LMP INTERVENTIONS FOR THE LONG TERM UNEMPLOYED



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LMP interventions for the long-term unemployed

An initial assessment





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Foreword

Long-term unemployment still poses a key challenge to achieving more inclusive labour markets across the OECD and European Union (EU). In the third quarter of 2018, there were still 1 million more long-term unemployed (LTU) in the European Union (EU) than at the pre-crisis trough in 2008 (Q3). Against the background of persistently high long-term unemployment, the Council of the EU adopted the recommendation on the integration of the long-term unemployed in the labour market in February 2016. To monitor the implementation of these policy recommendations, data on labour market policies (LMP) is needed. Such data is available through the LMP database, which includes public expenditure on various types of LMP interventions and beneficiary numbers. In this context, the European Commission (EC) and the OECD started a project to highlight the usefulness of the LMP database for policymakers and researchers concerned about the development, design and effectiveness of LMP measures in assisting the long-term unemployed.

This report by the OECD presents an initial assessment of the quality of the information available in the LMP database for identifying and assessing interventions targeted at the long-term unemployed. It is published alongside a another report (OECD, 2019_[1]), which provides a detailed evaluation of the quality, comprehensiveness and comparability of the LMP data in five EU countries (Portugal, Finland, Bulgaria, Germany and Hungary).

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Executive summary

Against the background of the recommendation on the integration of the long-term unemployed (LTU) in the labour market by the Council of the EU, the European Commission (EC) and the OECD started a project to highlight the usefulness of the LMP database for policymakers and researchers concerned about the development, design and effectiveness of LMP measures in assisting the long-term unemployed. This first report presents an initial assessment of the quality of the information available in the LMP database for identifying and assessing interventions targeted at the long-term unemployed across the EU. The main focus of the report is on LMP measures, which cover government interventions that provide temporary support for groups that are disadvantaged in the labour market.

With respect to the quality of the data the report has three major findings:

- 1. The target group information included in the database can be used to identify interventions intended to benefit the LTU (i.e. "Registered unemployed LTU" are among the intended beneficiaries). However, the target group information cannot be used to make a quantitative assessment of long-term unemployed benefitting from LMP measures, as it is "yes/no" information about intended beneficiaries. A comparison between target group and participant data also revealed some inconsistencies between the two types of information (e.g. measures targeted at LTU, but no participant is long-term unemployed), which should be addressed through additional automated validation checks.
- 2. Data on annual average participant stocks is the most important participant variable, as it is usually used to compare LMP measures across countries and over time. Explicit information on participants' prior labour market status is, however, missing from the stock data. This complicates the analysis of unemployed and, hence, also LTU benefitting from LMP interventions.
- 3. The report highlights that unemployment duration information for participants is often missing either for all or some measures in a country. When unemployment duration data is reported, there are various issues of inconsistent data. These inconsistencies should be discussed with the countries affected. Going forward, the aim should be consistent reporting of participant duration data, which could be facilitated though additional automated validation checks and a modification to the input mask in the LMP software.
- 4. Over the past decade, the coverage of the LMP participant data has improved in many countries with respect to prior labour market status of the participants, as well as, prior unemployment duration. This is a very positive finding. Nevertheless, for a large number of interventions across countries, crucial information on prior status and unemployment duration is still missing. An analysis of long-term unemployed participants in LMP interventions is consequently just a partial one. Furthermore, when considering changes for the LTU over time, it is not clear whether changes are driven by policy changes or

merely because the coverage of the prior status/unemployment duration data has changed.

Notwithstanding the issues of data quality, the LMP database can be used for some interesting cross-country comparisons in terms of countries' interventions mix and the main beneficiaries – including the LTU – of LMP measures.

- 1. The results show that most countries have a number of LMP measures, which are not intended for the unemployed (hence, neither the LTU). Interventions can also be differentiated between mainstream measures which are open to "all unemployed" and those which are targeted through eligibility criteria or special provisions to specific groups, e.g. the LTU. Across countries just under a fifth of LMP measures have a focus on the LTU (but other groups might also be among the beneficiaries of these measures).
- 2. Considering only unemployed LMP entrants shows that the majority of unemployed LMP participants are referred during the first six months of their unemployment spell. The highest proportion is found in Hungary, where about 90% of unemployed entrants start LMP measures during the first 6 months of unemployment and only about 10% start after more than 6 months of unemployment. In Portugal, Bulgaria, Sweden, the Slovak Republic, France, Slovenia, and Latvia more than a third of LMP entrants have been long-term unemployed and in Malta 60% of entrants into LMP measures have been long-term unemployed prior to joining LMP measures.

