) .....	20
Figure 12. Composition of the persistently out of-work population by labor market status, Poland and other EU countries under study (as a percentage of working age) .....	21
Figure 13: Employment Barrier Framework .....	22
Figure 14. Latent groups within the Polish target population.....	26
Figure 15. Number of barriers faced by individuals in latent groups .....	28
Figure 16: Linkages between Employment Barriers and AESPs .....	40
Figure 17. Composition of labor market spending as percentage of GDP).....	46
Figure 18. Detailed composition of labor market programs, in percentage of total labor market expenditure, 2014 .....	47
Figure 19. Number of beneficiaries (entrants) of selected ALMPs .....	49
Figure 20. Profile of ALMPs beneficiaries by age and gender, as a share of total beneficiaries (2015) .....	50
Figure 21. Profile of ALMPs beneficiaries by duration of unemployment and urbanization, as a share of total beneficiaries (2015) .....	51

## Boxes

Box 1: Definition of target population .....	18
Box 2. Definitions of employment barrier indicators used for Poland .....	23
Box 3: Active Labor Market Programs in Poland.....	48

## 1. Introduction

**Successful labor market inclusion requires a better understanding of who the labor market vulnerable are.** People who are out of work are not all the same: they can be middle-aged individuals and early retirees, as well as young adults neither working nor receiving education. At the same time, there may be other types of vulnerability in the labor market: some people take part in temporary or unstable employment, work a reduced number of hours, or earn very low incomes despite being engaged in full time work. Considering the priorities of the inclusive growth pillar of the Europe 2020 Strategy<sup>1</sup>, and potential negative impacts of labor market vulnerability on long-term growth, it is worth examining who the labor market vulnerable in Europe are and why they are out of work or are precariously employed. While some statistics on broad groups (youth) exist, deeper analysis, in particular on the diverse barriers faced by the labor market vulnerable in conjunction with other characteristics, is needed and would constitute an important step forward towards better labor market inclusion.

**In this context, Portraits of Labor Market Exclusion-2—a joint study between the European Commission (EC), the World Bank, and the Organization for Economic Cooperation and Development (OECD)<sup>2</sup>—aims to inform employment support, activation, and social inclusion policy making, through an improved understanding of labor-market barriers.** Covering 12 countries<sup>3</sup>, the study builds on the previous joint EC and World Bank study to map the diversity of profiles of individuals who are out of work in six countries (Sundaram et al., 2014) and other analyses that characterize individuals with labor market difficulties (European Commission, 2012; Ferré et al., 2013; Immervoll, 2013). The study expands the previous analysis by looking at a broader group of labor market vulnerable beyond the out of work to include: those in unstable employment, those with restricted hours, and those with near-zero incomes (i.e. marginally employed individuals). It also refines the analytical methodology by applying an employment barriers framework to facilitate policy making and country-specific application, and to provide a reference point for future methodological extensions.

**Utilizing an advanced statistical method (latent class analysis), the study separates out of work and marginally employed individuals into distinct groups with respect to types of employment barriers faced.** This approach facilitates discussions on the strengths and limitations of existing policy interventions for concrete groups of beneficiaries, and helps inform policy decisions on whether and how to channel additional efforts towards specific groups.

**Addressing the same barrier may require a different set of policies according to the characteristics of the identified groups.** For example, while not having recent work experience may be an employment barrier faced by many individuals, it may require a different approach for

---

<sup>1</sup> Where all European governments have committed to increasing the employment rate (European Commission, 2010).

<sup>2</sup> The activities of the “Understanding Employment Barriers” are financed through separate agreements between the EC and the World Bank and the EC and the OECD respectively. The respective agreements with the EC are titled “Portraits of Labor Market Exclusion 2.0” (EC-World Bank) and “Cooperation with the OECD on Assessing Activating and Enabling Benefits and Services in the EU” (EC-OECD).

<sup>3</sup> The existing analysis in Bulgaria, Estonia, Greece Hungary, Lithuania, and Romania is updated, broadened, and refined with the new methodology; Croatia, Ireland, Italy, Poland, Portugal, and Spain are analyzed for the first time.

inactive mothers compared to young unemployed men. It is therefore important to relate each barrier to specificities of each group. Thus, the study further delves into the results of the latent class analysis (LCA) for the priority groups that are identified in close collaboration with the corresponding country counterparts. Consequently, the study presents a richer and deeper understanding of the barriers, beyond what could be glimpsed through traditional statistics. It also provides an assessment of the adequacy of the policies and programs that are available to respond to the needs of the priority groups.

**The analysis focuses primarily on the supply-side constraints and corresponding policies.** While the study recognizes the essential role demand plays in improving labor market outcomes, analysis of these constraints — which requires a comprehensive approach across multiple facets of the economy — is beyond the scope of this study.

**The study provides a snapshot of the needs of the labor market vulnerable and relevant policies to inform strategic policy choices and directions.** Operationalization of these policy directions (such as improvements in existing programs) requires a sequence of activities including further in-depth analysis using program-level administrative and expenditure data as well as the more commonly used profiling methods. Thus, the conclusions should be interpreted in this light.

**This Country Policy Paper is one of twelve that is under study<sup>4</sup>, and analyzes the out of work and marginally employed population in Poland along with existing activation and employment support policies and programs.** The paper comprises consists of seven sections. Section 2 provides background on the Polish labor market. Section 3 describes the framework and the statistical clustering methodology. Section 4 presents the results, including a description of the identified clusters according to labor market barriers and demographic and socio-economic characteristics. Section 5 expands on this information with a more detailed analysis of the groups that, together with the Government of Poland, have been selected as priority groups for policy and program interventions. Section 6 analyzes the current policies and programs that address the needs of the prioritized groups. Finally, section 7 presents conclusions.

## 2. Country context: The Polish labor market

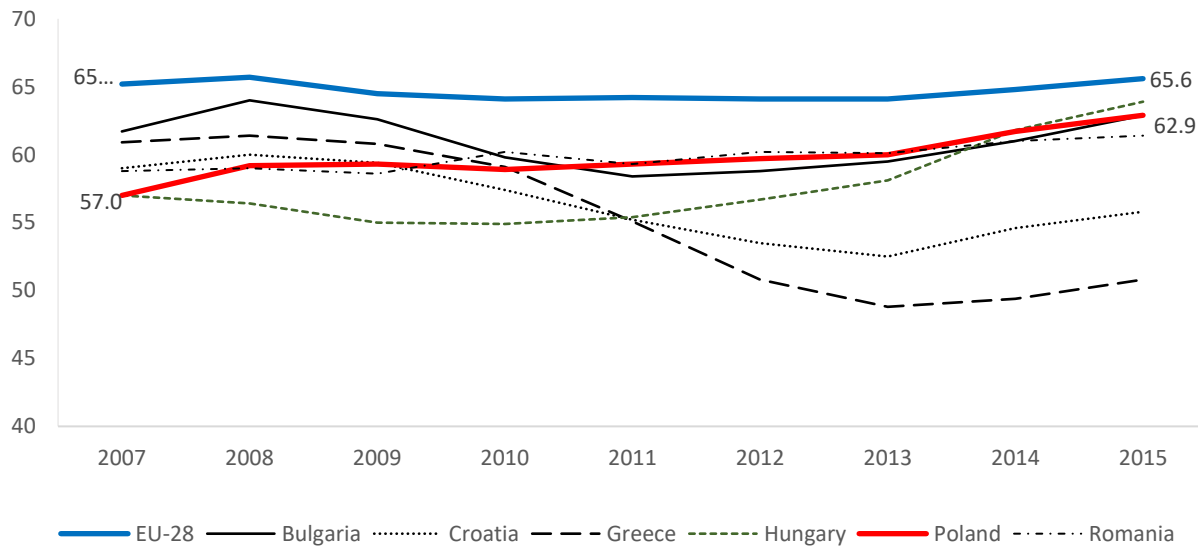
**The Polish labor market was not hit particularly hard by the financial crisis; a strong macroeconomic performance and sustained job creation has in fact allowed the labor market to recover in recent years.** Employment maintained stability following the crisis, and, in 2015, it reached 61.4 percent, placing it on a path to approaching the EU-28 average of 65.6 percent (Figure 1). The activity rate has also increased continuously since 2006 (63.4 percent), reaching 68.1 percent in 2015 (although this rate is still far below the EU-28 average of 72.5 percent). Although the unemployment rate slowly increased during 2008–2013, peaking at 10.3 percent in 2013, the rate has since then rapidly fallen to 7.5 percent in 2015, reaching pre-crisis levels, making it well below the EU-28 average of 9.4 percent (Figure 2). Recent statistics from the Central Statistical Office of

---

<sup>4</sup> Six Country Policy Papers are led by the World Bank and include: Bulgaria, Croatia, Greece, Hungary, Poland, and Romania. The Country Policy Papers led by OECD include: Estonia, Ireland, Italy, Lithuania, Portugal, and Spain.

Poland (GUS) show that the decreasing trend in unemployment has been maintained over 2016 (GUS, 2016a).<sup>5</sup>

**Figure 1: Employment (aged 15 to 64) in Poland and EU-28, 2007-2015<sup>6</sup>**



Note: The EU-28 average is weighted.

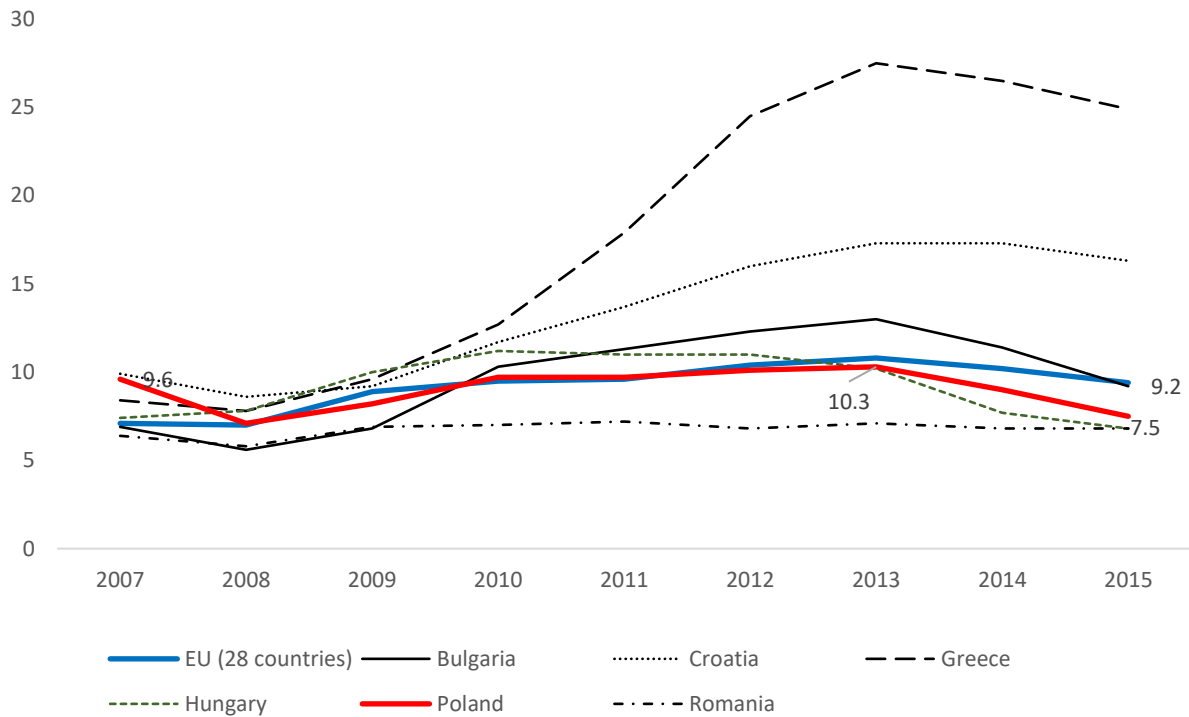
Source: Eurostat

<sup>5</sup> The number of registered unemployed individuals with respect to the active population was 11.5 percent at the end of September 2015, and 8.3 percent at the end of September 2016. Data presented by GUS are not annual but quarterly. The data look at unemployed individuals ages 18 and older until the age of retirement. The data are therefore not comparable with Eurostat data.

<sup>6</sup> The introduction section presents Eurostat figures in which the working age population refers to individuals between 15 and 64 years old. In the rest of the analysis, the working age population will be restricted to individuals ages 18 to 64.



**Figure 2: Unemployment (aged 15 to 64) in Poland and EU-28, 2007-2015**

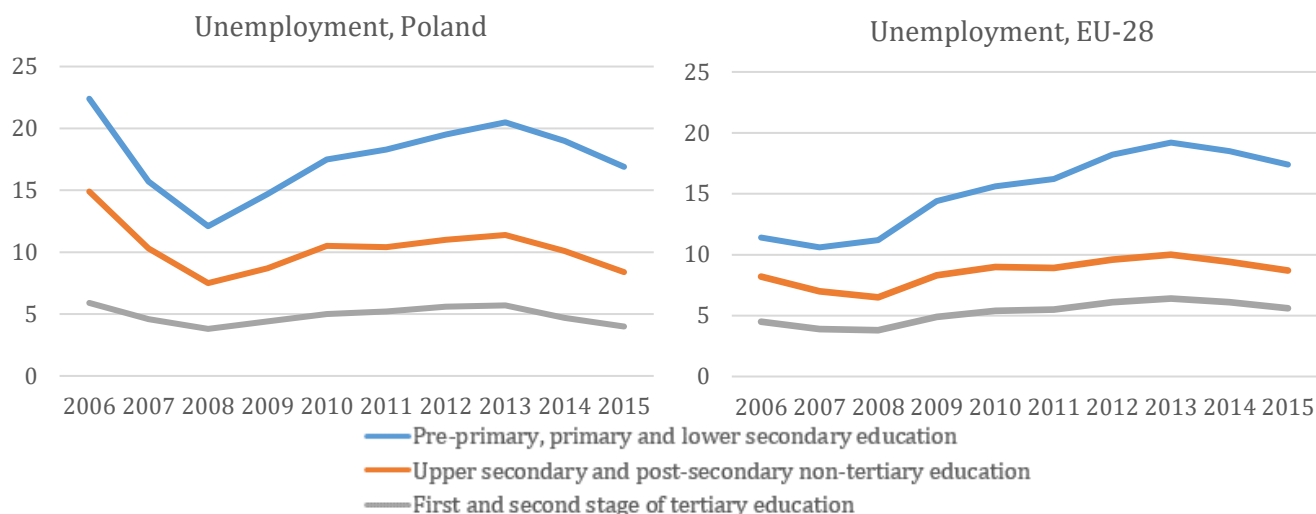


Note: The EU-28 average is weighted.

Source: Eurostat LFS.

**Unemployment is much higher among those with lower education levels.** The crisis impacted individuals quite differently according to their level of education. Similar to the overall EU-28 trend, unemployment rates for those with a low level of education in Poland rose significantly from 2008 to 2013; by contrast, the unemployment rate among individuals with a first or second stage of tertiary education suffered a relatively modest increase during the same period (Figure 3). Since 2013, unemployment rates have been decreasing across all education levels. However, differences by education level remain stark: individuals with a lower secondary education or below that level were unemployed at a rate of 16.9 percent in 2015 versus just 4 percent for those with tertiary education. The share of individuals with no more than a lower secondary education degree or basic vocational training continue to have a high total unemployment rate. This group represents 53.6 percent of the total unemployed in 2016 (GUS, 2016a).

**Figure 3: Unemployment by education level in Poland and EU-28 (aged 15 to 64), 2006-2015**



Note: The EU-28 average is weighted.

Source: Eurostat LFS.

**While economic activity rates have been steadily improving over the past years, they still fall short of the EU-28 average — especially for women.** Even though the share of active Poles within the working-age population (ages 15–64) has been steadily increasing over the years (from 63.1 percent in 2007 to 68.2 percent in 2015), it is still far behind the EU-28 average (72.5 percent in 2015). This low activity is mainly due to the lag in the female employment rate. In 2015, only 56.6 percent of females were employed compared to 69.2 percent of males. Although the rate of male employment in Poland is catching up to the average EU-28 rate (70.8 percent), the employment gap between males and females remains significant, compared to the EU-28 average employment rate for women at 60.4 percent.

**Economic activity rates for Poles in the prime age (25–49 years) of both genders are similar to the EU average; however, significant gaps remain for older age cohorts, especially older women.** By contrast, activity rates for Poles 25 to 49 years of age have followed a trend similar to that of the EU-28 average over the last decade, and in 2015, they even reached a higher level (86.4 percent versus 86 percent for EU-28). However, there are important gaps for certain age groups and for women. Older Poles (ages 50 to 64) had been increasing their activity over the last decade, but remain relatively far from the EU-28 average for both genders. The average effective age of retirement in Poland (59.8 years old in 2011) is relatively low compared to other European countries, and is still below the statutory retirement age of 65 for men and 60 for women. The difference with the European average is even more pronounced for older women, with a gap of 11 percentage points (59.6 percent in EU-28 versus 48.6 percent in Poland) (Figure 4). The statutory retirement age for women has been historically low; although it gradually increased since 2013, recent policy

developments have reverted previous reforms and lowered women’s statutory retirement age to 60 years old and lowered it to 65 years old for men.

**Joblessness among youth remains an important concern in Poland; activity rates are below the EU average and activity rates among young women have also recently declined.** The crisis has particularly affected youth. The unemployment rate for individuals between 15 and 24 year olds has increased by 10 percentage points during the 2008 and 2013 timeframe. Since 2013, however, the youth unemployment rate has decreased to 20.8 percent. Nonetheless, activity rates for both males and females are still not catching up to the EU average (Figure 4). Among young women the activity rate is even trending downward over the last two years, reaching only 26.9 percent in 2015 (versus 38.4 for males) and further widening the gender gap. The risk of becoming jobless after giving birth to a child is relatively high in Poland, due to shortages in the provision of early childcare as a public service (the share of children under 3 years in formal childcare was only 5.4 percent in 2015, which is the one of the lowest among the EU, with the EU28 average of 30.3 percent) (Eurostat 2017).

**Figure 4: Activity rates by sex and age in Poland (POL) and EU-28, 2006-2015**



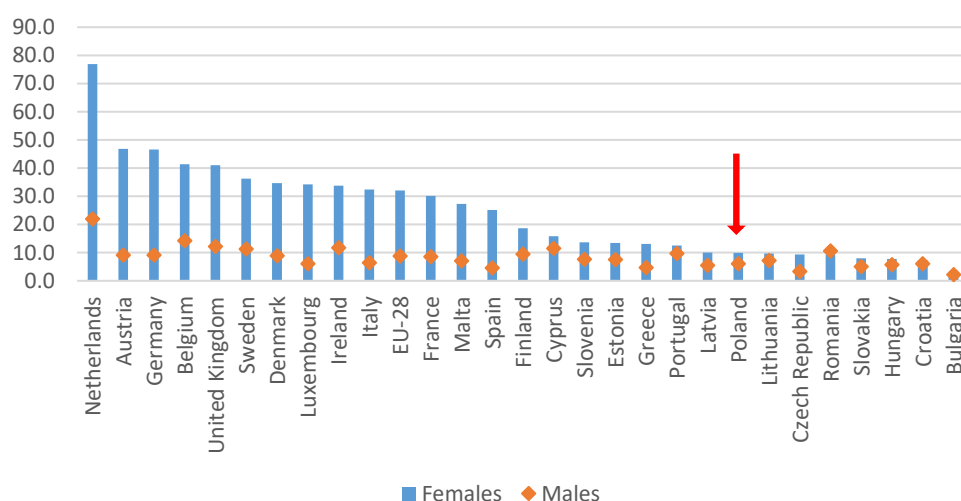
Note: The EU-28 average is weighted.

Source: Eurostat LFS.

**Low activity rates among women, youth, and older individuals may also reflect a labor market that is not conducive to voluntary part-time work.** Voluntary part-time work allows individuals to combine work with other activities, such as education, training, or caring for children or other

family members. It also allows older people or individuals with disabilities to more easily accommodate their physical limitations, or younger retirees to continue to be engaged in work while pursuing more leisure activities. Poland has a low level of part-time work activity as a percentage of total employment compared to other EU countries. This implies that many individuals who may be interested in working, but cannot take on a full-time job, are likely to be excluded from the labor market. Low average wages in Poland partly explain why few Polish can afford to work part-time. Similar to other EU countries, part-time work is primarily selected by women as a way to combine work with family and childcare responsibilities. In 2015, 9.9 percent of the total female employment was made up of part-time workers, whereas part-time male workers were only 6 percent of total male employment (Figure 5).

**Figure 5: Part-time employment as a percentage of total employment by sex, EU member states, 2015**



Note: The EU-28 average is weighted.

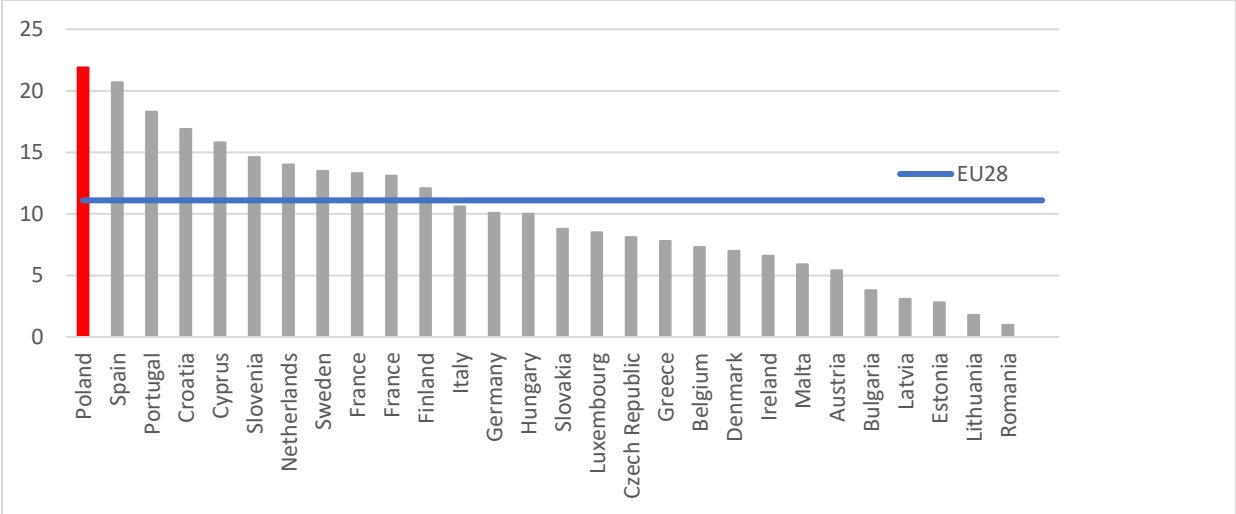
Source: Eurostat LFS.

**The decline in unemployment has been mainly driven by proliferation in temporary contracts, which in turn, exacerbates labor market duality in Poland.** The use of temporary contracts (including both civil law contracts and fixed-term labor contracts) became widespread in the early 2000s while Poland experienced high unemployment rates (in 2006, Poland’s unemployment rate was about 6 percentage points higher than the EU-28 average of 8.2 percent).<sup>7</sup> Between 2001 and 2014, the number of workers hired through temporary contracts increased by 2.3 million, while the number of permanent workers decreased by 0.2 million; overall, temporary

<sup>7</sup> Temporary employment encompasses both civil contracts (CCs) and fixed-term labor code contracts (FTLCs). FTLCs provide similar benefits as indefinite duration labor code contracts (IDLCS), except that they have different termination rules. In contrast, CCs that are flexible forms of employment are not regulated by the labor code, carry a narrow set of benefits, no protection against dismissal, and limited or no accrual of pension rights. The two main forms of CCs are commission contracts (pol. *umowa zlecenia*), and contracts of result (pol. *umowa o dzieło*). Although commission contracts, after recent reforms, have a statutory hourly minimum wage and obligatory social security contributions (up to the level of minimum wage), contracts of result remain fully flexible, and do not carry any benefits (including health insurance).

employment represents the net employment growth of the past decade (Gatti et al., 2014). In 2015, the share of temporary employees compared to the total number of employees reached 22 percent, the highest level among EU-28 countries (Figure 6). This increase has created a high duality on the Polish labor market as temporary contracts (in particular, civil law contracts) provide limited benefits to workers, but little or no social protection and low job security. The relatively low level of unemployment does not reflect the potential precarity risks associated with those contracts, which include the absence of a transition to a permanent job, the disincentive of employers to invest and train workers, and the consecutive human capital erosion, and the low wages.

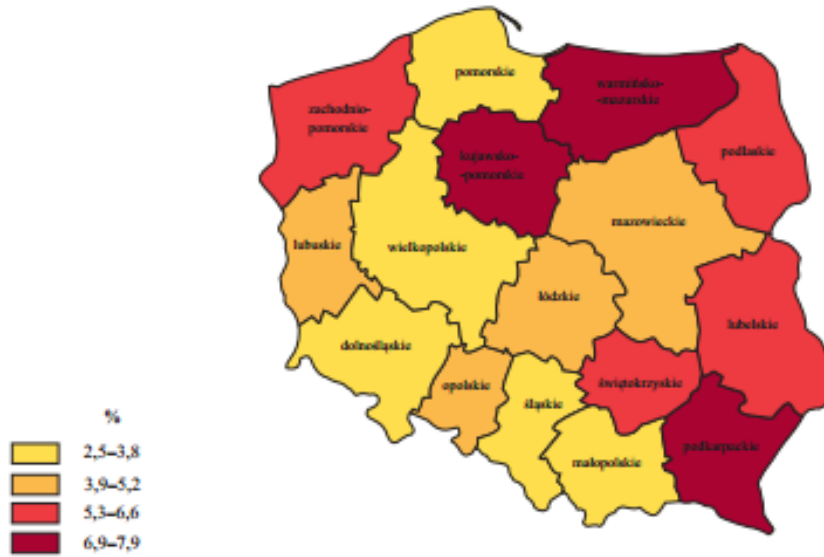
**Figure 6: Temporary employees as a percentage of total employees, EU member states, 2015**



Note: The EU-28 average is weighted.  
 Source: Eurostat LFS.