This last finding and the unemployment duration information included in the database more generally require **very careful interpretation**. This relates to the way unemployment duration is recorded in the LMP measures in the database: The unemployment duration refers to participants' unemployment spell **before** joining a measure. This has an important consequence for the interpretation of participant duration data: A country, which consistently refers all registered unemployed to LMP interventions before they are long-term unemployed (i.e. the unemployment duration is still less than 12 months) would not have any long-term unemployed among its LMP participants. However, also countries that "write off or park" long-term unemployed, would not have any long-term unemployed among their LMP participants. Hence, the results above on their own cannot be used to benchmark countries in terms of their assistance provided to the LTU without additional contextual information.

Acronyms and Abbreviations

Cat. Category

EC European Commission

FTE full-time equivalent

EU European Union

ILO International Labour Organisation

LFS Labour Force Survey

LMP Labour Market Policies

LTU Long-term unemployed

1. Introduction/background

- 1. Long-term unemployment still poses a key challenge to achieving more inclusive labour markets across the OECD and European Union (EU). In the third quarter of 2018 there were still 6.8 million individuals long-term unemployed across the EU, 1 million more than in 2008 (Q3), the pre-crisis trough. Against this background the Council of the EU adopted the recommendation on the integration of the long-term unemployed (LTU) in the labour market in February 2016. The Council recommends that countries register the unemployed with an employment service; provide them with an individual in-depth assessment to identify their needs and potential; and offer them a job integration agreement at the very latest at 18 months.
- 2. To monitor the implementation of these policy recommendations, data need to be collected on labour market policies (LMP), including the spending on various types of measures and beneficiary numbers. LMP refer here to the range of financial and practical supports offered by governments to disadvantaged groups in the labour market (e.g. the unemployed, persons employed but at risk of involuntary job loss and inactive persons who would like to enter the labour market). Member states provide annual data on public expenditure, participants and qualitative reports of their LMP to the EC, which are then used to compile the LMP database.
- 3. The objective of this project is to highlight the usefulness of the LMP database for policymakers and researchers concerned about the development, design and effectiveness of LMP measures in assisting the long-term unemployed. In this context a first observation is that the statistical definition of the LTU might not necessarily fit the definition of the population of interest (Box 1.1). As part of this project, this first report presents an initial assessment of the quality of the information available in the LMP database for identifying and assessing interventions targeted at the long-term unemployed across the EU. For this purpose Section 2 provides a short overview of the LMP database; Section 3 describes how the long-term unemployed participants in LMP interventions can be identified; Section 4 presents some cross-country comparisons of participation in LMP interventions in 2015, while Section 5 discusses changes over time; Section 6 summarises the findings.

¹ This report covers EU countries and Norway only, because the OECD does not collect LMP data for non-EU countries to the same level of detail. For non-EU countries the OECD collects information on expenditure and the annual average stock of participants only. The United Kingdom has not released any LMP data since 2010 and therefore is not included in this report.

Box 1.1. Who is long-term unemployed?

While there are standard international definitions of unemployment and long-term unemployment, national definitions may deviate from these standardised definitions. Furthermore, participation in labour market interventions might change an individual's labour market status.

According to the International Labour Organisation (ILO) definition of unemployment, the "unemployed" comprise all persons above a specified age who during the reference period were:

- "without work", i.e. were not in paid employment or self-employment;
- "currently available for work", i.e. were available for paid employment or selfemployment during the reference period; and
- "seeking work", i.e. had taken specific steps in a specified reference period to seek paid employment or self-employment.

The labour force surveys (LFS) implemented in most OECD countries use a recent past week (i.e. a fixed week each month or the week preceding the survey week) as the reference period for assessment of "without work" status. In some cases, the reference period for assessment of "currently available" status is the reference week used for "without work", but in EU countries it is a two-week (forward-looking) period after that reference week. The reference period for "seeking work" status is the previous four weeks (including the survey reference week). The long-term unemployed are then individuals who are out of work and have been actively seeking employment for at least a year.

Individuals registered as unemployed with the public employment service (PES) might nevertheless not fulfil these LFS criteria and national definitions and monitoring of these criteria can vary to a large extent. Furthermore, participation in LMP interventions could change the labour market status of participants, as unemployment spells might be broken as a consequence of participating in LMP measures. The LFS labour market status of training participants might change to inactive, if participants are not required to actively look for work any longer (or being available for work). Sometimes this change in status is reflected in a country's benefit system as well, with LMP participants moving to a separate category or another benefit. In these situations the unemployment benefit spell is broken and benefit claimants are not any longer included in a country's unemployment benefit claimant count. Public works interventions change LMP participants' labour market status from unemployed to employed. In these situations the definition of long-term unemployment becomes blurred: the LMP participants are not any longer long-term unemployed, but nevertheless might be long-term benefit dependent and still should be focus of public support.

2. Overview of the LMP database

- 4. This section provides a short overview on the data collected for the European Commission's (EC) Labour Market Policy (LMP) database. LMP statistics comprise all social expenditure (other than education) aimed at improving the beneficiaries' prospects of finding gainful employment or otherwise increasing their earnings capacity. The OECD refers to "programmes" to identify such actions by government, whereas the European Commission (EC) describe such actions as "interventions". As this report is based on LMP statistics collected by EC DG Employment the term "intervention" will be used in this report. Important is the criterion of targeting, which distinguishes actions included in the database and which act selectively to favour particular groups in the labour market from other general employment policy interventions (European Commission DG EMPL (2018_[2]), OECD (2001_[3]) and (2017_[4])).
- 5. Since 1998 Eurostat and since 2014 DG Employment have been collecting LMP statistics on an annual basis in the LMP database. Three different types of interventions are recognised in the database (European Commission DG EMPL, 2018, p. $9_{[2]}$):
 - LMP services cover interventions where the main activity of participants is job-search related and also other functions of the PES (Public Employment Service) that are not directly linked to participants (e.g. services for employers or general PES overheads).
 - LMP measures primarily cover government interventions that provide temporary support for groups that are disadvantaged in the labour market. Most measures are aimed at activating the unemployed, helping people move from involuntary inactivity into employment, or maintaining the jobs of persons threatened by unemployment. The main activity of participants in LMP measures is other than job-search related and participation usually results in a change in labour market status ²
 - LMP supports are interventions that provide financial assistance to individuals for labour market reasons or which compensate individuals for disadvantage caused by labour market circumstance. Financial assistance paid to persons participating in LMP measures should be considered as part of the costs of the measure and not as a LMP support.
- 6. This report focusses primarily on LMP measures.³ Measures are usually aimed at activating the unemployed among them LTU –, helping people move from involuntary

² For example, participation in a direct job creation programme or employment incentives will change the labour market status from unemployed to employed.

³ An analysis of LMP supports would require a more comprehensive discussion of available unemployment and related benefits (unemployment insurance, unemployment assistance, social assistance) and entitlement criteria for these benefits, which goes beyond the scope of the analysis

inactivity into employment, or maintaining the jobs of persons threatened by unemployment. LMP measures are further classified by type of action, which refers to the way in which an intervention acts to achieve its objectives (e.g. training or employment incentives). LMP measures are split into five main categories (Cat.): training (Cat. 2), employment incentives (Cat. 4), sheltered and supported employment and rehabilitation (Cat. 5), direct job creation (Cat. 6), and start-up incentives (Cat. 7). Most of the main categories are further broken down into two or more sub-categories. In addition to LMP measures, this report also includes one sub-category of the LMP services: individual case-management services (Cat. 1.1.2).