**The Polish labor market is fragmented at the regional level, with clear differences across municipalities and urban versus rural areas.** The unemployment rate in rural areas is 11 percentage points higher than in urban areas (25.6 percent versus 14.7 percent in 2015). Historically, certain municipalities (voivodships) have been more affected by unemployment, particularly long-term unemployment. The overall share of long-term unemployment is lower than the EU-28 average (3 percent versus 4.5 percent). However, from a regional perspective, some voivodships exhibit unemployment rates at least twice as high as the national average (Figure 7). The duality between rural and urban areas is further exacerbated by low rate of internal mobility of labor (World Bank 2015b).

Figure 7: Long-term unemployment rates by voivodships as of September 2016<sup>8</sup>

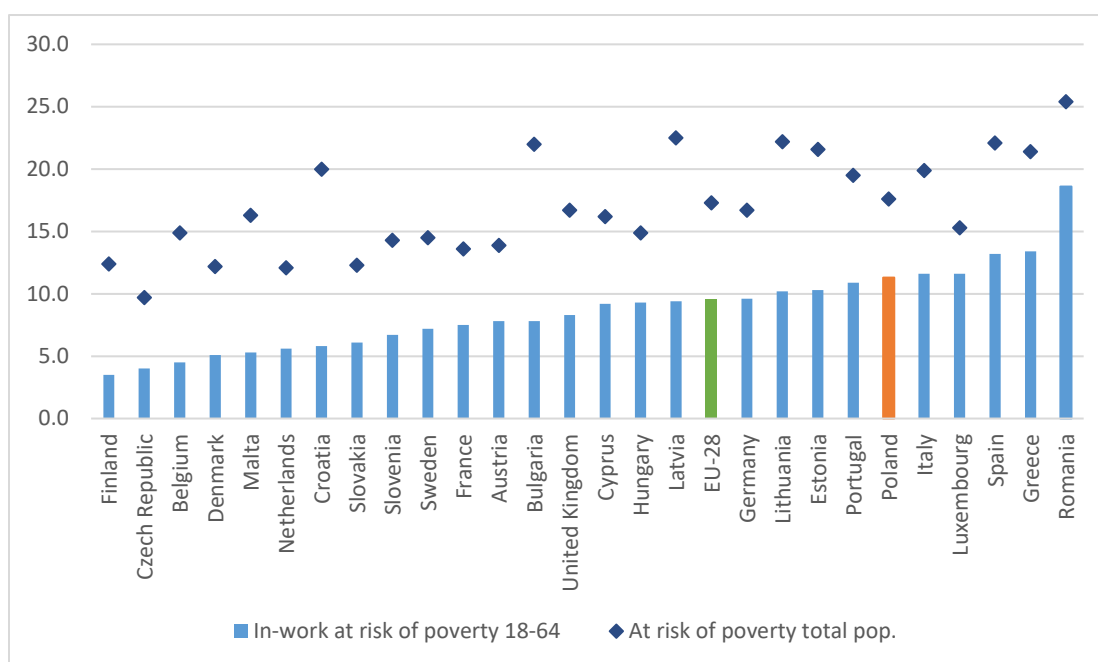


Source: GUS, 2016a

**In addition to concerns about joblessness, Poles face a high risk of poverty even when they are working.** In 2015, in-work poverty — measured according to who meets the at-risk-of-poverty line criteria — was just above the EU-28 average (10.7 percent in Poland versus 9.6 percent in EU-28) (Figure 8). In Poland, in-work poverty is mainly explained by the lack of a secondary earner in a large household, agricultural activities (half of the working poor are employed in agriculture), and low wages. The minimum wage is relatively low, and the share of employees’ compensation in terms of a percentage of GDP is one of the lowest (after Romania and Greece) in the EU-28 (World Bank, 2015; Lewandowski and Kaminska, 2015).

<sup>8</sup> The long-term unemployment rate computed by GUS is defined as the share of individuals ages 18 or more “who stayed in the registers of the county (pol. *powiat*) labor office for the overall period exceeding 12 months in the last two years, excluding the periods of trainee-ship occupational preparation of adult at the workplace” (GUS 2016, p.21).

**Figure 8: At-risk-of-poverty and in-work at-risk-of-poverty rates in EU member states, 2015**

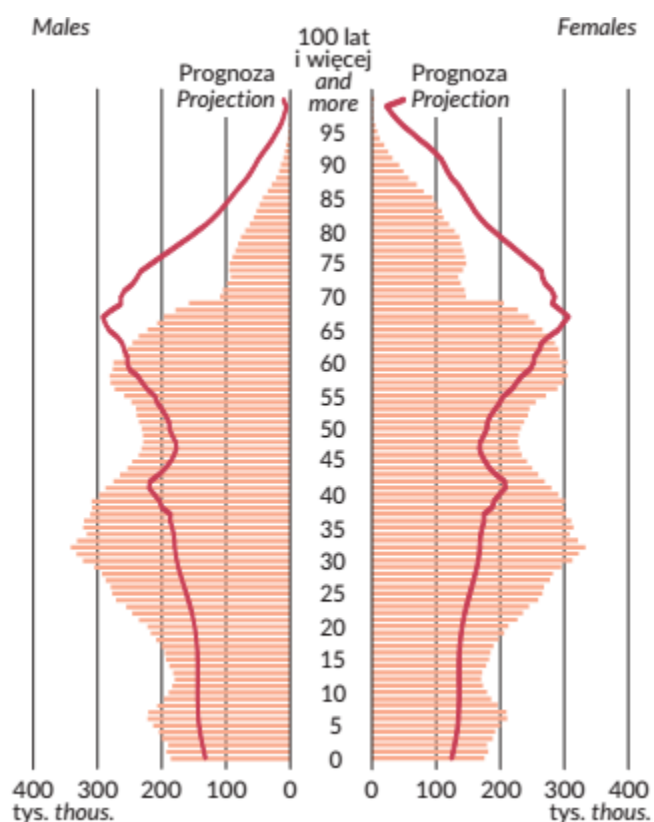


Note: The EU-28 average is weighted; it does not include Ireland, for which data were not available at the time the data were extracted.  
 Source: Eurostat, EU-SILC 2015.

**The Polish labor market and the low activity rate among the working-age population are placed at greater risk by demographic challenges.** The population is aging rapidly (Figure 9). The old-age dependency ratio has been increasing from 20.9 in 2010 to 31 percent in 2015, and is expected to reach 52 percent in 2050 (European Commission 2012b and GUS 2016).<sup>9</sup> Fertility rates are remarkably low and have remained below the simple replacement rate of 2.1 percent, reaching 1.32 in 2015 (Eurostat 2017). In addition, emigration has been increasing over the years; in 2006, about 46,936 Poles left the country; by contrast, 58,837 left in 2016 (Eurostat 2017). The recent outflow of Poles has tended to be compensated for by an exponential increase in immigration; however, the influx of people will not nearly compensate for the downward demographic drivers that will affect the working-age population. These demographic trends will result in fewer workers for the Polish economy, and strain public finances and pensions.

<sup>9</sup> Old-age dependency ratio is the ratio between the number of individuals 65 years of age and older (i.e. the age when people are generally economically inactive) and the number of individuals between 15 and 64 years old. The value is expressed per 100 persons of working age (15–64) (Eurostat definition).

Figure 9. Population in Poland by sex and age in 2015 and projection for 2050



Source: GUS 2016

### 3. Understanding employment barriers – A framework

**Given that there are now fewer workers and more old-age dependents, labor productivity improvements to increase employability and skill sets are key to growing the economy. Growth policies must place at the forefront the need to better utilize Poland’s human capital.** Although statistics based on labor force surveys are categorized in broad groups such as “youth,” “older workers,” and “retirees,” these groups within themselves are not internally homogenous; members within each group presumably face a variety of different barriers to employment. Details on the characteristics of these groups, and the obstacles they face are difficult to pinpoint. An effective strategy is to identify groups that share similar employment constraints and socioeconomic characteristics in an effort to design tailored policy interventions.

**Fundamental to crafting a holistic approach to policymaking for populations who are inactive or marginally employed is gaining a deep understanding of their characteristics and their barriers for entering the labor market.**



**This analysis of Poland yielded categories of out of work and marginally employed individuals into distinct sub-groups based on their socioeconomic characteristics as well as the barriers they face in entering the labor market.** Developing narrower and more distinct categories of individuals who share similar characteristics and face similar constraints provided a stronger evidence base to guide the design of activation and employment support policies. This process also helps policymakers view more critically the existing policies and assess their relevance and appropriateness in light of the needs of the target population and priorities.

**The rationale behind this exercise is to offer governments — in particular, ministries and agencies in charge of labor and employment policy — a powerful statistical tool that will help shed light on the characteristics of out of work or marginally employed individuals and provide the rationale for how needs should be prioritized.** Simply put, this tool will support the design of policies and programs that are suited to the distinct needs of vulnerable individuals with low labor market attachment.

### 3.1 Population of analysis: Individuals with potential labor market difficulties

**The target population — the focus of the current analysis — is a subset of the Polish working age population; this group is 18 to 64 years old, and it excludes full-time students and those serving in the military (compulsory service). The population comprises individuals who self-report being out of work during the entire survey reference period (see Box 1).** The people considered to be “out of work” includes those who are persistently out of work (with no labor employment attachment), as well as those who are marginally employed due to unstable jobs, restricted working hours, or very low earnings.<sup>10</sup> As such, the analysis offers a much broader perspective than common profiling exercises, which use administrative data collected on registered jobseekers.

**This analysis expands upon the scope of traditional profiling exercises.** It includes individuals who face difficulties in entering the labor market as well as those who are not working at an optimal level (in terms of stability, number of hours, or job quality), and those who are not covered by any activation measures or registered as unemployed. Set out below are “labor market status” definitions for those individuals included in the analysis, also, as mentioned above, referred to as the target or reference population.

---

<sup>10</sup> The survey data used were EU-SILC 2013 data, where the reference period is equal to the previous calendar year, i.e., 2012. EU-SILC data is used rather than the LFS due to the opportunity to observe the labor market status of each individual over the course of an entire calendar year as well as the richness of this data on socioeconomic characteristics. The delay in data availability indicates that certain changes in the structure of the labor market may have occurred since then. For a detailed discussion on the advantages and disadvantages of EU-SILC data, see Annex 1. The data used on the policy section is the most recent data available.

### Box 1: Definition of target population

The target population comprises people that are either persistently out of work (no labor attachment) or who are marginally employed. Specifically:

The ***persistently out of work*** are individuals reporting being unemployed or inactive—retired, disabled, engaged in domestic tasks, or other—during each of the 12 months of the reference period of the EU-SILC survey (the calendar year prior to the survey year), in addition to at the time of the survey interview.

***Marginally employed*** can be categorized into three non-mutually exclusive groups\*:

- ***Unstable jobs***: individuals reporting work activity for a maximum five months during the reference period. To reconcile information reported for the income reference period and at the moment of the interview, the following individuals are also considered in this group: workers who report no employment or self-employment during the income reference period but who report being employed or self-employed at the moment of the interview, and workers with between 45 percent and 50 percent of work activity during the income reference period who do not report any work activity in either the last month of the income reference period *or* at the moment of the interview.
- ***Restricted working hours***: identified as individuals who spent most or all of the reference period working *20 hours or less* a week for the following reasons: *illness or disability, family or care duties, absence of other job opportunities*.\*\* We exclude individuals working 20 or fewer hours due to education or training, or for whom the limited working hours is still considered a full-time job.
- ***Negative, zero, or near-zero labor incomes***: identified as individuals reporting some work activity during the income reference period but negative, zero, or near-zero earnings. Specifically, to allow comparison across countries, we adopt the same low-earnings threshold for all countries at EUR 120/month in purchasing power parities with EU-28 as the reference.\*\*\*

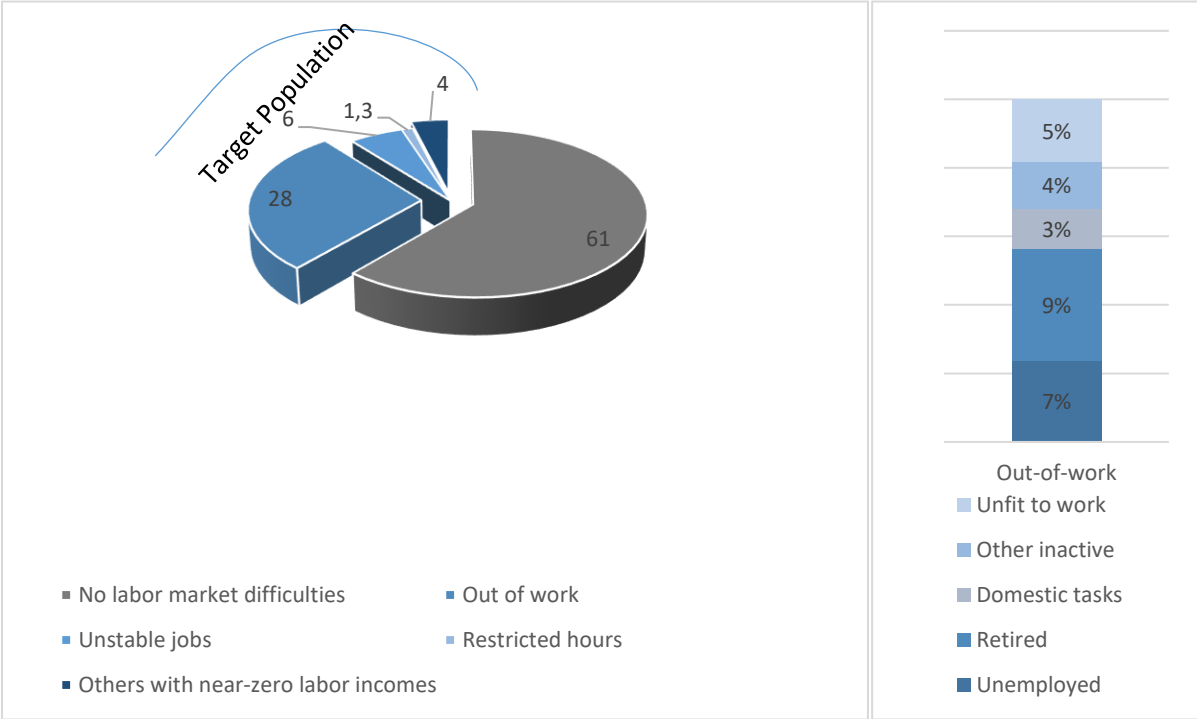
\* The three groups are non-mutually exclusive, since, for instance, an individual in an unstable job could be working restricted hours and could also be earning a very low income. However, individuals are assigned to a single category, starting with unstable jobs and ending with negative, zero or near-zero labor incomes as a residual category.

\*\* The threshold is approximately in-line with the 45 percent threshold that identifies the group with unstable jobs, as individuals who work for 20 hours a week have exploited only 50 percent of their full work capacity. EU-SILC collects information on the number of working hours only for the current job at the moment of the interview. The main activity status reported in each month of the income reference period distinguishes between full-time and part-time activities but does not impose a minimum number of working hours in the choice between the two options. We therefore include in the target population only the individuals who are working 20 hours or less a week at the moment of the interview and who spent at least 6 months of the income reference period working in part-time activities.

\*\*\*2012 is the income reference period for the 2013 EU-SILC survey.

**The target population represents 39 percent of the working-age Polish and does not include full-time students or those in compulsory military service.**<sup>11</sup> The remaining 61 percent consists of individuals with no potential labor market difficulties accessing the labor market and those with “good jobs” (left panel Figure 10). The target population is very heterogeneous and consists of (i) those who are persistently out of work (28 percent) for a variety of reasons including retirement (9 percent), unemployment (7 percent), disability (5 percent), caregiving or domestic duties (3 percent), or other inactivity (4 percent). The target population also includes (ii) those who have unstable jobs (6 percent); (iii) those who have restricted working hours; (1 percent); and (iv) those who have near-zero labor income (4 percent) (Figure 10).

**Figure 10: The composition of the working-age population<sup>12</sup> in Poland (left) and out of work (right)**



Source: World Bank staff calculations based on EU-SILC 2013

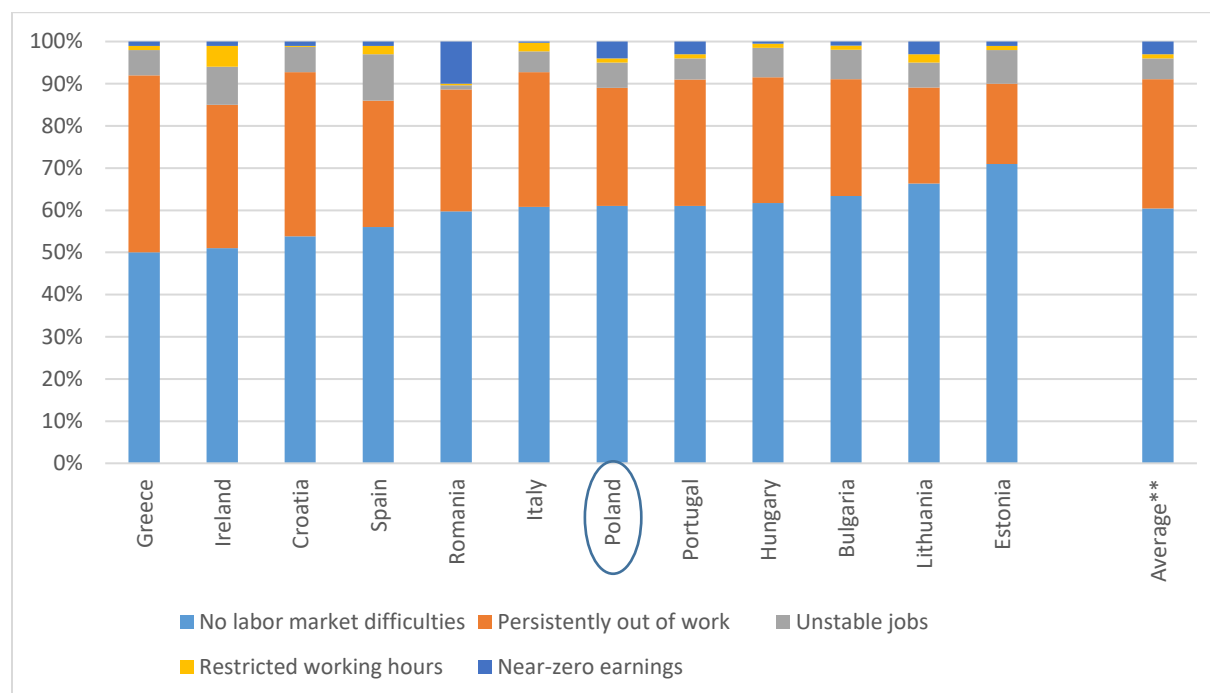
**Regarding the labor market attachment status of its working-age population, Poland does not stand out from the other EU countries under study (Figure 11).** On average, the target population makes up 40 percent of the working-age population of the 12 countries selected to be part of this

<sup>11</sup> Note that there were a significant number of observations with no information on activities. These observations were dropped, because they could not be classified one way or another as having potential labor market difficulties due to lack of activity and other information. These observations did not appear to be systematically missing with respect to other key variables (e.g. region, gender, and so on). Thus, the data were not reweighted.

<sup>12</sup> The working age population also includes individuals with no major labor market difficulties (61 percent in Poland), who may be thought of those having relatively good jobs as well as those who are out of work or are marginally employed.

study: in Poland, the target population represents 39 percent. The out-of-work also make up around 28 percent of the working-age population, in line with the cross-country average (31 percent). The share of individuals in unstable jobs and having restricted working hours is broadly in line with the average for the other countries too. The share of those with near-zero earnings is slightly above the average.

**Figure 11. Labor market attachment status of working-age\* population, Poland and other EU countries under study (percent)**



\* Ages 18-64 and not studying full time or serving compulsory military service.

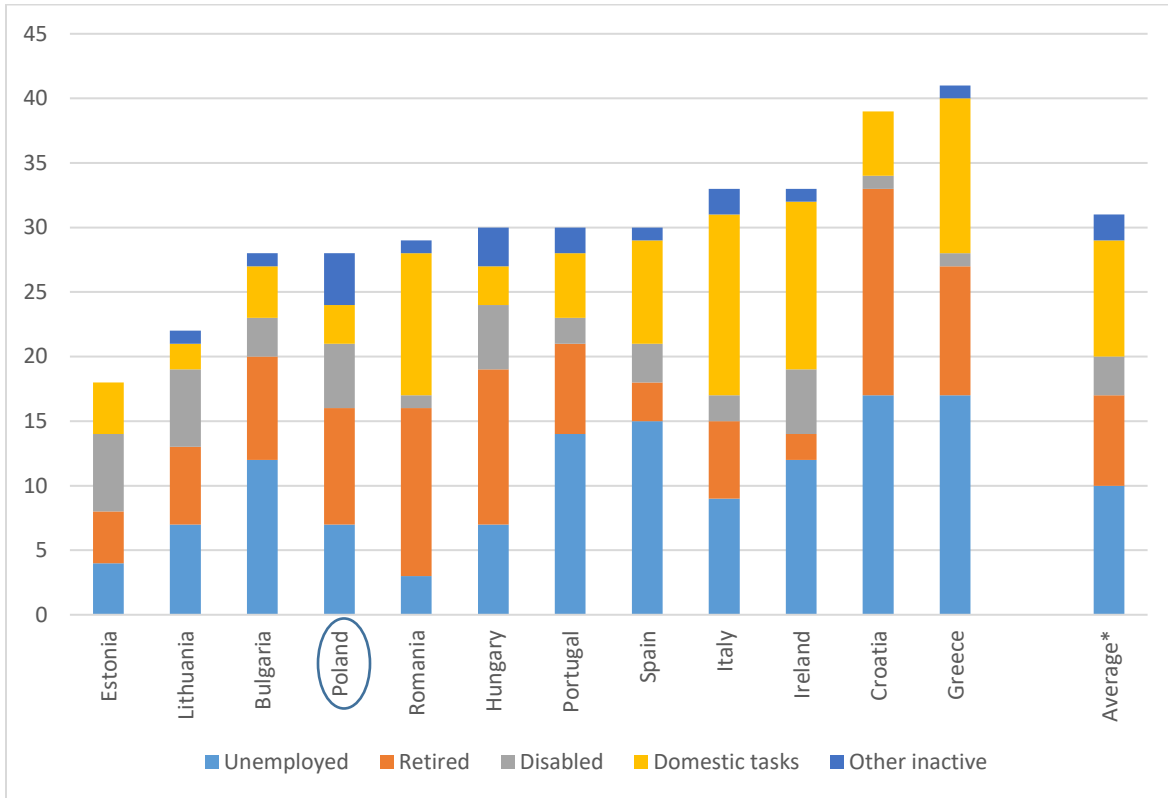
\*\*Weighted average

Source: World Bank staff calculations based on EU-SILC 2013; EU-SILC 2014 for Greece; OECD Draft Country Policy Paper (forthcoming) for Portugal

**Disaggregating the population that is persistently out of work by labor market status reveals a relatively high share of retirees.**<sup>13</sup> Figure 12 shows that 9 percent of the working-age population was retired in Poland, in contrast with 7 percent for the 12 countries. Seven percent of the Polish population of working age is classified as unemployed, which is below the 12-country average of 10 percent. The percentage of working-age individuals reporting to be engaged in domestic tasks in Poland (3 percent) is considerably lower than average (9 percent). Consequently, the total out-of-work population is slightly lower than the 12-country average (28 versus 31 percent). In contrast, the share of individuals with disabilities and “other inactive” is higher than the average.

<sup>13</sup> The out-of-work refer to individuals who report being unemployed or inactive over the entire reference period as well as at the time of the survey interview. Labor market status refers to the main activity reported during the reference period.

**Figure 12. Composition of the persistently out-of-work population by labor market status, Poland and other EU countries under study (as a percentage of working age)**



\*Weighted average.

Source: World Bank staff calculations based on EU-SILC 2013; EU-SILC 2014 for Greece; OECD Draft Country Policy Paper (forthcoming) for Portugal.

### 3.2 Employment Barrier Indicators

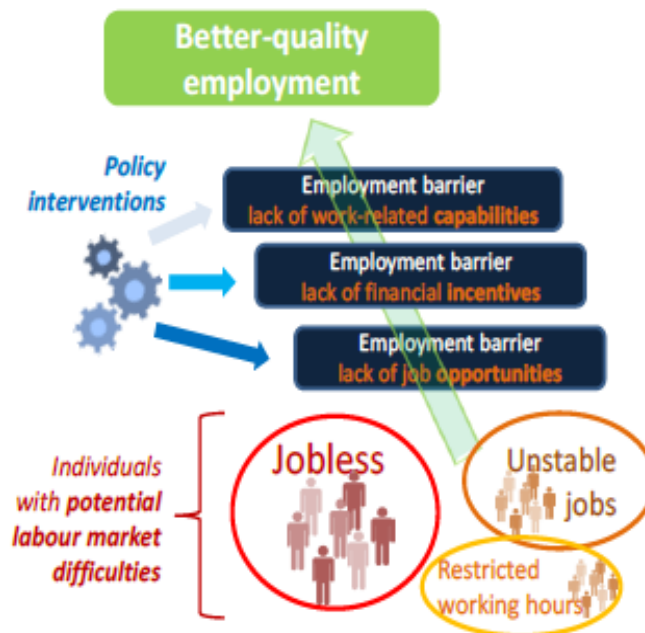
In order to achieve the purpose of segmenting the target population into distinct groups according to labor market barriers and socioeconomic characteristics a set of *indicators* has been formulated to capture the employment barriers that prevent individuals from being partially or fully active within the labor market. These indicators represent the following *three types of employment barriers*, as defined below and illustrated in Figure 13:

- **Insufficient *work-related capabilities*** include factors that may limit an individual's ability to perform certain tasks. These include, for example, low education (as a proxy for skills); low level of work experience; caregiving responsibilities; or limitations in daily activities due to health status.
- **Weak economic *incentives to look for or accept a "good" job***. In this case, an individual may decide not to participate in the labor market if he or she could potentially lose social benefits should he or she accept work or a higher-earning job (substitution effect), or if he or

she already has a high standard of living due to other income sources and can therefore consume more leisure (income effect).