- 7. For each LMP intervention and components in case of mixed interventions (see Box 2.1) countries submit quantitative information on expenditure and participants together with qualitative data describing the interventions via the LMP software tool. When countries submit LMP data to the EC, there are a number of validation processes to check the data's consistency across countries and over time. The details of participant data are discussed in Sub-section 3.2. While for some LMP interventions the expenditure per participant might be the same for beneficiaries, for many interventions the expenditure varies between different participants. In the LMP database, the expenditure data is not broken down by participants. Hence, expenditure for different types of participants (e.g. registered unemployed, LTU, other jobseekers) are always estimates based on the average expenditure per participant-year (total expenditure divided by the annual average stock).
- 8. In addition to intervention name, number and type of action, the qualitative data comprises a number of "free text" fields that contain a description of an intervention's aim, beneficiaries, action/instrument (i.e. a brief description of the way in which the intervention works), financing/support, eligibility, legal basis, and recent changes. Supplementary information on type of action, type of expenditure (transfers to individuals, employers, or service providers), treatment of unemployment spells whilst in an interventions (see Box 1.1), receipt of benefits, planned duration, area of application (national, regional or other), source of finance, responsible institution, start and end year, and target groups (see Sub-section 3.1) are collected via "tick-boxes". This qualitative information is published in the Labour Market Policy - Qualitative reports, which are EC DG Employment accessible webpage on the (http://ec.europa.eu/social/main.jsp?catId=1143&intPageId=3227&langId=en).

planned for this project. Also note that unemployment duration information for participants in LMP supports is only provided by about half of the countries included in the LMP database.

⁴ Job rotation and job sharing (Cat. 3) is no longer used. Measures of this type are included under sub-category 4.3

⁵ These "... are services of individualised assistance (e.g. intensive counselling and guidance, jobsearch assistance) and follow-up for unemployed persons provided as part of a planned path towards durable (re-) employment. Financial assistance for the unemployed in case of travel to interview costs, other job-search related costs and similar cases are included here." (European Commission DG EMPL, 2018_[2])

Box 2.1. Mixed interventions

The vast majority of LMP interventions encompass just one type of action. However, some interventions encompass more than one type of action (e.g. NL-64 combines 1.1.2 individual case management, 2.1. institutional training and 4.1. recruitment incentives). Interventions with more than one type of action – also called components – are called mixed interventions. While only one intervention name and number is assigned in the LMP database, participant and expenditure data for the different components are identified separately within the database. For mixed interventions countries are requested to provide the total number of participants and total expenditure and also participant and expenditure data for each component (European Commission DG EMPL, 2018_[2]). Hence, when presenting LMP data by the main categories one intervention may appear more than once (e.g. NL-64 appears in Cat. 1 Labour Market Services, Cat. 2. Training, and Cat. 4. Employment incentives).

3. Identifying interventions targeted at the long-term unemployed

9. This section introduces possibilities of how interventions targeted at the long term unemployed can be identified using i) qualitative information on target groups and ii) participant data included in LMP database. Advantages and disadvantages of both approaches and the quality of the data provided are discussed, highlighting some problems encountered especially with participant data.

3.1. Using qualitative information to identify interventions targeted at the LTU

- 10. The scope of the LMP database is limited primarily to interventions which are explicitly targeted in some way at groups of persons with difficulties in the labour market, which are referred to as "target groups". The database collects information on the intended target groups for each intervention using two levels of detail. In a first step four operational target groups 1) registered unemployed, 2) other registered jobseekers, 3) not registered and 4) employed (see also Box 3.1) reflect the basic legislative conditions defining eligibility to each intervention (European Commission DG EMPL, 2018_[2]). The operational target groups are completed with a simple yes/no answer ("tick-box") to indicate which groups are targeted by the current intervention. All interventions must be targeted to at least one of the four operational target groups. For example unemployment insurance benefits should usually be targeted at the registered unemployed only, whereas bankruptcy compensation payments are usually targeted at employed individuals only. Many LMP measures, however, span across all four operational target groups.
- 11. In a second step, countries have the option to provide information on detailed target groups to further refine the specification of the operational target groups in some way. There are eight detailed target groups: 1) all, 2) LTU, 3) youth, 4) older, 5) disabled, 6) immigrants/ ethnic minorities, 7) re-entrants/ lone parents, and 8) public priorities and other. The European Commission DG EMPL (2018, p. 47_[2]) states the following for completing information on detailed target groups:

"Detailed target groups should only be used to identify groups subject to specific focus within the intervention, either through eligibility criteria or through special provisions. In many cases interventions are simply targeted at one of the operational target groups and no detailed target groups are relevant.

[...]

All ... indicates that all members of the relevant operational target group(s) are targets of the intervention - e.g. a measure may be open to all registered unemployed.

This item is selected by default when an operational target group is selected and should be deselected only in the case that participation in the intervention is restricted to only part of that main group. In the case that the intervention is open

to all of the operational target groups but there are enhanced benefits for certain sub-groups (e.g. increased subsidies for disabled workers) then [all] should be selected together with the other relevant detailed target group(s).

LTU ... refers to long-term unemployed persons and is only relevant when registered unemployed ... is selected as an operational target group.

12. Table 3.1 provides the advantages and disadvantages of using target group data to identify interventions benefitting the LTU. It also includes information on participant data discussed in the next sections.

Table 3.1. Pros and cons of different data to identify LMP measures for the LTU

	Data type	Advantages	Disadvantages
1	Target group data	 Available for all interventions across countries and over time Minimisation of input errors ("tick-box") Identification of interventions intended for LTU (eligibility criteria or through special provisions) 	Respondents might not actively use detailed target group information No quantitative assessment for the number of LTU benefitting from interventions Interventions targeted at LTU can have many other beneficiaries Different definition of LTU for youth and older unemployed prior to 2013
2	Participant entrant data (yearly totals)	 Most complete participant data, as information on prior labour market status available 	 Missing data and some quality issues
3	Participant stock data (annual average)	 Interpretation as number of participant-years Eliminates duration differences of interventions Typically used in research and international comparisons 	 Information on prior labour market status not available Missing data and some quality issues Incomplete full-time equivalent (FTE)

13. For a number of interventions there are some inconsistencies between the target group data and the participant data. A number of interventions have been identified with participants recorded as registered unemployed, but according to the target group data, registered unemployed are not among the intervention beneficiaries (e.g. DK-20 and FI-55). Vice versa, a number of interventions are targeted at the long-term unemployed, but there are no long-term unemployed participants (e.g. PT-151 in the years 2012 and 2013 and SE-63 in 2007). While the LMP data validation process rules out similar inconsistencies for interventions targeted at youth and older people, no validation checks for the LTU exist, but could be added in the future.

3.2. Using participant data to identify the LTU

14. The LMP database collects three different participant data variables: stock, entrants and exists. This section covers entrant and stock data only and discusses the available information first for entrant, second for stock data and third discusses a number of problems that have been encountered when analysing this data. The final sub-section discusses how participant data is aggregated by categories (e.g. Cat. 2 Training).

3.2.1. Data on entrants into LMP measures

- 15. Participant entrant data is more comprehensive than participant stock data as Table 3.1 shows. Participant entrant data is broken down by 'status prior to joining LMP interventions' (see Box 3.1), which allows to distinguish registered unemployed from employed entrants and other types of jobseekers. Participant entrant data (as well as participant stock and exit data) is further broken down by the following criteria: gender (total, men, and women), age (total, under 25, 25-54, over 55) and unemployment duration. Unemployment duration is available for four different gender/age groups and should only apply to participants that were previously registered unemployed. Annex 1 shows participant data collected through the LMP database using a number of examples from interventions included in the database (e.g. Table A1.1 shows SI-12 *On-the-job training*).
- 16. It is important to highlight that for LMP interventions in category 1.1.2 and 2-7, unemployment duration refers to the unemployment spell of participants before they joined the intervention. This has an important consequence for the interpretation of participant duration data: A country, which consistently refers all registered unemployed to LMP interventions before they are long-term unemployed (i.e. the unemployment duration is still less than 12 months) would not have any long-term unemployed among its LMP participants. However, also countries that "write off or park" long-term unemployed, would not have any long-term unemployed among its LMP participants.

⁶ For LMP supports (Cat. 8 & 9) the duration refers to the current unemployment spell in the case of stock figures and to the duration of the ending spell of benefits for exit figures. For LMP supports entrants duration data does not apply.