- **Scarce employment opportunities**, which occur where there is a shortage of vacancies in the relevant labor market segment (geographical area or sector); friction in the labor market due to information asymmetries, skills mismatches, discrimination, lack of social capital, or other frictions are present in labor markets.

Figure 13: Employment Barrier Framework



Source: OECD and World Bank (2016).

**The three types of barriers described above cannot be directly observed using survey data. Thus, a set of eight indicators have been carefully constructed using EU-SILC 2013 data in order to proxy for broad measures for each of the three different types of employment barriers.** Together, the eight indicators serve as a starting point for identifying and characterizing the target population according to the barriers they face. However, bear in mind that while these indicators are able to capture broad aspects of the three main types of employment barriers identified in this framework, they do not offer a comprehensive view of labor market barriers. The indicators represent the barriers that we are able to capture using EU-SILC data. Moreover, employment barriers are complex and are often the result of the interaction of different individual and household characteristics including gender, age, socioeconomic status, ethnicity, social and cultural norms, as well as frictions in the labor market that we are unable to capture with household data. The indicators used for Poland are outlined in Box 2 below. Additional information on the definitions and construction of each indicator is available in Annex 2, as well as in the joint methodological paper (OECD and World Bank, 2016).

## Box 2. Definitions of employment barrier indicators used for Poland

The indicators represent the three broad types of employment barriers and are constructed from EU-SILC 2013 data as follows:

*Five indicators are used to proxy for capabilities barriers:*

1. **Low education:** if an individual has an education level lower than upper secondary education in the International Standard Classification of Education (ISCED)-11 classification);
2. **Care responsibilities:** if an individual lives with someone who requires care (i.e., children 12 and under receiving under 30 hours of care a week or elderly with health limitations) and is either the only potential care giver in the household or is reported as inactive or working part time because of care responsibilities;
3. **Health limitations:** if an individual reports some or severe self-perceived limitations in daily activities due to health conditions;
4. **Low relative work experience:** individuals who have worked less than 60 percent of the time since they left full time education;
5. **No recent work experience:**
  - The indicator may represent two situations:
    - (i) those who have worked in the past but have no recent work experience (have not worked for at least 1 month in the last semester of the reference year or at the month of the interview);
    - (ii) those who have never worked;

*Two indicators are used to proxy for incentives barriers:*

6. **High non-labor income:** if household income (excluding those from the individual's work-related activities) is more than 1.6 times higher than the median value in the reference population;
7. **High replacement benefits:** if earnings-replacement benefits (excluding categorical social benefits) are more than 60 percent of an individual's estimated potential earnings in work;

*One indicator is used to proxy for scarce employment opportunities:*

8. **Scarce employment opportunities\*:** if an individual is estimated to have a high probability of being unemployed or involuntarily working part time due to their age, gender, education, and region of residence.

*\*The scarce employment opportunities indicator does not take into account the fact that individuals who are not unemployed but are inactive may nonetheless face scarce opportunities if they were to search for a job.*

**The target and working-age populations are significantly different in terms of the employment barriers faced.** Table 1 shows that the target population is more likely to face each employment barrier compared to the overall working-age population, with the exception of non-labor income, in which case the two groups face this barrier in equal proportions.<sup>14</sup> The most common barrier found in the target population is having no recent work experience (although they may have worked in the past) (66 percent). Almost half of the target population has low relative work experience (43 percent). Thirty-two percent of the target population face scarce job opportunities, meaning that due to their gender, age, education, and the region where they reside, they face a relatively high probability of being or remaining unemployed. Another salient barrier for the target population is related to health limitations (30 percent versus 18 percent for the working-age population). Close to 20 percent have potential disincentives to work due to high income not derived from their own labor; the working-age population has a similar proportion. Nineteen percent of the target population also have low skills versus only 11 percent for the working-age population. For the target population, the share that faces caregiving responsibilities is relatively low (15 percent), and only 10 percent reports to have never worked. Finally, 9 percent in the target population receive a high level of benefits that may be withdrawn or reduced when working full-time in a high quality job versus just 4 percent of the working-age population. Specific sub-groups of the target population face distinctive barriers: e.g. 21 percent of those persistently out of work have a low level education, but only 13 percent of the marginally employed face the same barrier. Health limitations are also more common for the persistently out of work (36 percent) than for the marginally employed (15 percent).

**Table 1. Characterization of the target population and working-age population, according to barrier indicators (percent)**

INDICATOR	Working-age population	Target population		
		All	Persistently out of work	Marginally employed
<i>Capabilities barriers</i>				
1 - Low education	11	19	21	13
2 - Caregiving responsibilities*	6	15	16	12
3 - Health limitations	18	30	36	15
4 - Low relative work experience (WE)	23	43	47	30
5 - No recent WE - Has worked in the past*	26	66	86	12
5 - No recent WE - Has never worked*	4	10	14	0
<i>Incentives barriers</i>				
6 - High non-labor income	19	19	20	18
7 - High earnings replacement (benefits)	4	9	11	3
<i>Opportunity barrier</i>				
8 - Scarce job opportunities	25	32	30	37

\*By definition, this barrier does not affect individuals who are not members of the target population.

<sup>14</sup> The caregiving responsibilities barrier, by definition, does not affect any individuals who are not members of the target population. The same is true of the barriers associated with recent work experience, as the population with “good jobs,” by definition, has recent work experience because they have all worked for at least 1 month during the last semester of the reference year or at the month of the interview. All other barriers can equally affect individuals who have “good jobs” and are therefore not considered part of the target population.



Source: World Bank staff calculations based on EU-SILC 2013

**The target population in Poland stands out with regard to the education and the never worked barriers.** Table 2 shows a cross-country comparison of the employment barrier indicators among the target groups in six EU countries in South, Central, and Eastern Europe. Compared to these six countries, the target group in Poland has the lowest share of individuals with low education (individuals who have not completed upper secondary education) (19 percent). The target population in Poland includes one of the lowest shares of individuals (after Hungary) who have never worked at 10 percent. Compared to other countries, the target group in Poland faces one of the highest share of individuals with caregiving responsibilities (15 percent) and those with health limitations (30 percent).

**Table 2. A cross-country comparison of barriers faced by the target groups**

Country	Bulgaria	Croatia	Greece	Hungary	Poland	Romania	Average	
Share of target group facing each barrier by country (percent)								
<i>Capabilities barriers</i>								
1 -	Low education	38	30	81***	31	19	45	33***
2 -	Caregiving responsibilities	13	12	16	15	15	13	14
3 -	Health limitations	19	33	19	37	30	33	29
4-	Low relative work experience (WE)	N/A*	59	57	N/A*	43	48	52
5 -	No recent WE - Has worked in the past	58**	65	59	73	66	45	62
-	No recent WE - Has never worked	19**	20	26	9	10	28	19
<i>Incentives barriers</i>								
6 -	High non-labor income	18	20	23	19	19	19	20
7 -	High earnings-replacement benefits	6	3	12	14	9	10	9
<i>Opportunity barrier</i>								
8 -	Scarce employment opportunities	47	35	45	41	32	26	38

\* In Bulgaria and Hungary, a significant share of observations on work experience was missing from the EU-SILC 2013 dataset: as a result, the low relative work experience indicator could not be constructed for these countries.

\*\* In Bulgaria, a significant share of observations was missing from the data on activities conducted in the reference year: as a result, the indicator was constructed differently from the way it was done in the other countries.

\*\*\* In the case of Greece, the cut-off for low education has been set at the post-secondary rather than lower secondary level. The reason for the change in the cut-off is that unemployment (employment) rates by education level shows that unemployment (employment) only falls (rises) significantly among individuals who have completed tertiary education.

Source: World Bank staff calculations based on EU-SILC 2013; EU-SILC 2014 for Greece.

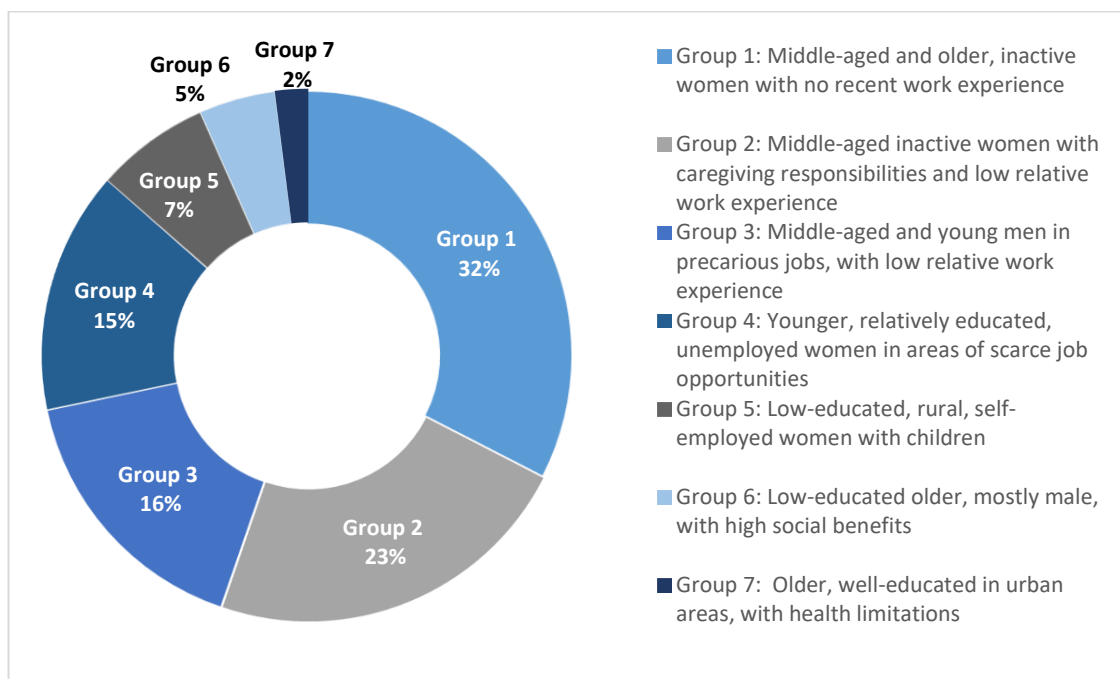
**The statistical clustering method utilized in this paper to analyze the target population is latent class analysis (LCA).** This method exploits the observed proxies of the different categories of employment barriers as captured by the employment barrier framework (Figure 13). LCA is a statistical segmentation technique that enables a characterization of a categorical latent variable (unobserved; in this case, labor market vulnerability) starting from an analysis of relationships among several observed variables (“indicators” as defined earlier). It allows for the statistical

segmentation of the target population into distinct but homogenous sub-groups with similar barriers to employment in each group, while across groups the profile of employment barriers would differ. In contrast to traditional regression analysis, which identifies the effect of one barrier while assuming all the other barriers stay constant, the LCA exploits the interrelationships of the employment barriers, and the joint determination of the observed outcome (Further details on LCA, and selection of indicators is provided at the OECD-World Bank Joint Methodology Paper, 2016.)

#### 4. Results of the analysis: Portraits of labor market exclusion in Poland

Applying the above methodology, latent class analysis yields the classification of the target population into seven different groups in Poland. Each group varies in terms of size (as shown in Figure 14), characteristics of its population, and in the mix of barriers they face.

Figure 14. Latent groups within the Polish target population



Source: World Bank staff calculations based on EU-SILC 2013

Error! Reference source not found. **shows the incidence of barriers within each of the seven groups emerging from the analysis, which have been named<sup>15</sup> according to their most salient characteristics** (i.e. those that have a high probability of occurrence for each group). Annex 3 provides a detailed list of socioeconomic characteristics by group and for the target population,

<sup>15</sup> The titles are somewhat subjective; nevertheless, they mirror the barriers/characteristics that are most common within each group.

including the active covariates that were also used in the model (sex, age group, the presence of children younger than 12 in the household, and the degree of urbanization in the place of residence). The paragraphs below describe in more detail each group's more salient characteristics.

**Table 3. Employment barriers faced by excluded groups in the Polish labor market**

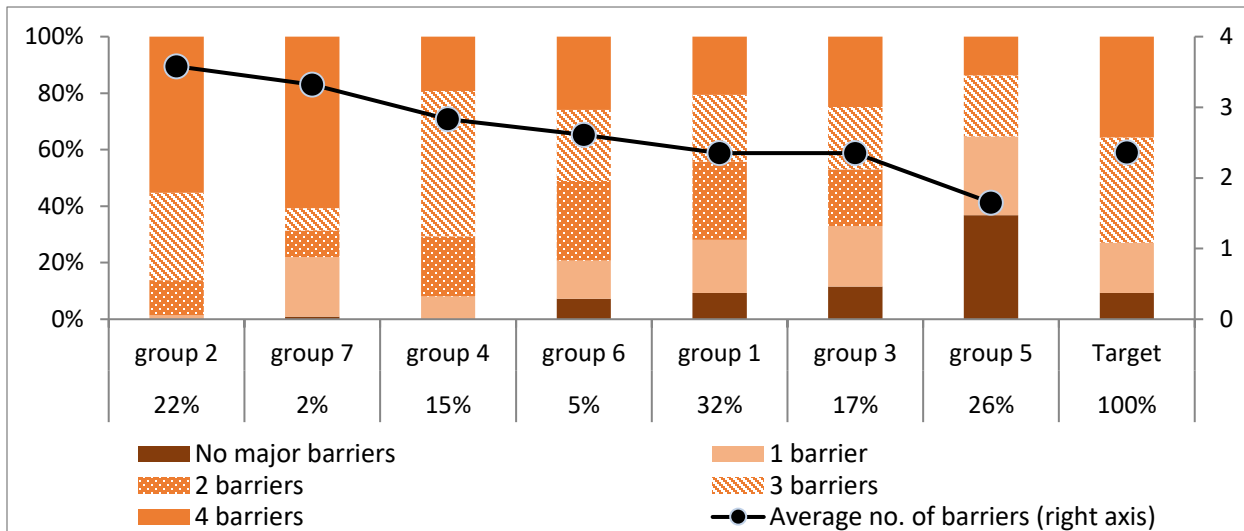
	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Target pop.
Group size (% of target population)	33	23	16	15	7	5	2	100
Number of individuals	648.637	385.349	378.325	325.572	118.141	79.636	5.569	1.941.231
Share of individuals facing each barrier								
<i>Capabilities barriers</i>								
1 - Low education	23	24	31	12	41	45	4	19
2 - Caregiving responsibilities	16	87	22	28	12	0	0	15
3 - Health limitations	40	16	10	2	25	28	90	30
4 - Low relative work experience (WE)	52	88	54	54	4	28	64	43
5 - No recent WE - Has worked in the past	62	60	38	71	30	83	55	66
5 - No recent WE - Has never worked	8	32	12	15	0	8	0	10
<i>Incentives barriers</i>								
6 - High non-labor income	2	8	24	4	2	6	51	19
7 - High earnings replacement (benefits)	0	4	0	4	6	73	67	9
<i>Opportunity barrier</i>								
8 - Scarce employment opportunities	24	54	50	100	40	13	14	32
Average number of barriers per individual	2.4	3.6	2.4	2.8	1.7	2.6	3.3	2.4

Notes: All figures represent percentages. Color shadings identify categories with high (dark blue) and lower (light blue) incidences.

Source: World Bank staff calculations based on EU-SILC 2013

**Figure 15 shows the distribution of the number of barriers faced by individuals in each group (left axis), as well as the average number of barriers faced (right axis).** On average, all individuals in the target population face a total of 2.4 barriers; the highest possible number of barriers that an individual can face is 7. Looking across all seven groups, groups 2 and 7 stand out as having the highest average number of barriers (above 3 for both groups). Group 7 stands out as having a very high proportion of individuals facing 4 or more barriers (60 percent). Group 5, on the other hand, has a particularly low average number of barriers (1.6).

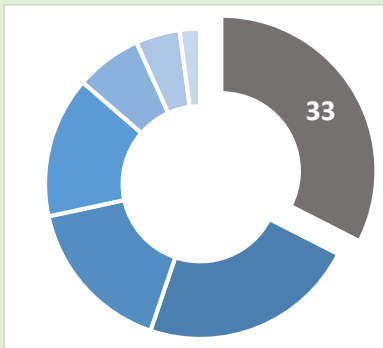
**Figure 15. Number of barriers faced by individuals in latent groups**



Note: Groups are ordered according to the average number of barriers per individual. Percentages in the horizontal axis represent group sizes.

Source: World Bank staff calculations based on EU-SILC 2013

**Group 1: Middle-aged and older, inactive women with no recent work experience (33 percent of the target population)**

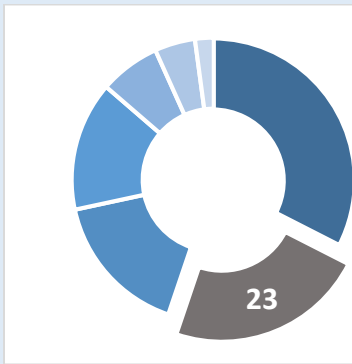


- 55 percent middle-aged (30-55 years), 30 percent older (ages 56-64)
- 20 percent report that they are unfit to work, 18 percent are in domestic tasks, and another 16 percent in unemployment
- 87 percent female
- 40 percent face health limitations
- 71 percent have no recent work experience (62 percent have worked in the past)
- 61 percent live in rural areas
- 47 percent are at risk of poverty
- 62 percent live with children and only 27 percent have children younger than 3
- Only 2 percent has a non-labor income barrier
- None face the high earnings-replacement benefits barrier
- Average number of barriers: 2.4

Group 1, the largest group, makes up one third of the target population. This group is mainly composed of middle-aged women (55 percent); however, 30 percent are also in the 56 to 64 age range (the average age is 45 years). The activity status of this group is quite heterogeneous, although the majority are inactive (20 percent report being unfit to work, another 18 percent are in domestic tasks, 14 percent are retired, and 12 percent in other inactivity). An additional 16 percent are unemployed and 13 percent are self-employed. Most members of this group are married (62 percent), and 40 percent have working partners. They are mainly concentrated in the poorest

income quintile (51 percent) with 47 percent at risk of poverty; none of the members of this group receive earnings replacement barriers that could be dis-incentivizing work. Sixty-eight percent have an upper-secondary education, and 23 percent have a low level of education. This group has one of the lowest percentages of those living with children (after Group 7), with only 27 percent living with children under 2. The most commonly faced barriers within this group are: no recent work experience (62 percent), low relative work experience (52 percent), and health limitations (40 percent).

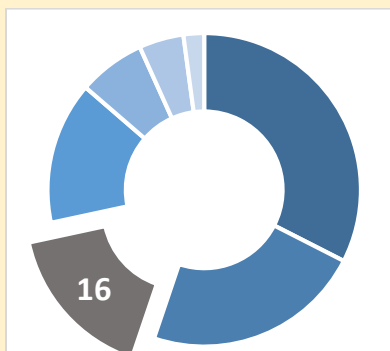
**Group 2: Middle-aged inactive women with caregiving responsibilities and low relative work experience (23 percent of the target population).**



- 91 percent middle-aged (ages 30-55)
- 53 percent in domestic tasks, 25 percent unemployed
- 97 percent female
- 92 percent with children
- 72 percent are married
- 63 percent in rural areas
- 49 percent are at risk of poverty
- 87 percent have caregiving responsibilities
- 88 percent have low relative work experience
- 32 percent have never worked
- Average number of barriers: 3.6

Group 2 comprises middle-aged (91 percent) women (97 percent). They are mostly inactive (73 percent, with 53 engaged in domestic tasks and 18 percent “other inactive.” Twenty five percent report being unemployed. The great majority have children under 12 (92 percent), and most have at least one child who does not attend any formal childcare facilities (71 percent). In part, for this reason, unlike Group 1, 87 percent have caregiving responsibilities. They are married (72 percent) and most have a working spouse (54 percent). Similar to Group 1, half are at risk of poverty (49 percent). It is noteworthy that 32 percent have never worked, which is the highest percentage among all the groups. Few face health limitations (16 percent), disincentives from non-labor income (8 percent), or from earnings-replacement benefits (4 percent). The main barriers for members of this group are caregiving responsibilities (87 percent), low relative work experience (88 percent), and no recent work experience (82 percent, among which 32 percent have never worked).

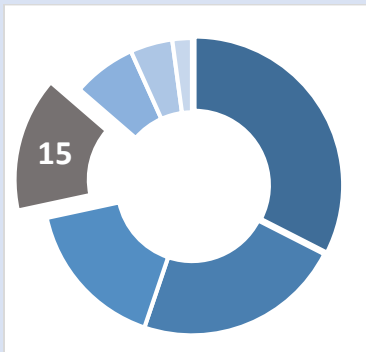
**Group 3: Middle-aged and young men in precarious jobs, with low relative work experience (16 percent of the target population)**



- 54 percent middle-aged (ages 30-55) and 38 percent young (ages 18-29)
- 75 percent male
- 33 percent unemployed during the reference period, but 29 percent are still unemployed at the time of interview
- 41 percent are working at the time of interview
- 59 percent in rural areas
- 30 percent are in unstable jobs and 25 percent have near-zero labor income
- 54 percent have low relative work experience
- 24 percent face the high non-labor income barrier
- 31 percent have low education
- 44 percent live with their parents
- 52 percent are at risk of poverty
- Average number of barriers: 2.4

Group 3 comprises mainly men (75 percent), with an average age of 36. Twenty five percent report having near-zero income (most are self-employed), while 30 percent are in unstable jobs, and 33 percent report being unemployed. Similar to groups 1 and 2, 55 percent are in the bottom income quintile, indicating a relatively high at-risk-of-poverty rate in the group (52 percent). Members of this group reside both in rural and urban areas (59 and 41 percent, respectively). Fifty-seven percent have an upper secondary education, which is relatively low compared to the other groups. Most are married (59 percent), but a relatively large proportion is single (36 percent). They mostly live in households with children (65 percent), and 44 percent live with their parents (which is unusual compared to other groups). This group also has one of the largest shares of individuals with a disincentive from non-labor income (24 percent). The most commonly faced barriers are low relative work experience (54 percent), scarce job opportunities (50 percent), and no recent work experience (38 percent have worked before and 12 percent have never worked).

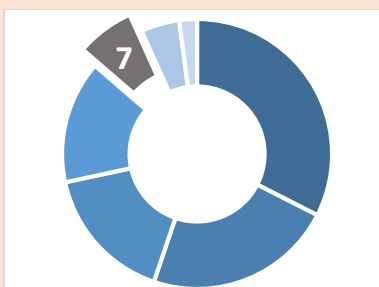
**Group 4: Younger, relatively educated, unemployed women in areas of scarce job opportunities (15 percent)**



- 55 percent young (18-29) and 45 percent middle-aged (30 -55)
- 51 percent unemployed, 20 percent disabled
- 77 percent female
- 81 percent with children in household
- 88 percent with upper secondary diploma or higher education
- 69 percent in rural areas
- 51 percent are at risk of poverty
- Average number of barriers: 2.8

Group 4 consists mainly of women (77 percent) of relatively young age (55 percent between 18 and 29 years old), with an average age of 32 (the lowest among the 7 groups). Half are unemployed (51 percent), most are in long-term unemployment (47 percent). The rest are either disabled (20 percent), or in other inactivity (17 percent). Most are married (60 percent), while 36 percent still live with their parents. The majority (88 percent) live in households with children, yet only 28 percent face a caregiving barrier (about 50 percent live with a potential caregiver (inactive spouse or parent), and only 28 percent have children who are not placed in formal care . They have a decent level of education;88 percent have completed at least an upper secondary education. As in the first three groups, the at-risk-of-poverty rate is relatively high (51 percent). The most commonly faced barriers are scarce job opportunities (100 percent), no recent work experience (71 percent have worked before and 15 percent have never worked) and low relative work experience (54 percent), which potentially reinforce each other.

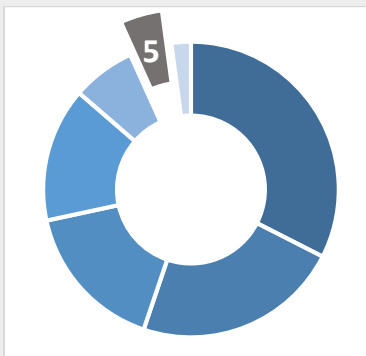
**Group 5: Low-educated, rural, self-employed women with children (7 percent)**



- 69 percent are in prime ages (30 to 55)
- 100 percent are female
- 41 percent have only primary education
- 100 percent reside in intermediate and thinly populated areas
- 64 percent are self-employed, 15 percent are retired
- 44 percent are at risk of poverty
- 4 percent have low relative work experience
- Average number of barriers: 1.7

Group 5 is made up exclusively of women with children who live in rural areas. This group is mainly characterized by a high prevalence of self-employed individuals (64 percent), with near-zero labor income (62 percent). These factors suggest that members are engaged in subsistence agriculture. Another 15 percent report being retired. They are between 30-55 years old (71 percent), with a mean age of 47. They are married (78 percent), and most have a working spouse (61 percent, the highest share among all groups). Only 12 percent face a caregiving responsibilities barrier (those who are working do not face the caregiving barrier by definition). Their at-risk-of-poverty status is slightly lower than in the first four groups, with a poverty rate of 44 percent. They are relatively low educated: 41 percent have only a primary education, which is a relatively high share compared to the overall target group (23 percent). Unlike other groups, few members of this group have a low relative work experience (4 percent versus 43 percent for the target group). The most commonly faced barriers are low education (42 percent) and scarce job opportunities (40 percent).

### Group 6: Low-educated older, mostly male, with high social benefits (5 percent)

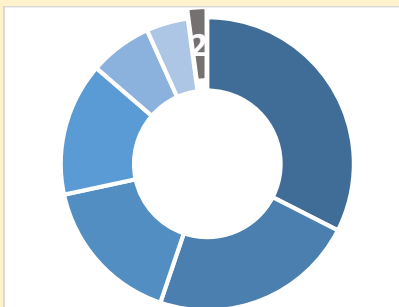


- 78 percent older (ages 56-64)
- 64 percent male
- 45 percent have primary education only
- 49 percent are retired; 20 percent are unfit to work and 20 percent are “other inactive”
- 54 percent receive old-age pension, 23 percent disability benefits, and 14 percent survivor pension
- 83 percent face the high earning-replacement benefits barrier
- 72 percent in intermediate and thinly populated areas
- 17 percent are at risk of poverty
- Average number of barriers: 2.6

Group 6 is composed mainly of older individuals (77 percent) who are either retired (49 percent) or “other inactive;” in this group, 20 percent are unfit to work. Thus, most in this group do not have recent work experience (84 percent). Another 17 percent report severe health limitations. Most of them are married (61 percent), but this group also comprises a higher share of widowers compared to other groups (21 percent). They are relatively high-income, only 11 percent are at risk of poverty. The majority receives social benefits, especially pensions (54 percent) with the average benefit (approximately 6000 euros a year) exceeding the at-risk-of-poverty line. Almost 25 percent of the group benefits from disability transfers and 14 percent from survivor pensions. The main barriers for this group are no recent work experience (84 percent), high earnings replacement (73 percent), and low education (45 percent).



### Group 7: Older, well-educated in urban areas, with health limitations (2 percent)



- 83 percent older (ages 56-64)
- 66 percent female
- 31 percent in part-time jobs, 27 percent in domestic tasks
- 89 percent in densely populated areas
- 11 percent poor
- 27 percent with tertiary education
- 90 percent have health limitations
- 51 percent have high non-labor income
- 67 percent have high earning replacements
- Average number of barriers: 3.32

Group 7 contains mainly older individuals (83 percent), with a widely ranging activity status: part-time employed (31 percent), in domestic tasks (27 percent), or unfit to work (24 percent). They are the most educated; 96 percent have at least an upper secondary education (27 percent have tertiary education). They are married (82 percent) and mainly in the upper quintile of income distribution (75 percent). The majority lives in the Południowy region (53 percent). The main barriers for this group are health limitations (90 percent), low relative work experience (64 percent), high non-labor income (51 percent), and earnings replacement benefits (67 percent).

## 5. Priority groups in the Polish labor market

The analysis has identified distinct and homogenous groups based on their labor market barriers and socioeconomic characteristics that are likely to contribute to their disadvantaged status. For example, large groups of women with no recent work experience face several barriers: specifically, Group 1 consists of middle-aged women some of which have health limitations and Group 2 consists of relatively younger women who have caregiving responsibilities.

- Another group of young women (Group 4) stand out from the analysis; they are mainly well educated; however, 50 percent are nonetheless unemployed, and many have been unemployed on a long-term basis.
- Two groups with precarious employment have also been identified: one comprises middle-aged and young men with unstable jobs and/or near-zero income (Group 3); another comprises a large proportion of women who are working as self-employed and/or earning near-zero incomes (Group 5).
- Two smaller groups of older and wealthier individuals face a high earnings replacement barrier. One is mostly in rural areas where the population has a lower level of education (Group 6) and one is in urban areas (Group 7).

**Given the labor market challenges described in section 2 and in accordance with government consultations, prioritization for activation focuses on two main populations: the inactive and those with unstable and low quality jobs were identified as priority populations.** Unemployment has been historically low over the last five years, while activity rates — especially among women— remain low. In the context of a rapidly aging population and low fertility rates, reducing barriers to employment for inactive persons is absolutely necessary, particularly for women because they are most affected. As such, Group 2 and Group 4 have been selected as part of the priority groups. The government’s other concern is the surge of temporary contracts and the consequent in-job precariousness. In response, the third priority group selected is Group 3.<sup>16</sup>

**As a next step, we delve deeper into the characteristics of these three groups to better understand the barriers they face; doing so will help decision makers inform the design of activation and employment support policies that target the needs of these particular groups.** Table 4<sup>17</sup> provides a subset of policy-relevant indicators and data for the priority groups as well as for the target population as a whole.

**Table 4: The priority groups’ employment barriers and characteristics**

Group name	Group 2: Middle-aged inactive women with caregiving responsibilities and low relative work experience	Group 3: Middle-age and young men in precarious jobs with low relative work experience	Group 4: Younger, relatively educated, unemployed women in areas of scarce job opportunities	Target pop.
Number of individuals	385,349	378,325	325,572	1,941,231
Group size (% of target population)	23	16	15	<b>100</b>
<i>Capabilities barriers</i>				
1 - Low level of education	24	31	12	19
2 - Caregiving responsibilities	87	22	28	15
3 - Health limitations	16	10	2	30
4 - Low relative work experience (WE)	88	54	54	43
5 - No recent WE - Has worked in the past	60	38	71	66
5 - No recent WE - Has never worked	32	12	15	10
<i>Incentives barriers</i>				
6 - High non-labor income	8	24	4	19
7 - High earnings-replacement benefits	4	0	4	9
<i>Opportunity barrier</i>				

<sup>16</sup> The activation of older men and women (Groups 6 and 7) is not a priority given their characteristics (relatively non-poor groups) and the low probability that they can increase their activity rates. Self-employed women (Group 5) are also given a lower activation priority due to their self-employed status. Group 1 has a relatively high number of older women with health limitations and/or women who are close to retirement age.

<sup>17</sup> Table 6 draws on the summary data provided by Annex 3; this table includes only variables with salient characteristics that have bearings on the priority groups.

8 - Scarce employment opportunities	54	50	100	32
<i>Average number of barriers</i>	3.58	2.35	2.83	2,9

### Socioeconomic characteristics of priority groups

<i>Women*</i>	97	25	77	75
<i>Children younger than 12 in household*</i>	92	65	81	74
<i>Age group*</i>				
Youth (18-29)	8	38	55	22
Middle-aged (30-55)	91	54	45	61
Older (56-64)	1	9	0	17
<i>Average age</i>	37	36	32	47
<i>Degree of urbanization*</i>				
Densely populated	19	26	10	27
Thinly populated	63	59	69	50
<i>Region</i>				
Centralny	18	20	11	19
Południowy	16	17	12	19
Wschodni	24	29	30	19
Północno-zachodni	14	13	14	17
Południowo-zachodni	10	8	13	10
Północny	18	13	20	16
<i>Target group**</i>				
Out of work	88	44	81	73
Unstable jobs	11	30	11	14
Restricted hours	1	1	3	3
Near-zero income	0	25	5	10
<i>Main activity during reference period (more disaggregated)</i>				
Employed full time		0	0	2
Employed part time	1	2	3	2
Self-employed full time	0	20	5	12
Self-employed part time	1	4	2	3
Unemployed	25	33	51	24
Retired	0	3	0	9
Disabled	2	7	1	10
Domestic tasks	53	13	20	24
Other inactive	18	15	17	15
<i>Main activity at moment of interview</i>				
Employed full time	4	12	2	5
Employed part time	1	3	3	4
Self-employed full time	0	22	5	9
Self-employed part time	1	3	2	3
Unemployed	24	29	52	21
Retired	0	3	0	9
Disabled	2	7	1	14
Domestic tasks	51	12	20	25
Other inactive	16	9	13	10
Student	0	0	1	0

<i>Months in unemployment</i>				
Zero months	68	54	38	72
1 to 11 months	8	22	15	10
12 or more	24	23	47	18
<i>Actively searching for a job at time of interview</i>	15	21	46	15
<i>At risk of poverty (60% of median income)</i>	49	52	51	46
<i>At risk of poverty (40% of median income)</i>	16	23	26	11
<i>Income quintile</i>				
Poorest	53	55	55	51
2	25	15	33	26
3	14	6	8	13
4	6	16	3	7
Richest	2	7	1	4
<i>Severe material deprivation</i>	31	24	34	18
<i>Average years of work experience***</i>	8	13	8	14
<i>Education level</i>				
Less than primary	0	1	0	1
Primary	24	21	10	21
Lower secondary	0	9	2	3
Upper secondary	66	57	76	65
Post-secondary	5	4	4	4
Tertiary	6	8	7	6
<i>Severe limitations in daily activities</i>	5	5	1	9
<i>At least one other household member 25 &amp; older working</i>	58	69	65	58
<i>Elderly in the household</i>	12	21	12	20
<i>Children younger than 6 in household</i>	57	46	60	55
<i>Children younger than 3 in household</i>	35	33	42	36
<i>Children younger than 13 in formal childcare</i>				
None	35	24	28	27
Some	36	21	29	28
All	21	20	23	19
NA	8	35	19	25
<i>Household type</i>				
One person	0	0	0	0
Single parent	11	1	7	3
2+ adults, 0 children	6	12	2	6
2+ adults, 1 child	7	8	8	10
2+ adults, 2+ children	76	79	82	81
<i>Live with parents</i>	15	44	36	23
<i>Marital status</i>				
Married	72	59	60	65
Never married	10	36	26	20
Divorced/separated	14	4	11	6
Widow/er	4	1	3	9
<i>Labor market status of spouse/partner</i>				
Working	54	38	44	47
Unemployed	4	5	9	7
Retired	0	2	0	5
Unfit to work	7	3	1	5
Domestic tasks	1	8	2	3

Other inactive	1	3	2	3
No spouse/partner	34	41	42	31
Receives family benefits	38	33	25	23
Average annual value (€)	1139	1049	971	1065
Receives social exclusion benefits	23	17	17	8
Average annual value (€)	531	610	555	687
Receives unemployment benefits	4	8	11	5
Average annual value (€)	869	1.510	1.023	1.691
Receives old-age benefits	0	2	0	26
Average annual value (€)	3.074	4.208	1.931	5.165
Receives survivor benefits	2	0	2	3
Average annual value (€)	2306	1522	1364	3827
Receives sickness benefits	1	2	0	1
Average annual value (€)	864	729	1257	972
Receives disability benefits	4	8	1	14
Average annual value (€)	2.020	2.266	2.369	2.686
Receives education benefits	0	1	2	0
Average annual value(€)	1266	840	1370	1277
Total average annual household income (€)	12.029	14.671	11.862	12.932
Average annual household income (€) from:				
Labor	8.630	10.374	8.327	8.023
Other	270	242	307	238
Benefits	3.128	4.056	3.227	4.669
Average household size	5	5	5	4
Average annual equivalized household income (€)	3.571	4.080	3.264	4.749

\*Included in the LCA model as active covariates.

\*\* Refers to target groups as defined in Section 3

\*\*\*Refers only to individuals who have worked before

Source: World Bank staff calculations based on EU-SILC 2013

**Individuals in the priority groups (Group 2, 3, and 4) share several common features<sup>18</sup> in terms of work experience and job opportunities as well as other demographics.** They all face multiple overlapping barriers with low relative work experience (more than 10 percentage points above the target group). The lack of recent work experience is a common barrier across all three groups. These groups also experience scarce job opportunities— although to a different degree— due to where they live and socioeconomic characteristics. Compared to the target population, these groups tend to live in *thinly populated areas* compared to the target population. In line with the target group average, *most of them are married, have children younger than 12 in the household* (a higher than average level in Groups 2 and 4), and live in households of five persons on average. In general, they are *relatively educated*; the percentage of people with at least an upper-secondary education ranges from 69 percent (Group 3) to 87 percent (Group 4). All priority groups have a large share of individuals *at risk of poverty* (about 50 percent of each group). More than half of individuals in all

<sup>18</sup> While latent class analysis offers the toolkit to describe these groups as distinct ones, this section nevertheless looks at commonalities and distinct features. It is noteworthy from a practical perspective, overlaps are likely to occur in the way policies or programs address key employment constraints. For example, one type of program addresses the same constraint that several groups face. Likewise, similar group features — for example, the geographic concentration of unemployed — will also be relevant when analyzing policies and programs.

three groups are in the bottom income quintile. About one third of individuals in each group live in severe material deprivation, well above the average of target group populations (18 percent). Finally, about one fourth of members in the priority groups receive family benefits (this is due to the high presence of children in each group). The share of beneficiaries of social exclusion benefits is higher than the average for the target group (i.e. 23 percent for Group 3 versus 8 percent for the overall target group), while the share of disability benefits is low for all priority groups.

**Even though some groups may share some similar characteristics (e.g., Groups 2 and 4 are comprised of mostly women), the barriers they face vary significantly.**

- **Group 2** is held back mainly due to caregiving responsibilities (87 percent) and low relative work experience (88 percent). This group also has the highest share of individuals with no work experience at all (32 percent), and 54 percent face scarce employment opportunity. In addition, Group 2 faces the highest number of barriers; on average, members of this group face 3.58 barriers.
- **Group 3** has the lowest share of individuals who are out-of-work because 30 percent are in unstable jobs and another 25 percent are near-zero income earners. Potential policies to help this group would need to focus on improving skills (31 percent have a low level of education, the highest among all groups), but also on ensuring job security. A high turnaround in jobs for this group is evident given the difference between the share of employed individuals during the reference period (29 percent) and the share of employed individuals at the moment of the interview (41 percent). This group also faces a low level of relative work experience (54 percent), probably due to their young age, and scarce employment opportunities (50 percent).
- **Group 4** has the highest rate of unemployed and consists mainly of women (77 percent) in rural areas. Their main barriers are scarce employment opportunities (100 percent) and no recent work experience (86 percent). Despite the record low unemployment rate on average in Poland, important regional differences continue to exist, with some municipalities having an unemployment rate above 20 percent, especially in north-east voivodship Warmińsko-Mazurskie (as depicted in Figure 7 in section 2), which are the municipalities where most of Group 4 women live.

**Some distinct features also differentiate these groups, in terms of gender and activity level.**

Unlike either of the other two priority groups, Group 3 is mainly composed of males and has the lowest share of out-of-work (44 percent against the target group average of 73 percent). Another distinctive characteristic among the groups is the main activity during the reference period: Group 2 has a high share of women with children in *domestic tasks* (51 percent) while Group 3 has a high share of *unemployed* (52 percent). Group 4 records the highest share of individuals *working at the time of interview* (41 percent), but also reports a relatively high share of unemployed (29 percent). Only Group 4 has a significant share of individuals who reported they were *looking for a job* (46 percent, which is well above the average of 15 percent for the target group), as well as a large share of long-term unemployed (47 percent versus 18 percent). Group 4 is also the youngest group (with an average age of 32 versus 47 for the target population).

**Activation policies should address the various barriers of the priority groups in accordance with the characteristics of each group.** Some policies may benefit the needs of several groups (e.g. measures designed to increase work experience would benefit all groups), while others will have a higher impact on a particular group (e.g. measures that reduce caregiving burdens will mainly contribute to helping Group 2 gain work experience). To propose an appropriate mix of new measures, the next section examines how current policies address the employment barriers of the priority groups.

## 6. Policies and measures targeting the employment barriers of priority groups

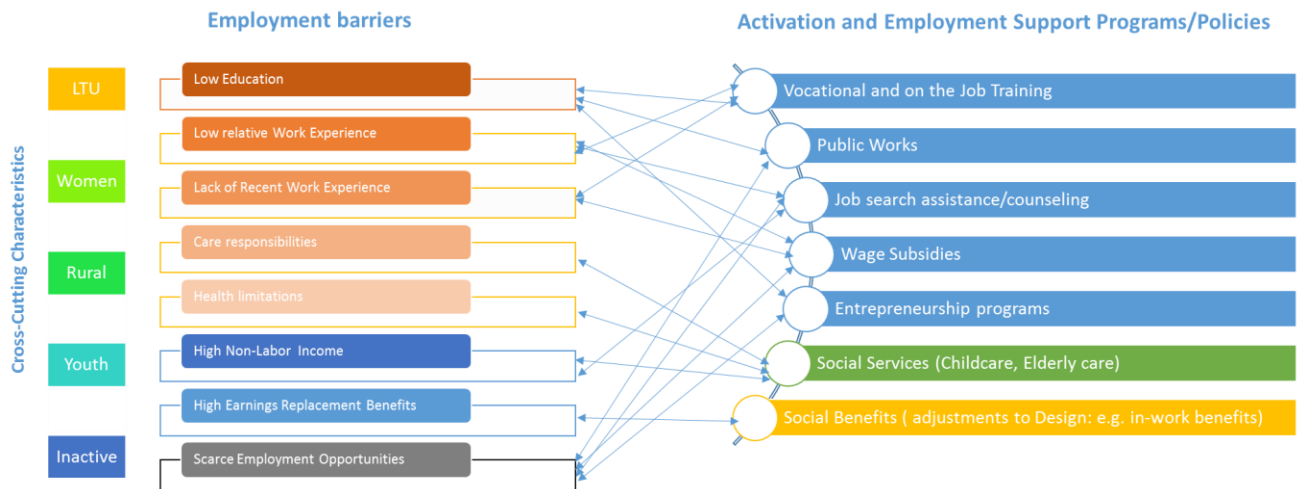
### 6.1 Framework and approach

**Identified groups face multiple barriers simultaneously; hence, they require a tailored mix of services to improve their employability (Figure 16).** The menu of programs/services to address their wide ranging employment barriers fall under three main areas: (i) employment support, (ii) social services, and (iii) social benefits (with the appropriate design elements). These tools support and incentivize individuals' efforts to search for and find jobs, participate productively in society, and improve their self-sufficiency.

**In this section, we review the activation and employment support programs and policies (AESPs) that are most relevant for each of the identified priority groups, paying particular attention to programs that are congruent with the identified employment barriers.** Based on the organizing framework presented in Figure 16, we review programs that address — either solely or in combination with other programs — work-related capability barriers (skills and caregiving responsibilities), and, to the extent possible, we assess whether or not existing programs have adverse incentives on work (e.g. incentive barriers). In addition, we consider whether existing programs address the needs of the relevant cross-cutting groups such as youth, women, long-term unemployed, and those living in rural areas.

**The broad capacity and adequacy of the existing menu of services/active labor market programs (ALMPs) are analyzed after we present a broad overview of existing AESPs and the policy environment.** We look at the needs of the selected priority groups based on their barriers and the existing services' capacity and adequacy to deliver the right package of support to help them find employment. In doing so, we can assess any gaps and determine potential policy directions.

**Figure 16: Linkages between Employment Barriers and AESPs**



## 6.2 Overview of activation and employment support programs and policies

### 6.2.1 Institutional and policy context

**Overall, a wide range of activation and employment support programs/policies exist, but there are potential gaps in the supply, accessibility, and delivery of these programs and policies.** The main programs/policies analyzed are: (i) social benefits (cash and in kind)); (ii) social services; and (iii) employment support, which consists of passive and active labor market measures. Although Poland has a variety of policies and programs in place in all three domains, some gaps still exist either in the coverage, accessibility, or coordination of services. As such, the existing social assistance benefits, while offering some protection, are not necessarily effective in linking the recipients with the labor market. Social services do not appear to provide adequate coverage, and clear gaps are apparent in certain areas such as child care. In contrast, the availability of employment support programs is not a major issue, although public employment services may be constrained in their capacity to deliver effective services.

**Poland has a set of social assistance benefits; however, they do not necessarily promote beneficiaries' ability to integrate into labor markets.** The Ministry of Labor and Social Protection provides several cash benefits (implemented at the municipality level through social welfare centers) that mainly cover the risk of falling into poverty due to shocks and other temporary factors and the risks related to disability, as well as the need to increase fertility and support poor families.<sup>19</sup> Although cash-based social benefits are numerous (they represent 0.7 percent of gross domestic

<sup>19</sup> The two main programs are the temporary assistance family benefits as well as the new child benefits program 500+. For a comprehensive review of cash social assistance programs, see the Joint Spending Review on Low Income Families Support (Spending Review WG, 2016)



product (GDP) in 2013), they are low compared to average EU spending (1.2 percent of GDP according to Eurostat). On average, benefit per beneficiary is lower relative to the EU average (World Bank, 2016). All benefits are means-tested (except the allowance for caregivers of individuals with disabilities and the child grants), and eligibility for benefits is not conditional on being registered in the public employment services (PES) nor does an individual need to be actively looking for a job.<sup>20</sup> The profile of social assistance beneficiaries (World Bank, 2015b) reveals that about 70 percent of beneficiaries are not registered in the PES nor are they jobseekers. In addition, the targeted groups include individuals who are not likely to immediately enter the labor force (e.g. persons with disabilities, caregivers of the disabled, parents of large families). Rather, the benefits appear to serve more as a substitute for employment rather than helping individuals transition to enter the labor market.

**In light of the profile of social assistance beneficiaries (World Bank 2015b), activation policies may need to focus on improving their access to social services and inclusion policies.** Data suggest that about 80 percent of beneficiaries are not working because of caregiving constraints or their own health issues or disability (based on Labor Force Survey 2013). World Bank (2015b) indicates that recipients of social benefits face some disincentives to join formal employment and fear that their benefits will be withdrawn if they take a job. Although individual benefits are not generous, combination of several benefits may be prohibitive and present disincentives to enter employment. Linking eligibility for social assistance and registration to PES could help activation of social assistance recipients, and in particular improve inclusion rates for persons with disabilities. In addition, beneficiaries may face high opportunity costs since they must pay for formal care and transportation, in situations where there is low access to care services.

**Counseling and outreach by social workers to vulnerable families and individuals remains underdeveloped in Poland.** Social workers and labor office staff in Poland report that administrative duties occupy the majority of their time, leaving little time for counseling and outreach (World Bank 2016). Moreover, use of different local regulations and administrative systems and inconsistent practices on data sharing in different localities makes it difficult to coordinate across agencies and to track beneficiaries who could benefit from multiple programs.

**The introduction in 2016 of a new child benefit program (the 500+) may have negative impacts on the labor force participation of women.** While spending on overall social assistance (2 percent of GDP in 2011) had been relatively low compared to the EU average, spending has recently skyrocketed with the introduction of the new child benefit 500+ program, with outlays of around 1.2 percent of GDP in 2017. This cash transfer of 500 PLN (per child) aims to boost natality in providing a means-tested cash transfer for the 1<sup>st</sup> child (if income is lower than 800 PLN, or 1,200 PLN for a disabled child) and a non-means tested transfer for every second child and children born after. A recent evaluation of this program (Myck, 2016) indicates that 240,000 individuals could potentially drop out of jobs as a result of this program; and recent statistics (GUS) have shown

---

<sup>20</sup> The only benefit program that requires individuals to register in the public employment service is the “temporary benefits” program; however, enforcement of this requirement has not been clearly evaluated.

143,000 individuals have increased their inactivity for family reasons.<sup>21</sup> The inactivity for family reasons has been on the rise for several years and could also be attributed to an aging population and the need to care for older household members. On the other hand, after the most recent evaluation of the program (2017), there are plans to improve social assistance beneficiaries' access to child care services for 0-3 years old by way of care vouchers and preferential access to encourage women's participation in the labor market.

**Social services and in-kind support remain low in Poland, and there is a clear gap in the provision of childcare services.**<sup>22</sup> In the framework of the Family Benefits Act, municipalities provide social services and in-kind transfers through subsidized institutions, which includes daycare for vulnerable children, foster care centers, and therapeutic institutions for children with disabilities. Under the Social Assistance Act, Ministry of Family, Labor and Social Policy (MFLSP) finances social welfare homes, which take care of those in need such as the elderly, adults and children with chronic physical or mental illness, and the homeless. In addition to these stationary forms of social assistance, additional in-kind support activities are provided for those who qualify for social assistance available at their place of residence. These in-kind benefits include meals, clothing, stays in homeless shelters, funeral arrangements, caregiving services at home, assistance in obtaining adequate housing, family counseling, and support in finding a job. In practice, it is difficult to evaluate the effectiveness of these interventions because reporting mechanisms do not exist.

**Access to child care facilities was among the lowest in the EU; however, with recent efforts access is expected to improve.** Since 2013, access to kindergarten (preschool) has been extended for younger children. In addition, since September 2015, every child at the age of 4 has the right to attend kindergarten, and as of September 2017, every child at the age of 3 will have this right. The law also fixed the maximum cost for the additional hour in kindergarten to 1PLN (EUR 0.25). The obligation to provide enough space for additional children in kindergartens falls on the county (*gminas*). As such, there is a risk that the quality of facilities will differ between regions, and that the quality of preschool education for families living in poor regions will be lower than the quality among those who are better off. Even as access to preschool improves, the provision of child care for children ages 0 to 2 remains the lowest in the EU, making the return to work after maternity leave an ongoing issue.

**Poland has a very generous policy when it comes to parental leave, while access to childcare for very young children (up to age 2) is still low.** Since 2015, parents have a right to 12 months of leave to be used by the mother for the first 14 weeks, and by the mother or father for the remaining time. The parent on leave receives 100 percent of wages if he or she decides to use only 6 months of the available leave of one year, or 80 percent if he or she decides to use the whole 12 months. While extending the leave makes it possible for fathers to stay longer at home with the newborns, the data show that the vast majority of leave is used by mothers, thus effectively prolonging out-of-employment periods for women. The right to maternity and paternity leave is available for

---

<sup>21</sup> Family reasons include care of children but can also be related to non-care activities.

<sup>22</sup> For example, spending on kindergarten equals only 3 percent of total social assistance spending and 0.4 percent of the total local governments' budgets in 2015 (GUS, 2016b).

dependent workers employed in labor code contracts. In addition, since 2016, a new maternity benefit was introduced, which provides financial support of 1000 PLN per month to all mothers who do not have a right to maternity benefits through their employment status (e.g. students, the unemployed, inactive, or dependent workers on the civil law contracts for results).

**Social security duality in Poland may distort incentives for those leaving in rural areas to look for employment outside of the agricultural sector.** The Social Insurance Institution for Farmers (KRUS) provides preferential conditions for farmers and farm household members to receive health and social security insurance, as well a much higher benefit-to-contribution ratio compared to the Social Insurance Institution for non-farmers (ZUS). The restrictions regarding overlaps of insurance titles, that in most cases does not allow to combine farm and non-farm employment, provide disincentive to get experience outside agriculture and make transitions between farm and non-farm employment less fluent. Given high labor market duality in Poland and relatively higher unemployment rate among youth, many young people entering labor market may face hardship in obtaining social security. Those coming from farm households may thus decide to return to the farms, and obtain full insurance coverage through that channel (World Bank, forthcoming).

**A wide range of labor market measures — active and passive — is also available to support employment in Poland.** These labor market services include all services and activities and administrative costs of the public employment services a; passive labor market programs that provide financial support to those who are out-of-work through unemployment benefits; and active labor market programs (ALMPs), which are all interventions that aim to result in employing participants or supporting employment for those with reduced working capacity (Annex 5 provides definitions of labor market programs provided based on Eurostat). The active labor market programs menu is sufficiently broad and includes vocational training, telework mobility and housing subsidies, wage subsidies for uncompetitive groups such as youth and those 50 years of age and older, childcare subsidies, and higher education incentives. Unemployment benefits are available but represent only a small fraction of the total labor market measures given the low unemployment rate in Poland. In fact, only 21 percent of all labor market expenditure is dedicated to unemployment benefits, which is unusually low compared to most European countries (Eurostat 2017). Benefits have limited duration, a low level of generosity, and are rarely combined with any other benefits.

**The public employment services (PES) operate as decentralized institutions under local governments with a robust level of responsibilities.** This system consists of 340 labor offices at the county (pol. *powiaty*) level, which are administratively under the county governments. Labor offices — at the county level — are charged with implementing ALMPs and passive labor market measures. County labor offices are financed by their respective local governments, but they also receive funding allocations from the national budget, the Labor Fund, and currently from the European Social Fund.

**Around two thirds of individuals registered in PES are jobseekers who indicated they registered for reasons other than seeking employment registry; most notably, they sought health insurance coverage.** The eligibility for unemployment benefits is conditional on being

registered in PES; however, unemployed individuals receiving this benefit represented only 16 percent of registered individuals. Moreover, only 69 percent of the registered individuals reported looking for a job (based on LFS Poland 2013 and World Bank 2015b). Registration to PES allows access to several benefits, most notably to health insurance for those who are not employed nor receiving coverage through other family members. There are clear indications that individuals who are not looking for jobs (caregivers, the self-employed, or informal workers) register for PES in order to benefit from health insurance. This, in turn, has implications on the workload of local public employment offices and their ability to provide core services.

### **In 2014, several major measures were implemented to increase the effectiveness of the PES:**

- **Introduction of a moderate performance-based financing of labor offices.** Previously, the resources from the Labor Fund were distributed based on prevalence of unemployment in voivodships. After 2014, the distribution of resources became partly linked to the effectiveness of professional and educational activation programs offered by labor offices; their success was measured by the placement rates of those employed out of the total of those who received activation support (gross effectiveness). This change directly affects labor office workers, because the sources for their remuneration are linked with the performance of the labor offices. Moreover, social partners now have an enhanced role in the process of distributing Labor Fund resources. Labor unions, employers' organizations, local governments, as well as non-profit organizations, now have representatives in Labor Market Boards (pol. *Rady Rynku Pracy*).
- **Introduction of a profiling system, designed to improve the matching of the services and instruments to the needs of the unemployed.** The new system is based on a survey to be completed by the unemployed at the time of registration. The data collected allows classification into three groups according to distance from the labor market, and, if necessary, close follow-up by a personally assigned local counselor. Responsibility for providing activation support to those individuals classified as "hard to serve" has been delegated to social welfare offices and/or non-governmental organizations (NGOs), to relieve the caseloads of labor offices workers.
- **New online tools to improve matching and emphasis on case management.** The new webpage of the Polish PES now offers the possibility of online registration. The unemployed can also answer the survey (for profiling) questions online, which may decrease the time needed for profiling during the personal meeting with the counselor.

**The evaluation of the effectiveness of these changes is mixed so far.** Among labor offices that were surveyed, 45 percent indicated that the profiling tool is not helpful in improving the matching of the tools to the needs of the unemployed, although 34 percent had the opposite opinion (MFLSP, 2016a). Of most significance, more than 80 percent of the labor offices suggested that improvements are needed in the profiling tool. On the other hand, labor offices assessed as positive the way in

which counselors were introduced and their individualistic approach to assisting the unemployed during the whole process (49 percent had a positive opinion on this change; only 10 percent felt negatively).

**The need for labor offices and social welfare offices to collaborate more closely in order to activate clients that they have in common has long been discussed as a necessary step to better assist the hard-to-serve.** However, the scale of the Activation and Integration Program that was introduced for these common clients was much smaller than before the reform. The program covered 5,513 persons in 2015, which is minuscule compared to the planned 180,000 or 270,000 individuals that the program is assumed to serve. In addition, only 1 percent of the people in the program were successfully activated, which suggests that challenges remain in providing adequate services to the hard-to-serve.

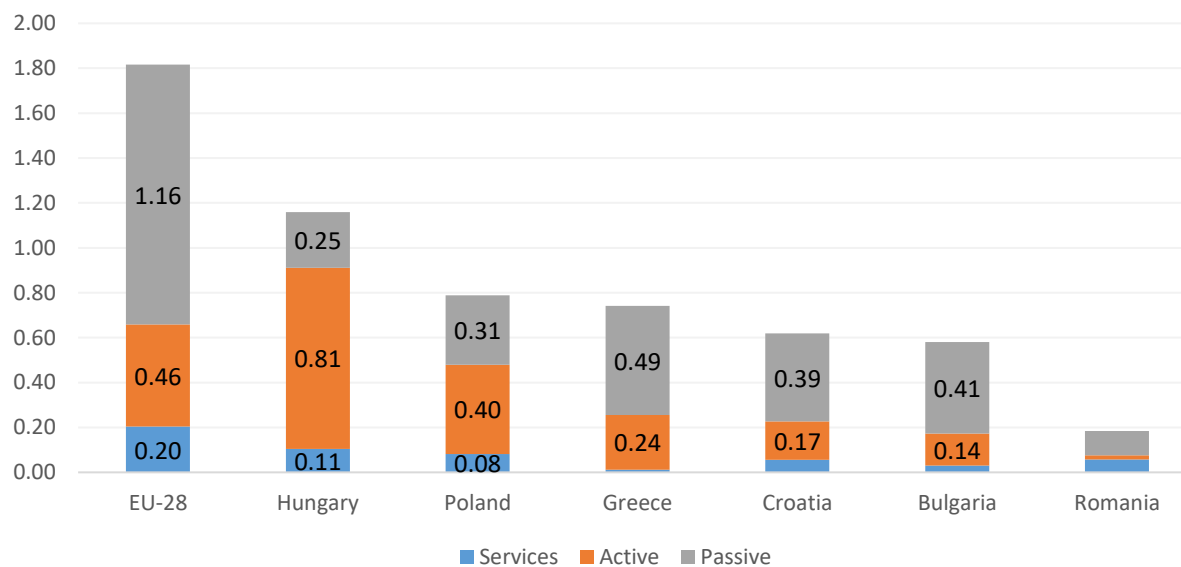
## 6.2.2 Overview of ALMP programs

**Spending on labor market policies is relatively low, and clearly below the EU-28 average.** In 2014, Poland spent 0.8 percent of GDP on labor market policies, including active and passive measures as well as services (see Annex 5 and 6 for programs classification) while the EU-28 average was 1.8 percent.<sup>23</sup> Active labor market policies represented 0.4 percent of GDP, which is well below most West European countries (representing more than 1 percent of GDP in Denmark and Sweden), but on par with the EU-28 average of 0.45 of GDP and above several countries in the region such as Romania, Croatia, and Bulgaria (Figure 17). When ALMP spending per unemployed individual is considered, Poland is well below the EU-28 average with only 1,600 euros spent per one entrant to ALMPs annually (5,100 for the EU-28 on average according to Eurostat data for 2014).

---

<sup>23</sup> Programs may be under-reported i.e. programs that are financed by the European Social Fund and programs that are not transitioned by the Labor Funds. Further clarification on decentralized programs and reporting mechanisms could shed more light on possible under-reporting.

**Figure 17. Composition of labor market spending as percentage of GDP**



Note: Data for Bulgaria, Greece, Hungary, and Romania are for 2015. Data for Croatia and Poland are for 2014; data for EU-28 are for 2011 (based on latest availability).

Source: Eurostat.

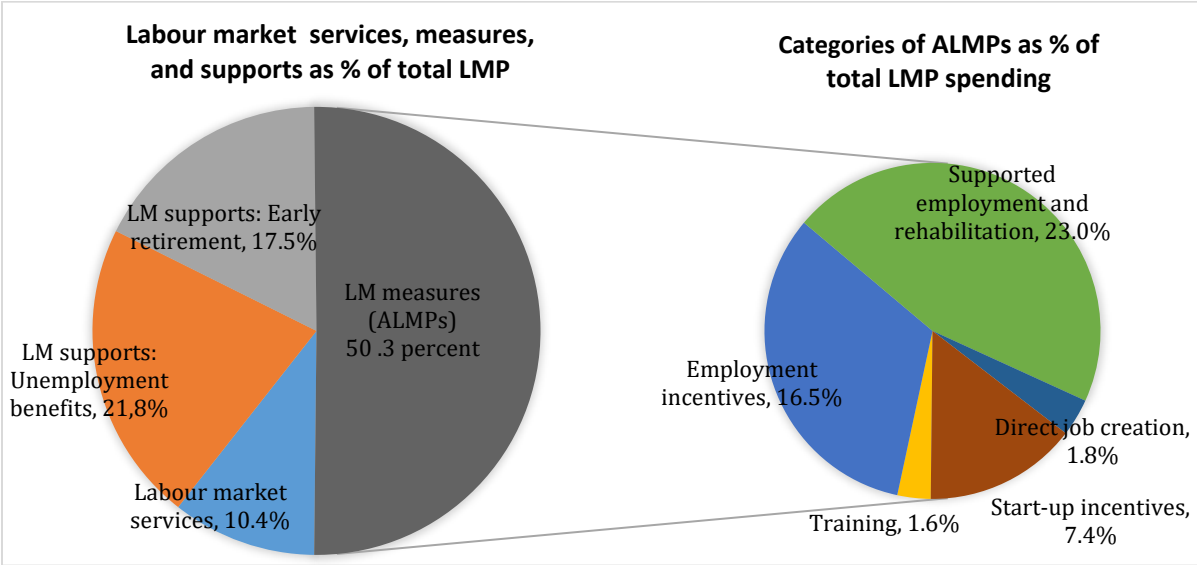
**Spending on LMPs in relation to GDP is two times lower than in the EU on average. This is due to much lower spending on passive measures, as ALMP spending is on par with the EU-28 average.** Half of labor market expenditures is dedicated to ALMPs only, while passive measures absorb 39 percent and the remaining 10 percent is allocated for services (Figure 17). By comparison, in most EU countries, the majority of the spending is primarily dedicated to passive measures (about 60 percent of total labor market spending for the EU-28 average). The level of spending on ALMPs, at 0.4 percent of GDP, is on par with the EU-28 average (0.45 percent of GDP).

**Labor market services represent 10.4 percent of the spending on total labor market policies in Poland.** Seven measures exist under this category; however, almost all spending covers the expenses related to the functioning of the labor offices. The other six measures are small instruments with joint spending, which represents less than 0.5 percent of total LMPs. (See Annex 6 for a detailed list of the spending and beneficiaries by program.) The general objective of services provided through the labor offices is to support clients during unemployment and facilitate their transition to employment. As described previously, these employment services are provided mainly by the county labor offices and are financed from local government budgets, as well as from the Labor Fund.

**The resources dedicated to services to deliver the range of ALMPs in Poland appear to be relatively low.** The share of spending on services within total ALMPs can serve as a proxy for the resources available to PES to administer ALMPs. In Poland, spending on services is equivalent to only 20 percent of total ALMPs. Countries with well-functioning PES delivery systems (such as Denmark and the Netherlands), dedicate a much larger proportion of spending toward the PES (above 50 percent); the average spending on services is 45 percent of the average ALMP spending in EU-28.

Within the range of ALMP measures provided by PES, the most predominant categories are ‘supported employment and rehabilitation programs’ and ‘employment incentives.’ Both ALMP categories (see Annex 5 for the Eurostat classification) represent more than two thirds of total ALMPs. Among total labor market expenditures, ‘supported employment and rehabilitation’ programs represent as much as 23 percent, while ‘employment incentives’ represent 16.5 percent (Figure 18). Main programs within each category are summarized in Box 2.

Figure 18. Detailed composition of labor market programs, in percentage of total labor market expenditure, 2014



Source: Eurostat.  
 Note: Categories used are based on Eurostat definitions (Annex 5).

About half of ALMP spending addresses employment support measures targeted to persons with disabilities; these measures are financed from the State Fund for the Rehabilitation of Disabled Persons. Two large wage subsidies aim to integrate disabled workers and account for 29 percent and 19 percent, respectively, of total ALMPs. The three other main programs are financed from the Labor Fund; they target mainly the unemployed who have registered with public employment services. These programs include work practices (i.e. internships) (19 percent), grants for the unemployed to start up economic activity (14 percent), and refunds for the costs of workplace equipment and additional workplace equipment needed to recruit unemployed individuals (9 percent). The training program and public works are also financed by the Labor Fund but are comparatively smaller programs (about 3 percent of total ALMP spending).

### Box 3: Active Labor Market Programs in Poland

**ALMPs aim to build capacity, help individuals gain experience, and incentivize or create employment.** ALMPs can be further classified into five categories: *employment incentives, supported employment and rehabilitation, direct job creation, start-up incentives and training.*

**The main ALMP programs according to each ALMP category in Poland are as follows:**

1. **Supported employment and employment and rehabilitation:** About 45 percent of spending on ALMPs is directed toward two *wage subsidy programs* for disabled workers, which provide monthly subsidies for up to 90 percent of the salary of disabled employees. Unlike other ALMPs that are funded from Labor Fund resources, these programs are financed from the State Fund for the Rehabilitation of Disabled Persons or from the state budget. The two wage subsidy programs cover about 330,000 people with disabilities and the number of beneficiaries has increased over the last 10 years (**Error! Reference source not found.**).
2. **Employment incentives:** *Work practices* (internships) is also one of the largest ALMPs (representing 19 percent of ALMP spending). This program aims to improve the work experience of a specific target group, and focuses on the registered unemployed: (i) those younger than 25, (ii) those older than 50, (iii) the Long-term unemployed, (iv) single people unemployed with children, and (v) the unemployed with a low level of skills or who are disabled. The local welfare office grants the participant a monthly scholarship (120 percent the unemployment benefit) for up to 12 months for unemployed individuals who are younger than 30 years old and up to 6 months for other unemployed. Although work practice remains the largest program for non-disabled beneficiaries, the number of entrants is currently lower than it was in 2009 (earliest available data).
3. **Start-up incentives:** *Grants for the unemployed who are starting economic activity* (14 percent of ALMP spending) is a start-up incentive program and one of the most generous in terms of spending per beneficiaries. It provides in-cash grants for unemployed individuals who start a business during a year (maximum 600 percent of average annual salary). Interestingly, this is one of the few programs that is also available to some non-registered jobseekers. Given the generosity of the program, the number of beneficiaries is relatively low (around 50,000 in 2014, but twice the number of beneficiaries than in 2005).
4. **Direct job creation:** *Two public work programs* aim to create part-time jobs (up to 20 hours in for public works and up to 10 hours for socially useful works). In particular, socially useful works are directed to people who have low employability. These beneficiaries do not have the right to unemployment benefits, and are shared clients of the public employment services and social assistance institutions. The number of beneficiaries in both programs was decreasing over time, which is in line with an improving labor market situation.
5. **Training:** *Several training measures are available to different target groups; however, overall, they represent a low share of total ALMPs* (3.2 percent). Moreover, the number of beneficiaries of training programs greatly declined over time (**Error! Reference source not found.**). The largest training program targets the registered unemployed and registered jobseekers may participate in training courses. Eligibility for training is also linked to lack of appropriate vocational qualifications or the necessity of acquiring new skills; and eligibility must be approved by the labor office worker.

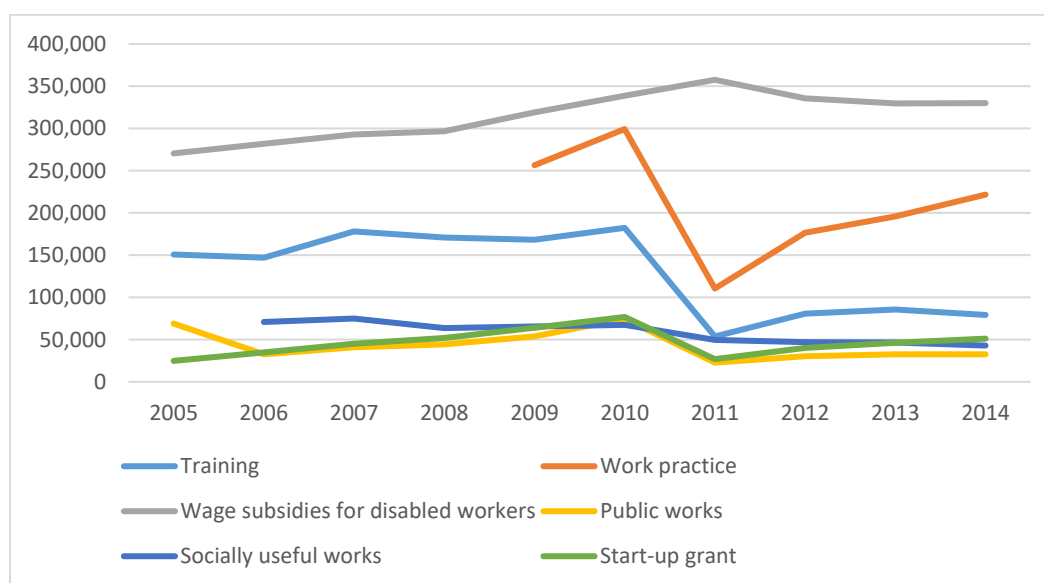
*Source:* Based on administrative data from the Ministry of Labor and Social Policy and Eurostat LMP database

**Over the last decade, the programs with the largest number of beneficiaries has been the wage subsidy for disabled workers. In addition, the work practices program was initiated in 2009**



**and is currently the largest program that covers non-disabled persons.** Although the work practices program reached about 220,000 individuals in 2014, the number of beneficiaries is below 2009 and 2010 levels. The second largest program for the non-disabled has been the training program, with 80,000 entrants in 2014. However, this program reached about 180,000 beneficiaries before 2011 (Figure 20). Similar drops have also occurred for the start-up grant and the public works program, as all programs financed by Labor Fund have been affected by declining funds from labor offices. In fact, labor offices received about PLN 7 billion from Labor Fund in 2010, while their allocation in 2011 was only PLN 3.2 billion (Dragan, 2012).

**Figure 19. Number of beneficiaries (entrants) of selected ALMPs**



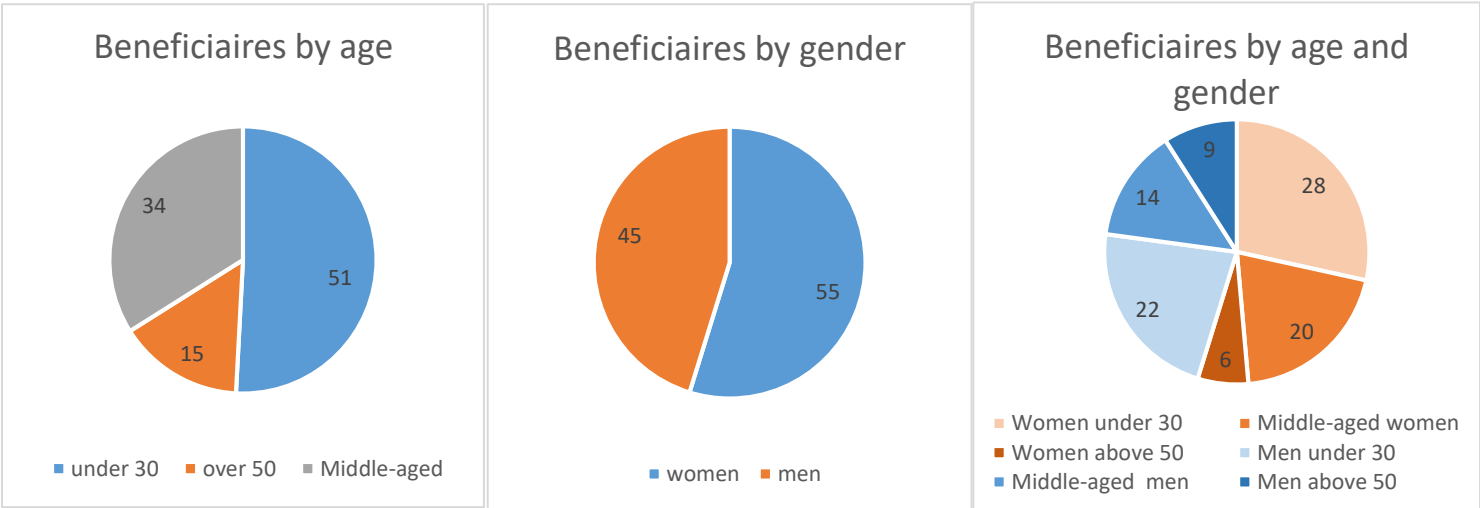
Note: Work practices data available from 2009. Source: Eurostat

**Since 2014, 11 new activation measures have been introduced to support specific target groups, although their coverage is still relatively low; in 2015, the coverage of all new measures was about 50,000 beneficiaries (MFLSP, 2016a).** They include measures to facilitate:

- **transitioning parents to employment** (grants for teleworking for parents who return to work after parental leave and an activation benefit for firms who employ caregivers). These measures are well targeted to parents with the goal of increasing the supply of labor supply; however, this measure had very low coverage and reached fewer than 50 beneficiaries in 2015.
- **recruiting the young unemployed** through a new system of vouchers for unemployed people younger than 30 years (*training vouchers, internship vouchers, employment vouchers, settlement vouchers*). This scheme covered a significant number of beneficiaries (25,000). However, the potential for duplication with the work practices program is not clear.
- **recruiting unemployed people ages 50 years or older** through partial wage subsidies, which reached 2,759 beneficiaries in 2015.

**Information on the composition of ALMP beneficiaries shed additional light on the effectiveness of the current mix of ALMPs, which focus mainly on youth.** The profile of ALMP beneficiaries (excluding programs targeted to disabled people) shows that about 51 percent of beneficiaries are younger than 30 years old and 34 percent are middle-aged. Women tend to benefit slightly more from ALMPs (55 percent of beneficiaries are women). Overall, the largest share of beneficiaries is made up by young women (28 percent), followed by young men (22 percent), and then by middle-aged women (20 percent) (Figure 20).

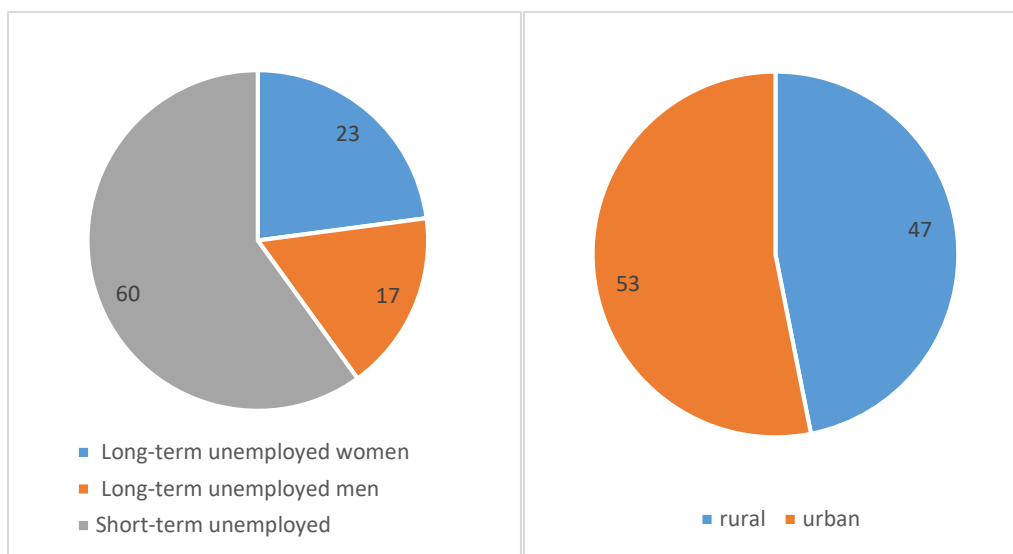
**Figure 20. Profile of ALMP beneficiaries by age and gender, as a share of total beneficiaries (2015)**



Note: Includes beneficiaries of subsidies (excluding those for individuals with disabilities), public works, training, and work practices programs.  
 Source: Data provided by Ministry of Family, Labor and Social Policy.

**The composition of ALMP beneficiaries also reveals that policies focus on the short-term unemployed and are more predominant in urban areas.** Only 40 percent of beneficiaries of ALMPs are long-term unemployed; 23 percent are female and 17 percent are male. Most beneficiaries live in urban areas (53 percent), which may exacerbate the wide regional difference as depicted in Figure 7. Although long-term unemployment is relatively low for the national average, unemployment rates, particularly long-term unemployment rates, are much higher in some of the more rural regions.

**Figure 21. Profile of ALMP beneficiaries by duration of unemployment and urbanization, as a share of total beneficiaries, 2015**



Note: Includes beneficiaries of wage subsidy (excluding those for disabled), public work, and training and work practice programs.  
 Source: Data provided by the Ministry of Family, Labor and Social Policy.

### 6.3 Activation and employment support policies vis-à-vis priority groups' needs

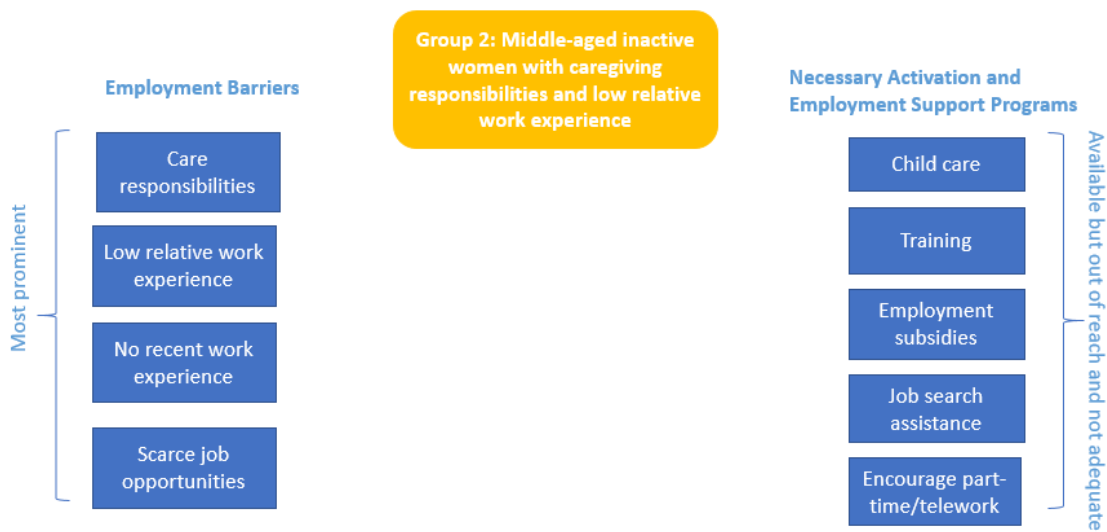
**This section reviews each of the three priority groups' main barriers and looks at their consequent needs and links the latter with available policies in order to evaluate potential gaps.** Addressing the same barrier may require a different set of activation policies to address the unique characteristics of identified priority group. For example, two different groups may face the employment barrier of low relative work experience; however, inactive mothers would require a different approach to overcoming this barrier compared to young men in precarious jobs. Thus, each barrier must be addressed in a manner appropriate to the specific needs of each group. This section focuses on identifying the needs<sup>24</sup> and corresponding policies for the three priority groups selected.

**The existing programs/policies do not appear to be adequately capturing the three priority groups, nor do they address their potentially simultaneous constraints.** Although a wide range of activation and employment support policies and programs are available, they do not appear to have adequate capacity and, in particular, the outreach capabilities to address the needs of the selected priority groups to (re)integrate into the labor market. These constraints relate to work experience (in particular, the groups' lack of recent work experience), caregiving responsibilities; and in some cases, education levels, and opportunity to access jobs and access ALMPs (a barrier that

<sup>24</sup> The main barriers are those (i) with a probability of occurrence that is higher than 50 percent in each group and (ii) with a probability of occurrence of 10 percentage points higher than for the target population.

is closely linked to where they reside). In all these domains, the issue is likely a combination of inadequacy of information/awareness, service levels, and supply and affordability of services. The size of the programs, as measured by the number of participants they serve is relatively low, even if they appropriately target the priority groups. The participation of middle-age and younger women in ALMPs is relatively low compared to the size of Group 2 and 4. Similarly, the ALMPs coverage of young and middle-age (115,604 and 71,255 respectively) is far below the size of Group 3 (378,315).

**Group 2: Middle-aged inactive women with caregiving responsibilities and low relative work experience**



**Effective activation policies must address numerous barriers faced by Group 2 and potentially use non-standard channels.** This group of women has the highest average number of barriers among all of the groups identified in the analysis. Although members of this group are relatively well educated (77 percent have at least an upper secondary education), they have child care responsibilities (87 percent) and low relative work experience (88 percent). The lack of recent work experience or zero work experience (60 percent and 32 percent, respectively) indicates a long history of inactivity given their age (92 percent are between 30 and 55). In fact, 73 percent are inactive (mainly performing domestic tasks); thus, the usual ALMPs offered to the registered unemployed by public employment services are out of reach. This group also faces scarce job opportunities.

**Considering this group’s needs, necessary first steps to enable individuals to (re)enter the labor market include enabling access to child care facilities, along with providing supportive work environments.** As stated before, most women in this group are inactive because of their domestic duties and face a very high caregiving barrier (almost 90 percent have caregiving responsibilities, and 71 percent have at least one child 13 or younger out of formal care facilities). In

fact, evidence from other countries shows that increasing childcare services — through subsidized care, tax allowances, or vouchers for care, for instance— has contributed to the increase in women’s labor market participation over the last decades (OECD, 2011 and Vuri, 2016). Although the effect of childcare services may depend on the context, the impact has been large in the United States, Canada, Spain (as cited in Vuri, 2016) Israel, Romania,<sup>25</sup> and Russia<sup>26</sup> (as cited in Todd, 2013). The policies that enable access to affordable childcare, in turn, should be supplemented by potentially increasing the supply of care institutions to avoid capacity constraints. These reforms have also proven to increase fertility compared to measures that simply provide cash support without any access to services (Posadas et al., 2016). Given the family situations and the high burden of domestic tasks for members of this group, appropriate measures, in the form of a supportive work environment that can accommodate a family’s life, will help (re)integrate these women to employment. These may include measures that encourage *telework and part-time work*. Although flex work or part-time work is permitted in Poland, very few women (less than 10 percent of employed women) and men (less than 6 percent) work in part-time jobs compared to workers in other countries in the EU (on average about 30 percent of the employed). This fact is a strong indication that few employers are in favor of part-time work. In addition, part-time is not available in most professions. The demand for part-time is also biased by the general low wages in Poland: part-time wages are under market levels.

**Parallel to lowering the opportunity cost of childcare, AESPs that focus on *building or refreshing skills, on assisting individuals in getting work experience, and assisting them with job searches* will also address the needs of this group.** A cross-country review of training programs (European Commission, 2015) shows that on-the-job training and internship programs may have a strong impact on post-intervention employment (up to 80 percent), if they appropriately target the groups that lack skills and adequately respond to the need of employers. Employment subsidies also appear to be an appropriate tool to improve this group’s chances for employment. Several studies have shown that subsidies that compensate part of the salary costs for those that live far away from the labor market have a positive impact on their post-measure employment (Almeida et al., 2014, and European Commission, 2014). In fact, this measure can improve these workers’ employability and build human capital, by providing work experience and/or specific training; the net effect would seem to mitigate the risk of returning to inactivity after holding a subsidized job. This group of women may require more explicit outreach and counseling on active labor market policies because they are likely to not have access to current measures; only 15 percent report actively looking for a job at the time of the interview, thus the majority are not likely to be registered with public employment services.

**One potential option would be to extend coverage to this group to some of the more relevant ALMPs for inactive women, in particular to ALMPs that could provide training and work**

---

<sup>25</sup> In Romania, Fong and Lockshin (2000, cited in Todd, 2013) found that government subsidies for childcare were an effective way to increase the number of hours for mothers who work, to increase the incomes of poor households, and to lift some families out of poverty (although the effects of these policies are less significant for poorer households).

<sup>26</sup> Studies in Argentina, Brazil, Guatemala, and Colombia have also shown a significant impact of the childcare provision on the labor force participation, working hours, and earnings among mothers with young children.

**experience through an extended outreach and information dissemination effort.** Given that more than 60 percent of this group live in thinly populated areas, which are likely to be far away from labor offices, their access to public employment services and the ALMPs is likely limited. In addition, considering their age and profile, members of this group are likely to have less proficiency in IT skills and thus cannot be easily served through online services, which, as discussed previously, were recently enhanced in the Polish public employment services system. The current set of ALMPs focus on the registered unemployed; as such, the set of training and subsidies programs are out of reach for this group. Currently, only a start-up incentive program is available for all (registered and unregistered), but this is inadequate given this group's lack of work experience and their caregiving constraints.

**The relatively high poverty rate in this group combined with the presence of children suggests that a large share of these women are in contact with social welfare offices, which could serve as a channel for their access to employment support.** Among the services provided by public employment services in Poland, the only potential services available to this group are job fairs and vocational counseling (typically one meeting with a labor officer). However, information is not available on the proportion of the unregistered who benefit from these activities. Tying social benefits to the participation in at least one counseling appointment or job fairs could expose these women to the set of ALMPs that could be available to them.

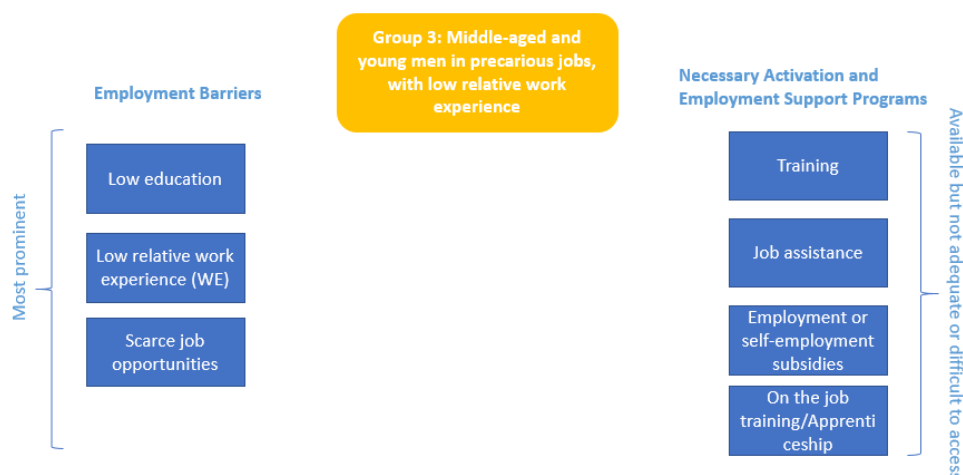
**The recently introduced 500+ program is expected to improve the financial situation of individuals in this group, but complementary measures are needed to incentivize employment among these women.** As discussed previously, the 500+ program may provide disincentives for these women to engage in work and further increase their distance to the labor market. Engaging in employment will generate high opportunity costs in terms of formal child care, as well as potentially withdrawing from the 500+ benefit (which is means-tested for the first child). Women in Group 2 are concentrated in rural areas in northern, eastern, and central regions, which are characterized by lower access to childcare facilities, especially for children up to the age of three (these facilities have less than 30 spaces per 1,000 children according to GUS, 2013), and probably are located even farther way from kindergartens.

**Recent efforts, such as special programs to refund the cost of childcare, may help link these women back to the labor market, but more information is needed on their effectiveness and capacity.** One of the new special programs introduced in 2014 includes the possibility of refunding the cost of care for up to 6 months, if the beneficiary engages in employment, an internship, or training. This appears to be a promising measure to address the high caregiving barrier for this group by bringing women from inactivity into the public employment services system, providing them with training or work experience, and then potentially supporting them in further labor market engagement. However, detailed data on this program are not available, so it is hard to assess whether and to what extent this program would be effective in addressing this group's needs. Moreover, childcare should be facilitated for a longer period than 6 months to activate this group, due to their complex situations. Similarly, *care vouchers*, programs that have been introduced at the municipality

level (e.g. in Szczecin and Nysa) may locally address the needs of this group. Vouchers provide monthly financial support to cover the cost of care for working parents with children up to the age of 3. It would be interesting to learn more about program effectiveness and consider whether this program should be scaled up.

**While programs that encourage part-time or telework exist, they do not necessarily cover this group and are very small in scale.** Activating this group could be facilitated by encouraging part-time work and teleworking. Two programs could potentially be extended to cover this group: the current “activation allowances” (see Annex 6 for details) provide an allowance to unemployed individuals who take up a part-time job. However, the program is targeted to unemployment benefit recipients only; thus, currently this program does not cover this group. A new program was introduced, which aims to encourage teleworking after parental leave, but it is out of reach for mothers that have not worked. In addition, the number of beneficiaries in this program is extremely low (6 beneficiaries in 2015, according to Ministry of Family, Labor and Social Policy data).

**Group 3: Middle-age and young men in precarious jobs, with low relative work experience**



**A differentiated approach is needed to address the diverse barriers and characteristics of Group 3.** More than half have low relative work experience, and they are relatively less educated (31 percent have lower secondary education or less and 57 percent have upper secondary education) compared to other priority groups and the target population. This group also faces scarce job opportunities as a main barrier. At the same time, individuals in this group will require differentiated support because only one third of the group is unemployed while a majority are in precarious employment (i.e. in unstable jobs or with near-zero income from self-employment or informal work). Those that are unemployed in this group will potentially be covered by measures offered by the public employment services, while others in precarious jobs may fall outside of the purview of public

employment services. Hence, they may not have access to the assistance (e.g. workplace training, employment subsidies and so forth) that they need to transition to better jobs.

**In line with evidence from other countries, job search assistance/counseling, along with employment subsidies may provide the needed support for the younger and unemployed.** Job search assistance is relatively more cost effective (compared to other ALMPs) and is proven to have significant positive short-term impacts on the employment of jobseekers (Card et al, 2015). Moreover, international evidence suggests that a combination of programs yield better results than single interventions. For example, the British New Deal program for young people, a program which offers a combination of job search assistance (for four months) followed by a wage subsidy to employers, had an economically and statistically significant effect on outflows to employment among men. The program appears to have increased the probability of young men (who had been unemployed for six months) in finding a job in the next four months; and it is estimated that part of this overall effect is the job subsidy element and part is the enhanced job search assistance (Blundell et al, 2013). As such, a combined approach may help address the low relative work experience and the scarce job opportunities faced by the younger and unemployed.

**Skill-building activities, particularly training activities that are closely linked with employers, help those in precarious jobs transition to better employment.** Job search assistance/counseling would also be helpful for those in precarious jobs (in particular those with civil law contracts) given their age, family situation (most are married and in families with children), and scarce job opportunities in their areas of residence. However, lack of skills is likely to be a more binding constraint for this group. Members of this group are likely trapped in low skilled activities, associated with poor job conditions and high precarity. One way to escape this trap, and transition to better jobs, would be for these individuals to acquire the specific skills needed by recruiters. In fact, the European Commission (2015), and recent evidence from the U.S. (Hendra et al., 2016) indicate that a key element of successful training and vocational programs is addressing the sectoral mismatches by linking the programs closely with the employers to ensure their needs are met.

**Addressing labor market duality is likely to improve the uptake and impact of ALMPs.** Individuals in the groups are most likely those working on civil law contracts and only for a few months per year, or those working as self-employed, or as informal workers. Therefore, incentives can be provided for employers to provide better contracts. Recent reforms of civil law contracts go in that direction: they introduce minimum wage and obligation of employers to pay social security contribution for a year. Similarly, informal workers and those working in the farm sector can also be provided with incentives to enter formal employment. Reducing the duality within the two social insurance schemes (SUZ and KRUS) would also provide incentives to look for employment outside the agricultural sector as well as increase mobility.

**While training programs exist, their low coverage and level of effectiveness indicate a lack of adequate capacity to address these needs.** To activate this group, training programs must address this group's lack of skills and low level of work experience. However, current training programs



represent a very low share of total ALMPs (2.7 percent). In addition, a recent evaluation (MFLSP, 2015) revealed that the main training measure (see Annex 6 for program details) is not very effective in terms of employment outcomes (48 percent of beneficiaries of training programs are employed three months after the training is completed), although training has proven to be cost effective per person employed. Moreover, studies that evaluated the net effectiveness of a set of interventions with respect to employment of the counterfactual group indicate lowest employment effectiveness of training programs across interventions.<sup>27</sup> However, international literature suggests that training effects tend to materialize more in the medium term and in the form of higher wages (Card et al., 2015).

**The existing wage and self-employment subsidies are out of reach for most of Group 3.** Employment or self-employment subsidies also offer opportunities to gain work experience and new skills, which would improve the group's chances of gaining (better) employment. However, the main wage subsidies in Poland are out of reach for this group because they focus on the disabled or registered unemployed, but not on those in precarious jobs.

**Scarce job opportunities and lack of experience (both relative and recent) limit employment access for young women in Group 4.** These women are relatively well educated (87 percent have at least an upper secondary education), but they are unable to access employment due to their lack of recent work experience and their *low work experience* given their young age (and they have indicated problems in transitioning from school to work). Moreover, more than two thirds reside in thinly populated areas, and about one third have caregiving responsibilities. Most are unemployed, although a small percentage is marginally employed in unstable jobs, and 46 percent report themselves as “actively looking for a job” at the time of the interview. Thus, they are likely registered in public employment services and potentially have access to all measures available for the registered unemployed.

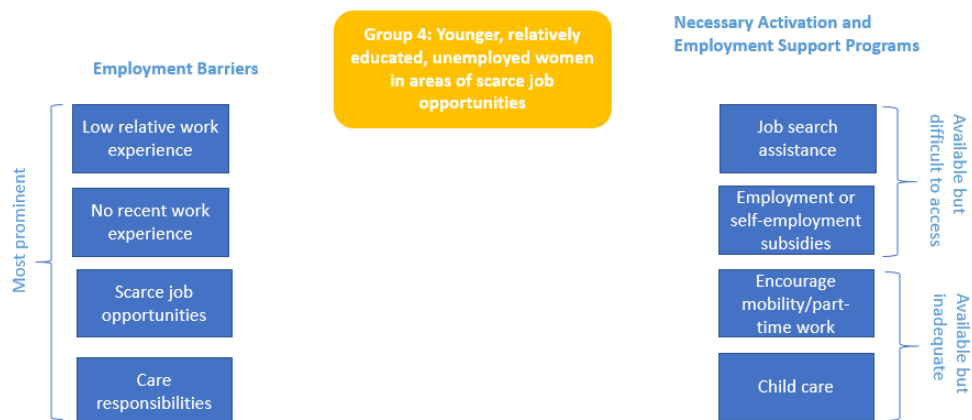
**Job search assistance and help in obtaining work experience are the first-lines of support needed by this group.** Unlike the inactive mothers in Group 2, these women are mostly unemployed and actively searching for jobs; however, due to the potential remoteness of their place of residence, they may have inadequate or no access to information. Hence, they may require explicit outreach, job search assistance and more targeted counseling on active labor market policies. As previously mentioned, job search assistance is relatively more cost effective with large short-term impacts (exit rates) on employment of jobseekers (Card et al., 2015), thus appropriate for this group. In addition,

---

<sup>27</sup> The attempts to measure net effectiveness include works developed by Maksym and Wiśniewski (2012), as well as the tool developed by Chancellery of Prime Minister (pol. Narzędzie do rankingowania Powiatowych Urzędów Pracy w zakresie skuteczności polityk aktywizacyjnych, 2013), where the administrative data as well as the econometric techniques to measure average treatment effect on the treated are used. While the works of Maksym and Wiśniewski (2012) compare the net effectiveness of various interventions, the tool developed by Chancellery of Prime Minister aimed to compare the effectiveness of labor opportunities from different poviats. Maksym and Wiśniewski (2012) assessed net effectiveness for 7 poviats in 2010 indicating positive net effects of grants in setting up the company or creating new jobs (above 50 percent), as well as of intervention works and trainings (around 10 percent).

employment (or self-employment subsidies) would allow members of this group to gain opportunities for much needed work experience. Studies indicate that subsidies that compensate part of the salary costs of those that are far away from the labor market have a positive impact on their post-measure employment (Almeida et al., 2014, and European Commission, 2014).

#### **Group 4: Younger relatively educated unemployed women in areas of scarce job**



**Enabling access to childcare facilities, promoting supportive work environments, and encouraging mobility will further support labor market integration.** Given the scarce job opportunity barrier faced by a significant share of the group, and the fact that most live in rural areas (with children of young age), measures that encourage mobility, enable access to child care, and potentially encourage part-time work will further round out the support services required by this group. While the caregiving responsibilities in this group are not as high as in Group 2, measures based on international evidence (i.e. increasing childcare services through subsidized care, tax allowances, or vouchers for care, for instance; or flexible/part-time work opportunities) are needed to enhance these individuals' chances of employment.

**The access of this group to labor market services might be constrained by the rural location and distance to the nearest labor office.** Offering the counseling and access to job offers through online tools, as well as promoting the services provided by PES for youth, could increase the chances that this group is covered by available labor market services.

**Among available active labor market policies (ALMPs), three of the largest programs for non-disabled workers, namely work practices, grants for the unemployed starting economic activity, as well as support to employer to create working place are potentially available to assist the transition of this group into employment.** These measures were widely implemented in the regions where most of this group is located (*pol.* region wschodni and region północny). These employment and self-employment subsidies have been evaluated and characterized by high gross

employment effectiveness — measured as the proportion of beneficiaries that are still employed three months after the program terminates. According to the Ministry of Family, Labor and Social Policy (MFLSP) (MFLSP, 2016b), effectiveness of these three measures is high, and about 80 percent of beneficiaries remained employed three months after the termination period. Note that the evaluation period is relatively short and that effectiveness may decrease after a longer period, especially given the short time lapse of the measures. Although there is the risk that these programs may lead to opportunistic hires and high rotation among subsidized workers, these are associated with the conditions of prolonging the employment of beneficiaries after the program terminates, which should mitigate this effect.

**Although this group can potentially be supported with available measures that have high coverage and funding, access to these measures may be constrained given this group's characteristics.** The majority of the group members are young married women with children and/or living with parents, in thinly populated/remote areas. The mobility of the latter group can be enhanced with the *vouchers programs* introduced in 2014, in particular with *settlement vouchers*, which proved to be one of the most popular among the new interventions (there were around 6,000 beneficiaries in 2015 (MFLSP, 2016a). However, young women living with their spouses would rather benefit from opportunities that enable commuting to work or teleworking. While programs that encourage part-time or telework exist, they do not necessarily cover this group and are small in scale. Two programs currently exist: “activation allowances” is targeted to unemployment benefit recipients only; thus, this program does not cover this group (since only 11 percent receive unemployment benefits). A new program was introduced, which aims to encourage teleworking after parental leave, but it has an extremely low coverage.

## 7 Conclusions and Policy Directions

**The objective of this study is to provide a snapshot of what are often multiple and simultaneous constraints faced by the labor market vulnerable in Poland to inform policy decisions that will address pressing needs of these groups.** Policy makers are accountable for ensuring that employment policy takes into account the different needs, challenges, and barriers faced by different at-risk groups on the labor market when they develop policy tools or program-level interventions. To this end, this paper categorized (through the use of an advanced statistical clustering technique) traditionally known vulnerable groups into more distinct homogenous groups and identified their most salient employment barriers and socioeconomic characteristics. Three priority groups were then identified, and their key relevant characteristics for activation and social inclusion policies were examined in depth. An overview assessment of the key features of ongoing (and some upcoming) activation and employment support programs and policies (AESPs) in Poland were presented, to explore whether and to what extent the needs of selected priority groups were met with existing programs/policies. While recognizing the essential role of labor demand to achieve good employment outcomes, this study primarily focused on supply side constraints and related policies. Further analysis of demand side constraints remains a topic for a different study.

**In this section, conclusions and policy directions which relate to both the identified needs of the priority groups and the gaps in activation and employment support programs and policies are presented.** These policy directions are intended to be explored further with additional analysis. In this vein, translating these conclusions and suggested policy directions into concrete policy action will require in-depth analysis of program level data, particularly related to beneficiaries of existing active labor market, minimum-income guarantee, and other large social assistance programs.

**Through this analysis, we find that while various programs to support the target population and the identified priority groups exist, these programs do not necessarily reach the most vulnerable.** Despite recent efforts to target specific groups, analysis of administrative data suggests that programs fall short in targeting those farther away from the labor market. Based on this analysis, these groups are primarily women of different age brackets with caregiving responsibilities, skills gaps, and youth who have very little work experience, live in remote areas and do not have much access to stable jobs. The data indicate that the majority of those in the identified priority groups do not have access to the existing ALMPs. In addition, the required services (e.g. child care, especially for the first three years) are not widely available to facilitate these individuals' reintegration to labor market.

**Extended outreach and employment promotion is necessary to target, in particular, inactive women and youth who live in remote and rural areas.** Making information and counseling available to those who are inactive and farther away from the labor market is a necessary first step as these individuals are not engaged or full engaged in the labor market due to multiple and overlapping constraints. Doing so will ensure that individuals who are "inactive" register with the employment offices and also that those who are actively looking for a job receive support. The extension in outreach and job search assistance cannot just be achieved through employment offices, but would require multiple channels including social welfare offices and mobile units set up periodically at community centers or alternative locations. Both employment offices and social welfare offices have already recognized capacity constraints. Therefore, this initiative will need to be reinforced with either additional and specialized staff and/or increased online services to be able to handle an increased volume of beneficiaries. In addition, reducing social security duality could encourage those in remote areas to look for employment outside agriculture and increase workers' mobility.

**Formalizing and operationalizing coordination among agencies that provide services to vulnerable populations is critical.** Addressing multiple barriers faced by the most vulnerable out of work and marginally employed will require additional investments in administrative systems to ensure data exchange, joint outreach, assessment of individuals' situations and delivery of a package of integrated services to improve vulnerable populations' chances of getting and keeping a job.

**Access to affordable child care services (in particular for 0 to 3 year olds) must be expanded, especially in more remote areas.** Despite efforts to increase the availability of child care services, women still seem to have significant challenges reconciling childcare duties with holding a stable job. In the absence of accessible and affordable child care, women seem to withdraw from the labor market. Alternative mechanisms for ensuring the provision of affordable child care might involve expanding access to subsidized child care via vouchers or providing larger employers with incentives

to set up in-house childcare facilities. The small scale childcare voucher program seems to be a good measure to assess and expand upon.

**A preliminary assessment<sup>28</sup> indicates that the existing range of active labor market measures do not target or benefit those who are in most need of employment support. Moreover, there is scope to recalibrate the spending on different measures to align with priority groups' needs.**

Although a wide enough range of programs exist — including employment subsidies, skills and on-the-job training, public works and self-employment support — coverage of training, employment subsidies, and on-the-job training programs are limited and their targeting is restricted. In line with the needs of the identified priority groups, employment subsidies, on-the-job training, or apprenticeship programs can be targeted to low skilled or less educated individuals of all age brackets, and they can focus on the needs of women. In addition, employment subsidy programs can also be modified to include part-time jobs so that more women will be encouraged to join the labor force and/or to be able to switch from unstable, often informal jobs to secure, longer term jobs. There is also the potential to expand the start-up incentives/self-employment programs which might, in particular, be attractive to younger, relatively educated, unemployed women. At the moment, spending on training programs is limited and spending efficiency is deemed low. However, based on international evidence, which is mixed, training programs can be effective and yield good employment outcomes if they are well aligned with the labor market needs, well targeted and combined with hiring incentives; i.e. in the case of on the job training programs. In light of the prominence of joblessness concentrated in rural areas, mobility incentives can also be considered as part of a package of services to activate or facilitate re-entry to the labor market.

**There is scope to improve the design of social assistance programs to improve work incentives for social assistance beneficiaries.** Recent analytical work suggests that large social assistance benefits/programs need to be reviewed to ensure that, either on their own or in combination with other cash benefits, they do not create disincentives for work by providing too generous benefits. This requires further consideration for consolidation and alignment of various social benefits. Similarly, social assistance benefit design can be modified to give more prominence to in-work benefits following several good practice examples from around Europe (including Romania, Slovakia and Slovenia).

**In order to adjust the targeting and design of AESPs, it is necessary to invest in rigorous evaluations.** Very few rigorous (i.e. net impact) evaluations of the AESPs currently exist, which prevents policy makers from being able to distinguish the measures that are effective. Designing interventions with a rigorous results evaluation framework will allow policy makers to identify design and implementation elements that work for particular target groups and to adjust existing programs accordingly. Additional sharing and discussions of the experience with other agencies within and outside of Europe will yield cross-country benefits.

---

<sup>28</sup> Based on administrative data with few basic demographic profile and employment status of ALMP beneficiaries. More detailed information of their social-economic status would allow a refined analysis.

## References

- Alkire, S. and J. Foster. 2011. *Counting and multidimensional poverty measurement*. Journal of public economics, Vol. 95, No. 7, pp. 476-487.
- Akaike, H. 1987. Factor Analysis and AIC. *Psychometrika*, 52.
- Almeida, Orr, and Robalino. 2014. "Wage Subsidies in Developing Countries as a Tool to Build Human Capital." IZA Journal of Labor Policy 3 (12).
- Blundell R., M. Costa Dias, C. Meghir, and J. Van Reenen. 2004. Evaluating the Employment Impact of a Mandatory Job Search Program. *Journal of the European Economic Association*
- Card, D., J. Kluwe and A. Weber. 2015. *What Works? A Meta Analysis of Recent Active Labor Market Program Evaluations*. Discussion Paper No. 9236. Bonn: IZA.
- Dragan A. 2012. *Programy walki z bezrobociem na poziomie Unii Europejskiej i w wybranych państwach – Polsce, Finlandii, Irlandii i Niemczech (Programs to fight unemployment at EU level and in selected countries - Poland, Finland, Ireland and Germany)*. Kancelaria Senatu, Warszawa.
- European Commission. (2010). "Europe 2020: A strategy for smart, sustainable and inclusive growth." Brussels: European Commission: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:2020:FIN:EN:PDF>
- European Commission. 2012a. Social trends and dynamics of poverty and exclusion. Chapter 2 in Employment and Social Developments in Europe.
- European Commission. 2012b. *The 2012 Ageing Report: Economic and Budgetary Projections for the EU27 Member States (2010-2060)*, Joint Report prepared by the European Commission (DG ECFIN) and the Economic Policy Committee (AWG), European Economy 2/2012. Brussels: European Commission.
- European Commission - Directorate-General for Employment, Social Affairs and Inclusion. 2014. *Stimulating job demand: the design of effective hiring subsidies in Europe*. European Employment Policy Observatory Review.
- European Commission, 2015. European Employment Policy Observatory Review. Upskilling Unemployed Adults: The Organization, Profiling and Targeting of Training Provision.
- European Commission. 2016a. *Country Report Poland*  
[http://ec.europa.eu/europe2020/pdf/csr2016/cr2016\\_Poland\\_en.pdf](http://ec.europa.eu/europe2020/pdf/csr2016/cr2016_Poland_en.pdf)
- European Commission (EC). 2016b. *Employment and Social Developments in Europe 2015*. Brussels.
- European Employment Policy Observatory. 2014. *Upskilling unemployed adults: The organization, profiling and targeting of training provision*. EEPO Review Spring 2015

European Social Policy Network (ESPN). 2015. *Social Investment in Europe: A study of national policies*. Brussels.

Eurostat (2013) "Labour market policy statistics: Methodology 2013." Luxembourg: Publications Office of the European Union.

Eurostat (2017) Labour Force Survey (LFS), <http://ec.europa.eu/eurostat/web/lfs/data/database>

Ferré, C., H. Immervoll and E. Sinnott (2013), "Profiling of People with No or Limited Labor market Attachment", *Latvia: Who is Unemployed, Inactive or Needy? Assessing Post-crisis Policy Options*, World Bank, Washington, DC.

FOR (2015). *Następne 25 lat: Jakie reformy musimy przeprowadzić by dogonić Zachód*, Fundacja FOR.

Galasso, E., Ravallion, M., and Salvia A. (2004). "Assisting the transition from workfare to work: A randomized experiment." *Ind Labor Relat Review* 57(5): 128-142

Gatti R., Goraus K., and Morgandi, M (2014). *Balancing Flexibility and Worker Protection. Understanding Labor Market Duality in Poland*. The World Bank, Washington DC

Gatti, R., Morgandi, M., Damerau, T., Goraus, K., Oberlander, L. 2015. *Activation and Public Employment Services in Poland*. Washington, DC: World Bank Group.

GUS - Główny Urząd Statystyczny (Central Statistical Office). 2016a. *Poland in Figures - 2016. Statistical information and elaborations*. Warsaw.

GUS - Główny Urząd Statystyczny (Central Statistical Office). 2016b. *Pomoc Społeczna i Opieka nad Dzieckiem i Rodziną w 2015 roku*. Główny Urząd Statystyczny, Warszawa

GUS - Główny Urząd Statystyczny (Central Statistical Office). 2016g. *Registered unemployment*. Statistical information and elaborations. Warsaw.

Immervoll, H. (2013), "Profiles of vulnerable people in Turkey", in: Finn, D., Grun, R., Herrera-Sosa, K., Immervoll, H., Ridao-Cano, C., Uysal, G., & Yener, A. L., *Activating Vulnerable People into Good Jobs in Turkey*, World Bank, Washington, D.C.

Kiss, A., A. Vandeplas. 2015. *Measuring skills mismatch* Analytical Web Note 7/2015. European Commission, Brussels.

MFLSP – Ministry of Family, Labor and Social Policy (Ministerstwo Rodziny, Pracy i Polityki Społecznej). 2016a. *Analiza rozwiązań wprowadzonych ustawą z dnia 14 marca 2014 r. O zmianie ustawy o promocji zatrudnienia i instytucjach rynku pracy oraz niektórych innych ustaw (dz. U. Poz. 598)*. Warszawa.

MFLSP – Ministry of Family, Labor and Social Policy (Ministerstwo Rodziny, Pracy i Polityki Społecznej). 2016b. *Efektywność podstawowych form aktywizacji zawodowej, realizowanych w ramach programów na rzecz promocji zatrudnienia, łagodzenia skutków bezrobocia i aktywizacji zawodowej w 2015 roku*. Warszawa.

Myck, M. 2016. Estimating Labour Supply Response to the Introduction of the Family 500+ Programme, CenEA Working Paper Series, WP 01/16

OECD and The World Bank. 2016. *Understanding Employment Barriers: OECD-World Bank Joint Methodological Paper*. Washington DC: The World Bank.

OECD (2016), *Employment and Skills Strategies in Poland*, OECD Publishing, Paris.

DOI: <http://dx.doi.org/10.1787/9789264256521-en>

OECD. 2011. *Doing Better for Families*, OECD Publishing, Paris.

Posadas, Josefina, Victoria Levin, Emily Sinnott and Matteo Morgandi. 2016. Briefing Note on the Challenge of Supporting Fertility in Armenia, mimeo, The World Bank.

Schwartz G. (1978). "Estimating the dimension of a model." *The Annals of Statistics*. 1978, vol. 6 (pg. 61-464)

Schwarz, A.M., O.S. Arias, A. Zviniene, H.P. Rudolph, S. Eckardt, J. Koettl, H. Immervoll and M. Abels. 2014. *The Inverting Pyramid: Pension Systems Facing Demographic Challenges in Europe and Central Asia.*, World Bank, Washington, DC.

Sianesi B. (2004). "An evaluation of the Swedish system of active labor market programs in the 1990s." *Review of Economics and Statistics* 86(1): 133–155

Sianesi, B. (2008). "Differential effects of Swedish active labour market programmes for unemployed adults during the 1990s." *Labour Economics*: 15, 392–421.

Spending Review Working Group. 2016. *Spending Review In Poland: Support To Low-Income Families*. 2016. Spending Review Working Group included representatives of Ministry of Finance, Ministry of Labor and Social Policy as well as World Bank experts.

Sundaram, R., U. Hoerning, N. De Andrade Falcao, N. Millan, C. Tokman and M. Zini (2014), "*Portraits of Labor Market Exclusion*", World Bank, Washington, D.C..

Todd, Petra. 2013. *How to Improve Women's Employability and Quality of Work in Developing and Transition Economies*. Mimeo. January 2013

Vuri, Daniela. 2016. Do childcare policies increase maternal employment? Subsidized childcare fosters maternal employment, but employment status, childcare quality, and availability matter. *IZA World of Labor* 2016: 241

.Vermunt, J.K. and Magidson, J. (2016). *Technical Guide for Latent GOLD 5.1: Basic, Advanced, and Syntax*. Belmont, MA: Statistical Innovations, Inc.

Vuri, Daniela. 2016. Do childcare policies increase maternal employment? Subsidized childcare fosters maternal employment, but employment status, childcare quality, and availability matter. *IZA World of Labor* 2016: 241



World Bank. 2014. *Portraits of Labor Market Exclusion*. Washington DC: The World Bank.

World Bank. 2015a. *How Poland Can Accelerate Growth with Inclusion*. World Bank Policy Note.

World Bank. 2015b. Activation and Public Employment Services in Poland. Enhancing Labor Market Policies for the Out of Work Population. Washington, DC: World Bank.

## Annex 1. Advantages and disadvantages of the EU-SILC Data

The data source for the analysis is the harmonized version of the European Union Statistics of Income and Living Conditions (EU-SILC) survey. There are several reasons why the SILC survey was selected instead of the European Union Labor Force Surveys (EU-LFS), which are made available to researchers on a timelier basis. The SILC survey, as its full name implies, is a comprehensive survey of income and living conditions that goes beyond standard labor market surveys. In addition to several socioeconomic characteristics, the survey captures the incomes (from labor, social transfers, and other sources) as well as the (self-reported) labor market status of individuals and households throughout each month of the calendar year (reference period) prior to the interview. This level of comprehensive data is necessary for this analysis. Had we used the LFS survey, we would only be able to identify the target population of this study — out of work or marginally employed — according to their labor market status at the time of the interview. Had we used the LFS survey, we therefore would not have been able to identify the population that, although working at the time of the interview, may have been marginally employed due to working in unstable jobs. Furthermore, because we were able to capture the full income of individuals and their households (the LFS survey would only have allowed us to capture earnings from labor and unemployment benefits), we are able to get a more comprehensive view of the socioeconomic status of the target population of this study, which includes income from social transfers other than unemployment benefits that may be denied or reduced when accepting a job. Moreover, the SILC survey also includes information about access to childcare that is necessary to identify caregiving responsibilities that present a barrier to work.

Although using SILC data provides many clear benefits for the present analysis, a few shortcomings of this data collection method are worth mentioning.

First, the survey relies on self-reported labor market status, rather than a series of questions that lead to standardized classification of employment status. Thus, it is possible that some individuals who work do not self-identify as employed because they work very few hours. Thus, some of the population identified as out of work may have been mischaracterized.

Second, among old-age and family/child social transfers, the survey does not distinguish between those receiving social insurance and social assistance benefits. Being able to yield this type of information would enrich the analysis of how social inclusion policies are targeted to specific groups, as well as how social benefits may affect incentives to participate in the labor market.

Another drawback of the SILC survey vis-à-vis the LFS survey is that it does not yield detailed information pertaining to an individual's educational status. EU-SILC only includes information regarding the highest International Standard Classification of Education (ISCED) level achieved. In contrast, the LFS survey includes information on vocational versus general education, field of study, and additional training or certifications. This information could be used to inform policies aimed at addressing barriers to employment due to skills.

Another important dimension that is not captured by the SILC survey (or by the LFS survey) is ethnicity. Ethnicity can play an important role in the labor market. For example, certain groups, such as Roma, may have more difficulty finding jobs due to discriminatory practices by employers. Information from other surveys shows that Roma are likely to be overrepresented among the population that is out of work or marginally employed, at risk of poverty, and who have low levels of education. As such, it is likely that some of the groups identified in this analysis comprise a large

proportion of the Roma. Being able to identify the Roma population would make the labor market barriers they face more visible, allowing for the design of evidence-based policies, and perhaps breaking down stereotypes of Roma as being out of work or marginally employed by choice. Designing and prioritizing policies aimed at including the Roma population in the labor market — a group that has historically suffered from social exclusion — is also increasingly important in the context of aging and shrinking populations.

Finally, compared to the LFS survey, the SILC survey has a small sample size, totaling 7,949 observations for the reference population of this study for the Polish 2013 survey. The statistical methodology used in this study benefits significantly when there is a large sample size. Large sample sizes can allow us to identify a greater number of groups of individuals that are more homogenous within themselves and more heterogeneous among each other in terms of labor market barriers and socioeconomic characteristics. In doing so, we could design more specific tailored policies.

*Source:* Based on Sundaram et al. (2014).

## Annex 2: Definitions of Employment Barrier Framework Indicators

Across the six countries that are analyzed by the World Bank, eight indicators are used in order to proxy for broad measures of each of the three types of employment barriers: insufficient work-related capabilities, weak economic incentives to look for a job, and scarce employment opportunities. The definitions of the indicators are outlined below, with further details available in the joint methodological paper (OECD and World Bank, 2016).

**The following five indicators are used to capture different aspects of the *insufficient work-related capabilities* barrier:**

- 1. Low education:** In the absence of data on the cognitive, socio-emotional, or technical skills of the population, we use education as a proxy for skills. Even though education may not be a comprehensive measure of the skills that individuals bring into the labor market, a high correlation between education level and skill level is reasonable to assume. Similarly, the labor market itself uses education to screen for skills. We consider an individual to have low education if his or her education level is lower than upper-secondary (based on the International Standard Classification of Education (ISCED)-11 classification). In other words, the population with this barrier has only completed pre-primary, primary, or lower secondary schooling. In Greece, the cut-off for low education has been set at the post-secondary level rather than the lower secondary level. The reason for the change in the cut-off is that a look at unemployment (employment) rates by education level shows that unemployment (employment) only falls (rises) significantly among individuals who have completed tertiary education.
- 2. Care responsibilities:** Caring for children or caring for incapacitated family members are legitimate barriers to employment, because they reduce the time that an individual can spend on paid work. To determine whether an individual faces a care-related employment barrier using EU-SILC data, we rely on information regarding (i) household members who face some unmet care need, such as young children, incapacitated family members, or elderly relatives and (ii) the availability of alternative care arrangements, namely the use of formal childcare services<sup>29</sup> and the availability of other potential caregivers in the household. We consider an individual as having care responsibilities if he or she lives with someone who requires care and is either the only potential caregiver in the household or if he or she reports being inactive or working part time because of care responsibilities.

The individuals who require care are children 12 years or younger who receive 30 or fewer hours of non-parental childcare a week. We also considered individuals of working age who (1) reported severe long-lasting limitations in activities due to health problems and (2) reported a permanent disability as the main reason of inactivity. Lastly, elderly household members are classified as requiring care if they have long-lasting limitations in activities due to poor health and if they report being inactive during each month of the SILC reference period. An individual is considered to be a potential caregiver if he or she is an adult 18-75 years of age with no severe health-related limitations and if during the SILC reference period he or she engaged in either part-time work, unemployment, retirement, domestic

---

<sup>29</sup> EU-SILC data only provides information with regard to access to non-parental formal or informal childcare for children 12 and under. Information on access to formal or informal care services for incapacitated individuals ages 13 and over is unavailable.

responsibilities, and other types of inactivity and did not have a permanent disability. Individuals who reported they were full-time workers, full-time students, or participated in compulsory military service could not be considered potential caregivers.

3. **Health limitations:** An individual is considered to have health limitations if they report having moderate or severe self-perceived limitations carrying out daily activities due to health conditions (physical or mental).
4. **Low relative work experience:** An individual is considered to have low relative work experience if they have worked less than 60 percent of their total potential work life, measured by the number of years since they left full-time education. Note that this indicator is not used in the analysis for Hungary or Bulgaria due to missing data on work experience.
5. **No recent work experience:** This indicator may represent two situations: (i) individuals who have worked in the past but have no recent work experience (i.e. have not worked for at least one month in the last semester of the reference year or in the month of the interview); (ii) those who are not working at the time of the interview and report having never worked in the past. Individuals working at the time of the interview do not face this employment barrier.

**Two indicators are used to capture the *weak economic incentives to look for a job or accept a job barrier*** by identifying individuals who could potentially draw on significant income independently of their own work effort:

6. **High non-labor income.** In this scenario, an individual's total household income (excluding income from the individual's work-related activities) is more than 1.6 times higher than the median value among the population of working age.<sup>30</sup>
7. **High earnings-replacement benefits:** This indicator captures possible financial disincentives to work that are based on the extent of the benefit reductions that an individual is likely to experience if they were to engage in full-time employment. The indicator is constructed using the ratio between the amount of earnings-replacement benefits received at the individual level and the own shadow income or reservation wage.<sup>31</sup> The following individual earnings-replacement benefits are considered, as grouped by the EU-SILC survey: unemployment benefits, old-age benefits received before the statutory retirement age, survivor benefits, sickness benefits, disability benefits, and full-time education-related allowances. The adult-per-capita amounts of the following household-level allowances — family/children related allowances, housing, and social exclusion not elsewhere classified — are also added to the individual benefits, assuming that at least part of these benefits would be withdrawn if the individuals increased their own labor supply. Based on this resulting variable, an individual is considered to have high replacement

---

<sup>30</sup> Specifically, we use the EU-SILC variable 'gross household income' (which includes pre-tax income from labor and capital plus government transfers) *minus* the person of interest's own income which is dependent on the person's own work efforts (*i.e.*, employment income and earnings-replacement benefits, such as unemployment benefits) and *minus* a share, proportional to the number of adults in the household, of social transfers awarded at the household level (for instance, social assistance or rent allowances). The final indicator is the difference between the total gross household income and the own labor-market contribution as defined above, divided by the Eurostat equivalence scale and discretized in 2 categories. The individuals with high financial work disincentives are those with a value of the indicator above 1.6 times the median of the resulting variable in the reference population; the remainder in the target population is characterized as having no or low financial work disincentives.

<sup>31</sup> See OECD and World Bank, 2016 for details on how the reservation wage is calculated.

benefits if their earnings-replacement benefits are more than 60 percent of their estimated potential earnings in work or shadow wage.

**One indicator is used to capture the scarce employment opportunities barrier:**

- 8. Scarce job opportunities:** In general, this barrier relates to demand-related constraints in the respective labor market segment. Although a number of indicators of labor demand exist at the aggregate or semi-aggregate level, capturing the scarcity of job opportunities at the micro-level would require the ability to describe the availability of vacancies in the labor-market segment that are relevant for each individual given their skills set and job market characteristics. This type of information is unavailable in EU-SILC data. In order to proxy individuals facing scarce employment opportunities, we estimate risk of demand-side constraints (specifically the risk of being long-term unemployed or working in a sub-optimal job) in standard labor-market segments in a regression including age, gender, education level, and region (at the NUTS (Nomenclature of Territorial Units for Statistics) 1 level) as independent variables and being long-term unemployed or involuntarily working part-time as the dependent variable. In this way, we are able to calculate different risks depending not only on the geographical location but also on the combination of other observable characteristics within the same geographical area. The estimated parameters are then used to predict at the local level the risk of becoming long-term unemployed or involuntarily working part time conditional on individual circumstances. Importantly, the estimated risk will depend on the empirically observed relation between covariates included in the regression model and the variable describing labor-market tightness. We consider an individual to have scarce employment opportunities if their estimated risk of being long-term unemployed or involuntarily working part time is 1.6 times the median value. It is important to note, however, that the scarce employment opportunities indicator may underestimate the risk of becoming long-term unemployed or involuntarily working part-time among individuals who are inactive if they were to undertake a job search. This is because many inactive individuals may not resemble the long-term unemployed and involuntary part-time workers but they may still have a high probability of unemployment. This does not imply, however, that they would be able to find a job without difficulty if they were to enter the labor market. This is an important weakness of this indicator that should be borne in mind.

## Annex 3: Latent Class Analysis results of EU SILC 2013 respondents who are out-of-work or marginally employed

### Characteristics of latent groups (percent)

	Group 1: Middle-aged and older inactive women with no recent work experience	Group 2: Middle-aged women with care responsibilities and low relative work experience	Group 3: Middle-aged and young men in precarious jobs with low relative work experience	Group 4: Younger relatively educated unemployed women in areas of scarce job	Group 5: Low educated and self-employed women with children living in rural areas	Group 6: Poorly educated elderly, mostly men, with high social benefits	Group 7: Well-educated elderly in urban areas with health limitations	Target pop.	Working-age pop.
Percent of target population								1.941.2	
Number of individuals	648.637	385.349	378.325	325.572	118.141	79.636	5.569	31	NA
Women*	87	97	25	77	100	36	66	75	52
Children younger than 12 in household*	62	92	65	81	100	67	30	74	35
<i>Age group*</i>									
Youth (18-29)	16	8	38	55	5	6	14	22	19
Middle-aged (30-55)	55	91	54	45	69	15	3	61	60
Older (56-64)	30	1	9	0	26	78	83	17	22
<i>Main activity during the reference period*</i>									
Employed	19	2	29	10	66	7	31	17	67
Unemployed	16	25	33	51	2	4	4	24	10
Retired	14	0	3	0	15	49	0	9	9
Domestic tasks	18	53	13	20	8	0	27	10	4
Other inactive or disabled	32	20	22	18	9	40	38	39	10
<i>Degree of urbanization*</i>									
Densely populated	13	19	26	10	0	11	89	27	33
Thinly populated	61	63	59	69	100	72	11	50	43
<i>Region</i>									
Centralny	20	18	20	11	24	7	0	19	21
Południowy	16	16	17	12	10	10	53	19	19
Wschodni	27	24	29	30	34	16	14	19	18

Północno-zachodni	16	14	13	14	12	33	3	17	16
Południowo-zachodni	6	10	8	13	3	11	4	10	10
Północny	15	18	13	20	17	24	25	16	15
<i>Target group**</i>									
Out of work	67	88	44	81	29	91	55	73	28
Unstable jobs	15	11	30	11	6	2	14	14	6
Restricted hours	3	1	1	3	3	0	27	3	1
Near-zero income	16	0	25	5	62	7	4	10	4
<i>Main activity during reference period (more disaggregated)</i>									
Employed full time	0	0	2	0	0	0	0	0	50
Employed part time	2	1	2	3	2	0	31	2	3
Self-employed full time	13	0	20	5	54	7	0	12	12
Self-employed part time	4	1	4	2	10	0	0	3	1
Unemployed	16	25	33	51	2	4	4	24	10
Retired	14	0	3	0	15	49	0	9	9
Disabled	20	2	7	1	4	20	24	10	5
Domestic tasks	18	53	13	20	8	0	27	24	4
Other inactive	12	18	15	17	5	20	14	15	5
<i>Main activity at moment of interview</i>									
Employed full time	6	4	12	2	2	2	0	5	49
Employed part time	4	1	3	3	2	0	40	4	4
Self-employed full time	15	0	22	5	56	6	0	9	12
Self-employed part time	3	1	3	2	9	0	0	3	1
Unemployed	13	24	29	52	1	4	3	21	10
Retired	14	0	3	0	15	49	0	9	10
Disabled	20	2	7	1	6	21	24	14	6
Domestic tasks	15	51	12	20	7	0	28	25	4
Other inactive	10	16	9	13	2	17	4	10	4
Student	0	0	0	1	0	1	0	0	0
<i>Months in unemployment</i>									
Zero months	78	68	54	38	95	88	75	72	85
1 to 11 months	10	8	22	15	3	3	24	10	8
12 or more	12	24	23	47	2	9	0	18	7
<i>Actively searching for a job at time of interview</i>									
	8	15	21	46	1	2	0	15	8
<i>At risk of poverty (60% of median income)</i>									
	47	49	52	51	44	17	11	46	16



<i>At risk of poverty (40% of median income)</i>	18	16	23	26	20	4	0	11	6
<i>Income quintile</i>									
Poorest	51	53	55	55	48	28	11	51	19
2	29	25	15	33	25	31	3	26	18
3	15	14	6	8	19	27	8	13	19
4	5	6	16	3	6	11	3	7	21
Richest	1	2	7	1	2	2	75	4	22
<i>Severe material deprivation</i>	27	31	24	34	18	20	16	18	12
<i>Years of work experience</i>									
1 to 5	13	16	25	30	2	3	4	31	15
6 to 10	13	28	14	26	4	1	10	18	14
11 to 20	19	18	15	16	14	5	27	23	23
21 to 30	26	5	20	9	34	13	29	17	22
More than 30	21	0	13	4	47	70	30	11	22
<i>Average years of work experience***</i>	17	8	13	8	25	30	21	14	19
<i>Education level</i>									
Less than primary	2	0	1	0	0	0	0	1	0
Primary	18	24	21	10	41	45	0	21	10
Lower secondary	3	0	9	2	1	0	4	3	1
Upper secondary	68	66	57	76	50	54	69	65	61
Post-secondary	3	5	4	4	6	0	0	4	5
Tertiary	6	6	8	7	3	1	27	6	23
<i>Age groups (more disaggregated)</i>									
18-24 years	7	5	26	21	2	6	4	8	7
25-34 years	15	35	21	45	12	3	10	17	24
35-54 years	48	60	44	33	60	13	3	34	45
55-59 years	15	1	5	0	15	28	31	17	13
60-64 years	14	0	3	0	11	51	52	25	11
<i>Average age</i>	45	37	36	32	47	55	55	47	43
<i>Severe limitations in daily activities</i>	17	5	5	1	7	17	8	9	5
<i>At least one other household member 25 and older working</i>	61	58	69	65	84	45	30	58	64
<i>Elderly in the household</i>	19	12	21	12	23	11	0	20	16
<i>Children under 6 in household</i>	41	57	46	60	65	51	30	55	23
<i>Children under 3 in household</i>	27	35	33	42	41	26	0	36	14
<i>Children under 13 in formal childcare</i>									

None	20	35	24	28	37	21	21	27	11
Some	26	36	21	29	33	32	10	28	7
All	16	21	20	23	31	14	0	19	18
NA	38	8	35	19	0	33	70	25	65
<i>Household type</i>									
One person	0	0	0	0	0	0	4	0	7
Single parent	7	11	1	7	7	15	10	3	1
2+ adults, 0 children	10	6	12	2	0	7	62	6	42
2+ adults, 1 child	7	7	8	8	1	7	3	10	13
2+ adults, 2+ children	75	76	79	82	92	71	21	81	37
<i>Live with parents</i>	20	15	44	36	8	9	4	23	22
<i>Marital status</i>									
Married	62	72	59	60	78	61	82	65	69
Never married	13	10	36	26	4	12	4	20	22
Divorced/separated	11	14	4	11	5	5	10	6	5
Widow/er	13	4	1	3	14	21	4	9	4
<i>Labor market status of spouse/partner</i>									
Working	40	54	38	44	61	12	27	47	37
Unemployed	6	4	5	9	1	8	0	7	4
Retired	7	0	2	0	6	18	0	5	14
Unfit to work	5	7	3	1	6	3	0	5	5
Domestic tasks	2	1	8	2	0	14	33	3	1
Other inactive	2	1	3	2	1	6	1	3	2
No spouse/partner	38	34	41	42	24	39	39	31	37
<i>Receive housing benefits</i>	7	14	7	13	1	3	0	4	2
<i>Receives family benefits</i>	27	38	33	25	32	27	7	23	16
<i>Average annual value (€)</i>	1025	1139	1049	971	1222	1001	4667	1065	1092
<i>Receives social exclusion benefits</i>	15	23	17	17	8	2	13	8	4
<i>Average annual value (€)</i>	638	531	610	555	404	363	262	687	654
<i>Receives unemployment benefits</i>	3	4	8	11	1	1	10	5	3
<i>Average annual value (€)</i>	1.456	869	1.510	1.023	1.735	2.455	390	1.691	1.422
<i>Receives old-age benefits</i>	13	0	2	0	16	54	21	26	11
<i>Average annual value (€)</i>	3.384	3.074	4.208	1.931	3.086	6.359	3.665	5.165	5.244
<i>Receives survivor benefits</i>	3	2	0	2	7	14	8	3	1
<i>Average annual value (€)</i>	2411	2306	1522	1364	2289	3567	3687	3827	3391
<i>Receives sickness benefits</i>	1	1	2	0	2	0	0	1	1
<i>Average annual value (€)</i>	665	864	729	1257	278	606	606	972	890
<i>Receives disability benefits</i>	21	4	8	1	5	23	3	14	6

<i>Average annual value (€)</i>	2.401	2.020	2.266	2.369	2.667	4.182	2.232	2.686	2.645
<i>Receives education benefits</i>	0	0	1	2	0	1	0	0	0
<i>Average annual value (€)</i>	722	1266	840	1370	751	1284	1178	1277	1.287
<i>Total average annual household income (€)</i>	11.626	12.029	14.671	11.862	14.107	14.577	15.221	12.932	17.196
<i>Average annual household income (€) from:</i>									
Labor	6.999	8.630	10.374	8.327	9.023	6.823	7.525	8.023	13955
Other	234	270	242	307	239	207	182	238	222
Benefits	4.392	3.128	4.056	3.227	4.845	7.548	7.515	4.669	3.018
<i>Average household size</i>	5	5	5	5	6	6	3	4	4
<i>Average annual equivalized household income (€)</i>	3.381	3.571	4.080	3.264	3.533	4.075	6.844	4.749	6.245

\*Included in the LCA model as active covariates.

\*\* Refers to target groups as defined in section 3.

\*\*\*Refers only to individuals who have worked before.

Source: World Bank staff calculations based on EU-SILC 2013 data. Color shadings identify categories with high (darker) frequencies.

## Annex 4. Latent Class Analysis model selection for Poland

A latent class model does not automatically provide an estimate of the *optimal* number of latent groups of individuals. Instead, models with different numbers of classes must first be estimated sequentially and the optimal model is then chosen based on a series of statistical criteria. The model selection process starts with the *definition of a baseline model* (Step 1). In this case, the baseline model has been defined based on a set of eight indicators representing the three main types of employment barriers that are to be used as the main drivers for segmenting individuals into groups. Under Step 2, the model with the *optimal* number of classes is selected, primarily based on the goodness-of-fit statistics and classification-error statistics. Next, Step 3 examines mis-specification issues, mostly associated with the violation of the Local Independence Assumption (LIA) (see Box 9 of OECD and World Bank, 2016). The final model is then further refined with the inclusion of the so-called *active covariates* under Step 4. The following paragraphs describe the step-by-step process that was used to select the final model for Poland starting with Step 2. For a general more detailed explanation of the step-by-step process of model selection, see OECD and World Bank, 2016.

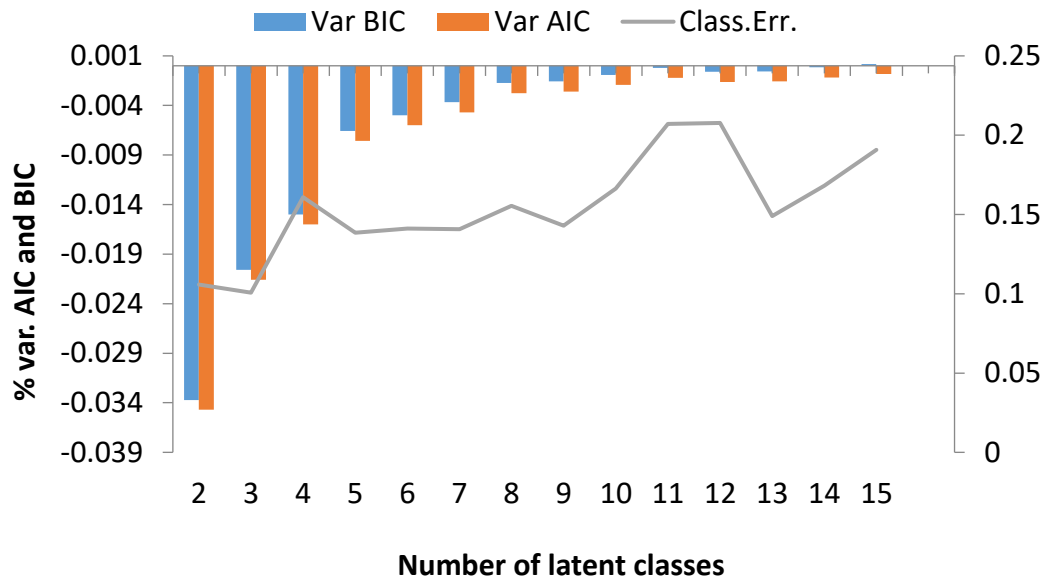
Figure A2.1 below summarizes graphically Step 2 outlined above for Poland. The blue bars show the percentage variations of the *Bayesian Information* (BIC, Schwartz 1978) for increasing numbers of latent groups for the baseline model; the orange bars show the percentage variation of the *Akaike Information Criterion* (AIC; Akaike, 1987)<sup>32</sup>; and the grey line shows the *classification error statistics* (Vermunt and Magdison, 2016).<sup>33</sup> In general, smaller values of the BIC and AIC indicate a more optimal balance between model fit and parsimony, whereas a smaller value of the classification error statistics means that individuals are better classified into one (and only one) group. In Figure A2.1, both AIC and BIC are declining when increasing the number of class, but models with seven classes exhibits the lowest classification error.

---

<sup>32</sup> The BIC and the AIC are measures that capture the *trade-off* between the model's ability to fit the data and the model's parametrization: a model with a higher number of latent classes always provide a better fitting of the underlying data but at the cost of complicating the model's structure. The BIC and the AIC summarize this trade-off into a single index. This index provides guidelines for choosing between an adequate representation of the population into a finite number of sub-groups and an increasing complexity of the statistical model.

<sup>33</sup> The classification error shows how-well the model is able to *classify* individuals into specific groups. To understand the meaning of the classification error index, one must keep in mind that LCA does not assign individuals to specific classes; rather it estimates probabilities of class membership. One has therefore two options for analyzing the results: assigning individuals into a given cluster based on the highest probability of class-membership (*modal* assignment) or *weighting* each person with the related class-membership probability in the analysis of each class (*proportional* assignment). The classification error statistics is based on the share of individuals that are mis-classified according to the modal assignment.

Figure A2.1: Selection of the optimal number of latent classes



### Step 3: Mis-specification tests

The model selected through goodness-of-fit and classification statistics under Step 2 may not be optimal due to mis-specification issues, the most common of which is associated with the violation of the LIA. This assumption shapes the mathematical specification of the statistical model and, in practice, requires the indicators to be *pairwise* independent *within* the latent groups. When this requirement is not met, the model is not able to reproduce the *observed* association between the indicators, at least for the indicators showing some residual within-class (*local*) dependency. These violations of the LIA can be best addressed modelling explicitly the local dependencies between pairs of indicators, via the so-called *direct effects* (Vermunt and Magdison, 2016; OECD and World Bank, 2016). The inclusion of direct effects in the model specification eliminates any residual correlation between the indicators (by construction) but it also requires repeating the model selection process from the beginning, as the new baseline model with local dependencies may lead to a different optimal number of classes.

For Poland, the 7-class model selected clear signs of mis-specification, with bivariate residuals significantly higher than 1 for several pairs of indicators.<sup>34</sup> Eliminating the local dependencies through the use of direct effects once again points to a 7-cluster model when minimizing the BIC criterion and the classification error: hence, it remains the preferred model for Poland.

### Step 4: Model refinements – inclusion of active covariates

In most empirical applications, the aim of latent class analysis is not just to build a classification model based on a set of indicators but also to relate the class membership to other individual and household characteristics. For example, it allows identification of specific population sub-groups of interest, such as *youth* and *women*.

In order to further describe the identified groups according to specific population sub-groups that are typically considered in the breakdown of common labor market statistics, we run the latent class model again, this time with covariates *actively* contributing to the definition of the group-membership probabilities. The inclusion of active covariates is primarily driven by the interest in specific population sub-groups that are typically considered in the

<sup>34</sup> In the case of Poland, 15 direct effects have been included. Results are available upon request.

breakdown of common labor market statistics. As such, different specifications of models with active covariates were estimated, including different combinations of *age* (3 categories), *gender*, presence of *young children* and *degree of urbanization*. The choice of the active covariates also relies on practical considerations, i.e. the relevance of these categories in the policy debate on AESPs and also on whether it is possible for public employment services to actually collect this information. The inclusion of active covariates does produce mis-specification once again (i.e. bivariate residuals between combinations of indicators and covariates), which we, again, address by explicitly modelling the associations between indicators and covariates with *direct effects* (as discussed in Step 3 above).

Culminating Step 4, we find that a 7-cluster model with the combination of active covariates—including age, gender, presence of young children, and urbanization level—and direct effects brings the bivariate residuals down and has the lowest classification error than the model without any covariates. The model has a classification error of 13 percent, slightly lower than the model without active covariates (15 percent), along with considerable improvement in both AIC and BIC. A reduction of the classification-error statistics in models with active covariates is the sign that, for some individuals, the employment-barrier indicators alone do not produce a clear-cut latent-class assignment and that, therefore, the covariates are playing an important role not only in improving the latent-class membership but also in shaping the main barrier profile that characterizes some of the latent groups. While this does not typically affect the barrier profiles of the biggest groups (i.e. those with the biggest shares in the target population), the barrier profiles of the smallest groups could be partially shaped around the interaction between the information provided with the active covariates and the indicators.<sup>35</sup>

---

<sup>35</sup> This should be considered as an improvement with respect to a model *without* covariates whose indicators do not produce a clear-cut latent-class assignment for some individuals. In fact, without additional information, the assignment of these individuals into a specific latent group would be done almost at random; whereas in models with covariates, the assignment of the individuals depends on the additional information provided to the latent class model and how this interacts with the indicators.

## Annex 5. Categorization and Definitions of Labor Market Programs based on Eurostat

Labor market programs are government initiatives that include expenditure programs but also foregone revenues (e.g. reductions in social security contributions) that aim to reduce disequilibria and improve efficiency of the labor market (Eurostat 2013).

Eurostat classifies these labor market policies in three broad categories:

**1. Labor Market Services.** This covers all services and activities of the public employment service together with any other publicly funded services for jobseekers, including their administrative costs.

**2. Active Labor Market Programs (ALMPs).** These include all interventions where the main activity of participants is other than job-search related and where participation usually results in a change in labor market status. With the exception of programs that support permanent reduced working capacity, these measures usually provide a temporary support designed to activate the unemployed, help people move from involuntary inactivity into employment, or maintain the jobs of people threatened by unemployment. Since 2013, Eurostat classifies these measures into 5 subcategories:

- a) training,
- b) employment incentives,
- c) supported employment and rehabilitation,
- d) direct job creation, and
- e) start up incentives.

**3. Passive Labor Market programs.** These usually provide financial assistance to those who are out-of-work (unemployment benefits) or who retired early from the labor market.

*Source:* adapted from Eurostat LMP database, Eurostat (2013)

## Annex 6. Detailed list of labor market services and measures: Typologies, spending, and coverage for Poland

### Labor market services

Program names	Target group	Objectives	Spending (% of total LMPs)	Beneficiaries
<b>1. Service provided by local PES</b>	Registered unemployed Other registered jobseekers	Finance regional labor offices	10.3	n.a.
<b>2. Job clubs - Training in job-search skills</b>	Registered unemployed Other registered jobseekers (condition: need counselor approval to attend the program)	Assistance in active job-seeking and gaining theoretical and practical information on how to seek a job	0.0	7,906
<b>3. Job clubs - Activation tutorials</b>	Registered unemployed Other registered jobseekers Not registered Employed	Assistance in active job-seeking (tutorials to increase participant activity)	0.0	120,179
<b>4. Vocational counseling (guidance) (&lt;1 day)</b>	Registered unemployed Other registered jobseekers Not registered Employed	To provide the unemployed and job-seekers with assistance in selecting suitable occupations/employment. To help employers choose an appropriate worker	0.0	513,106
<b>5. Financing of travel costs (Maximum 1 year)</b>	Registered unemployed Registered jobseekers entitled to training <sup>36</sup>	To help confirm qualifications by recognized diploma and certificates	0.0	n.a.
<b>6. Financing of accommodation costs (Maximum 1 year)</b>	Registered unemployed if they take a job or training in a place outside their permanent residence (conditions: income lower than 200% of minimum salary and maximum 1 year)	Promote vocational mobility, help to return to work, and participation in active labor market measures	0.0	n.a.
<b>7. Financing of examination costs (One-off)</b>	All registered unemployed Registered jobseekers entitled to training <sup>37</sup>	To help confirm qualifications by recognized diploma and certificates	0.0	1,773

<sup>36</sup> Jobseekers entitled to training include (i) laid-off employees, (ii) soldiers in reserve, (iii) those receiving a training pension or social allowance for people on miners' leave, (iv) those in the agricultural sector who want to find another job, and (v) those ages 45 and older who register in local labor offices (PUP).

<sup>37</sup> Ibid



Labor market measures (ALMPs): Training

Program names	Target group	Objectives	Implementation/ payment type	Spending (% of total ALMP)	Beneficiaries
<b>1. Vocational training organized by Local labor office (maximum 36 months)</b>	Disabled (all)	To increase the chances of finding employment, upgrading vocational qualifications or intensifying occupational activity of disabled persons	Local labor office Transfer to service provider	0.02	672
<b>2. Scholarship for continuing school education (maximum 12 months)</b>	All registered unemployed (means-tested according to eligibility rule for social assistance)	Improve the qualifications of unemployed persons to increase their employability	Regional PES Scholarship paid to beneficiaries	0.07	382
<b>3. Training (maximum 24 months)</b>	All registered unemployed Registered jobseekers entitled to training <sup>38</sup> Conditions: lack of skills	To acquire or complement vocational and general skills and qualifications in order to increase employability of unemployed and job seekers	Regional PES Scholarship paid to beneficiaries	2.72	79,195
<b>4. Vocational training organized by employers</b>	Disabled workers (on request of employers)	To increase the competitiveness for disabled persons in the labor market	Local labor office Transfer to employers	0.0	15
<b>5. The expenses return on labor market's instruments and services dedicated to unemployed and disabled jobseekers</b>	Disabled	To increase chances of employment and work activity and to develop vocational qualifications for disabled persons	Local labor office Transfer to employers	0.16	2,518
<b>6. Financing of postgraduate studies</b>	All registered unemployed Registered jobseekers entitled to training <sup>39</sup>	To improve the qualifications of unemployed persons and job-seekers with tertiary education in order to improve their employability	Regional PES Scholarship paid to beneficiaries	0.09	1,135

<sup>38</sup> Ibid

<sup>39</sup> Ibid

	Conditions: not entitled to scholarship				
<b>7. Refund costs of training for workers and employers co-financed by employers</b>	Employers who created training funds and invest in training courses	To help the employers to finance the costs of training and increase the employability of workers	Regional PES Reimbursement of training cost to employers	0.00	104
<b>8. Apprenticeship for adults (maximum 18 months)</b>	All registered unemployed Registered jobseekers entitled to training <sup>40</sup>	To improve employability of the unemployed and jobseekers and formally confirm skills and qualifications acquired	Regional PES Reimbursement of training costs to employers or service providers Scholarships paid to beneficiaries	0.08	162
<b>9. Junior vocational activation program for disabled school-leavers</b>	Registered and disabled unemployed, 25 years old or younger (or 27 if person completed tertiary education)	To facilitate the integration of disabled graduates into the labor market	Central government Reimbursement of training cost to employers or service providers Scholarship paid to beneficiaries	0.06	571

#### Labor market measures (ALMPs): Employment Incentives

<b>Program names</b>	<b>Target group</b>	<b>Objectives</b>	<b>Implementation/ payment type</b>	<b>Spending (% of total ALMP)</b>	<b>Beneficiaries</b>
<b>1. Adaptation of the workplace for persons with a disability</b>	Disabled (registered)	To facilitate the employment of disabled persons and their vocational integration	Local labor offices Reimbursement to employers	0.52	1,068
<b>2. Interventional jobs (maximum 4 years)</b>	Registered unemployed younger than 25 years old Registered unemployed older than 50 Long-term unemployed	Supporting the unemployed who are in a specific situation on the labor market	Regional PES Reimbursement to employers (part of the cost of remuneration and social security contribution)	2.67	31,195

<sup>40</sup> Ibid

	Unemployed with low skills Single unemployed with child Disabled unemployed				
<b>3. Refund of costs of equipment and additional workplace equipment related to recruiting an unemployed person (2 years)</b>	Registered unemployed	Support unemployed persons transition to work	Regional PES Reimbursement to employers	8.68	41,576
<b>4. Activation allowances</b>	Registered unemployed with the right to unemployment benefit Condition: salary lower than minimum wage)	To encourage the unemployed to begin a part-time job	Regional PES Allowance to the unemployed who start a job	1.58	118,353
<b>5. Refund of social insurance contributions</b>	Registered unemployed (condition: full-time job and should remain at least 1 year after placed on the job)	To encourage employers to hire the unemployed	Regional PES Reimbursement to employers	0.01	n.a.
<b>6. Co-financing the costs of care for children or dependents (Maximum 6 months)</b>	Registered unemployed parent with a child younger than 18 years of age (condition: salary below minimum wage)	Integration into the labor market of those raising children or taking care of dependents	Regional PES Reimbursement of childcare to workers	0.01	n.a.
<b>7. Work practice (maximum 12 months)</b>	Registered unemployed younger than 25 years old Registered unemployed older than 50 Long-term unemployed	To help the unemployed in specific situations on the labor market in gaining a work experience	Regional PES Scholarship paid to participant	19.29	221,555

	Unemployed with low skills Single unemployed with child Disabled unemployed				
<b>8. Activation benefit (18 months)</b>	Registered unemployed (caregiver)	To support unemployed parents and the unemployed taking care of dependents, in their return to the labor market	Regional PES payments to employers	0.00	n.a.
<b>9. Reimbursement of social insurance contributions for the unemployed up to 30 years of age, starting the first job</b>	Registered unemployed, younger than 30 years old	To support young unemployed	Regional PES Reimbursement to employers	n.a.	n.a.
<b>10. Grant for telework</b>	Registered unemployed, younger than 30 years old	To support return to employment for parents who have a child younger than 6 years old  Also supports of the unemployed who had stopped working to take care of a dependent person	Regional PES Reimbursement to employers	0.00	n.a.
<b>11. Replacement work</b>	Registered unemployed	Replacement for an employee on a longer paid training leave	Regional PES Reimbursement to employers	n.a.	n.a.

Labor market measures (ALMPs): Supported employment and rehabilitation

Program names	Target group	Objectives	Implementation/payment type	Spending (% of total ALMP)	Beneficiaries
<b>1. Support for employers running supported work environments (SWEs) - co-financing up to 50% of interests due on bank loans</b>	Employed (disabled)	To guarantee sheltered work places by supporting the performance of SWE	Central government/ Transfers to employers (Reimbursements)	0.03	11,516

<b>2. Wage subsidies for disabled workers</b>	Employed (Disabled)	To increase the employment of disabled	Central government/ Transfers to employers (Periodic cash payments)	14.44	130,415
<b>3. Wage subsidies for disabled workers in SWE</b>	Employed (Disabled)	To increase the employment of disabled	Central government/ Transfers to employers (Periodic cash payments)	28.87	199,588
<b>4. Reimbursement of cost of remuneration of employee assisting a disabled worker</b>	Employed (Disabled)	To facilitate the performance of the activities impossible or difficult for the disabled worker at the workplace	Local government/ Transfers to employers (Reimbursements)	0.01	161
<b>5. Reimbursement of obligatory social insurance premiums for disabled individuals who run a business</b>	Employed (Disabled)	To support disabled who run a business	Central government/ Transfers to individuals (Reimbursements)	1.19	31,811
<b>6. Reimbursement of social contributions paid by disabled farmers or disabled family members of farmers</b>	Employed (Disabled)	To support disabled farmers and farmers obliged to pay social insurance contributions on behalf of a disabled household member	Central government/ Transfers to individuals (Reimbursements)	0.06	3,164
<b>7. Reimbursement of obligatory social insurance premiums paid for disabled employees</b>	Employed (Disabled)	To increase the employment of disabled	Central government/ Transfers to employers (Periodic cash payments)	0.00	73
<b>8. Reimbursement of the costs of creating and operating the occupational activity enterprises</b>	Employed (Disabled)	To facilitate the vocational integration of people with severe degrees of disability through sheltered employment	Regional government/ Transfers to employers (Periodic cash payments)	1.08	3466

Labor market measures (ALMPs): Direct job creation

<b>Program names</b>	<b>Target group</b>	<b>Objectives</b>	<b>Implementation/ payment type</b>	<b>Spending (% of total ALMP)</b>	<b>Beneficiaries</b>
----------------------	---------------------	-------------------	-----------------------------------------	---------------------------------------	----------------------

<b>1. Public works</b>	Registered unemployed (LTU, Youth, Older, Disabled, Re-entrants/Single parents, Public priorities and Other)	Supporting the unemployed on the labor market through employment provided by communes or NGOs	PES/ Transfer to employers (Reimbursements Reduced social contribution)	3.05	32,639
<b>2. Socially useful works</b>	Registered unemployed (Public priorities and other)	Improve employability of unemployed persons who have no right to the unemployment benefit who receive benefits from the social security system or participate in social contracts	PES/ Transfer to employers (Reimbursements Reduced social contribution)	0.56	42,995

Labor market measures (ALMPs): Start-up incentives

<b>Program names</b>	<b>Target group</b>	<b>Objectives</b>	<b>Implementation/ payment type</b>	<b>Spending (% of total ALMP)</b>	<b>Beneficiaries</b>
<b>1. Grant for the unemployed who are starting economic activity</b>	Registered unemployed (All, Public priorities, and Other)  Other registered jobseekers (Public priorities and Other)  Not registered (Public priorities and Other)	To provide assistance in starting economic activity for the unemployed and dismissed farmers	Regional PES/ Transfers to individuals (Lump-sum payments)	14.40	51,165
<b>2. Support for running a business</b>	Registered unemployed (Disabled)  Other registered jobseekers (Disabled)	To facilitate the integration of disabled persons into the labor market by creating conditions favorable to self-employment	Central government,  Local government/  Transfers to individuals	0.34	736

	Employed (Disabled)		(Lump-sum payments, Reimbursements)		
--	------------------------	--	-------------------------------------------	--	--

Source: adapted from Eurostat LMP database