Box 3.1. Participants by prior labour market status (entrant data only)

The LMP database collects information on the previous labour market status of entrants into LMP interventions. This type of information is not collected for participant stock data. The different categories do not align with Labour Force Survey definitions of labour market status. Entrants can have the following statuses prior to joining:

- **Registered**: refers to the number of entrants that were previously registered with the PES as jobseekers. This information is further broken down as follows:
 - Registered unemployed: refers to the number of entrants that were previously considered as registered unemployed according to national definitions.
 - Other registered jobseekers: refers to the number of entrants who were registered with the PES as jobseekers but who were not considered as registered unemployed according to national definitions. To separate this group from entrants employed prior to joining the intervention, it should normally refer to persons who are unemployed, underemployed or inactive. Jobseekers activated through the PES should also be included here, irrespective of whether they actually were registered with the PES or not (e.g. activation of persons registered in sickness or social security schemes).
- Employed: refers to the number of entrants that were previously in employment, irrespective of whether or not they are individually registered with the PES. Persons who are employed part-time but are seeking to work more hours to fill the hours for which they are unemployed tend to become eligible to participate in an LMP intervention on the basis of their situation of underemployment rather than their employment and should therefore be considered as other registered jobseekers or registered unemployed. The majority of LMP interventions aim at activating the unemployed or helping inactive people move into employment. Therefore the category of previously employed entrants will not be applicable in many cases. Primarily it is expected in the case of measures for persons who are employed at risk, sheltered and supported employment for persons with reduced working capacity, as well as some forms of LMP support e.g. partial unemployment benefits.
- **Not registered**: refers to the number of entrants who were not previously employed and who were not registered as jobseekers with the PES or where this information is not relevant (e.g. interventions implemented by organisations other than the PES).

Unknown: LMP entrants for whom the previous status is not known.

Source: European Commission DG EMPL (2018_[2]), Labour market policy statistics: Methodology 2018.

3.2.2. Data participant stocks in LMP measures

- 17. The advantage (see Table 3.1) of stock data is that it reflects the average number of persons participating in LMP interventions at any given time in the year (i.e. the number of participant years). Dividing expenditure by the annual average stock yields the expenditure by participant-year and allows the comparison of costs of different interventions, as it eliminates differences due to the duration of different interventions (European Commission DG EMPL, 2018_[2]). Research based on the LMP database also typically uses participant stock data (see e.g. Duell, Thurau & Vetter (2016_[5]), European Commission (2015_[6])). For this reason the OECD Database on Labour Market Programmes publishes information on participant stocks only.
- 18. Two different stock variables are collected for the LMP database: i) Stock (total): the annual average number of participants and ii) Stock (FTE): the annual average stock converted to full-time equivalents (FTE)⁷. Although FTE data would be the preferred measure for cross-intervention and -country comparisons,⁸ it cannot be used as it is provided for just around one fifth of interventions in 2015.
- 19. Prior status information is not collected for stock data, but can partly be derived using the available unemployment duration information. Participants with unemployment duration must have been unemployed before joining the intervention. The prior status of participants without unemployment duration information can only be estimated based on information provided in the entrant data. Furthermore, missing information on unemployment duration could imply that the participants were not (registered) unemployed before joining or they were (registered) unemployed, but duration data was not provided. Even though in the latter case, Alphametrics asks countries to nevertheless provide the total by duration (e.g. BE-89). Given this assumed value of this information it is surprising that it is not gathered for stock data, which is the main participant variable used to analyse LMP data.

3.2.3. Assessing the quality of the LMP participant data

- 20. LMP participant entrant and stock data build the basis of any quantitative analysis of the long-term unemployed benefitting from LMP interventions and the resources devoted to this group. A number of issues, however, arise when using the participant data contained in the LMP database, including:
 - Missing participant data,
 - Interventions with participant stock data only,
 - Interventions with participant entrant data only,
 - Missing unemployment duration information, and
 - Issues discovered in the unemployment duration data.

Missing participant data

21. While interventions that have ended are usually excluded in subsequent years from the LMP database, nearly 9% of interventions in 2015 included in the LMP

⁷ FTE data refers to adjusted annual average stock data to take account of part-time participation.

⁸ Using stock (FTE) data to express expenditure by participant (FTE)-year would be the preferred measure for comparisons across interventions, as it makes part-time and full-time interventions comparable (European Commission DG EMPL, 2018, p. 41_[2]).

database⁹ have no participant and no expenditure data. These interventions have been excluded from any further analysis.¹⁰ There are also a number of interventions in the database, which have positive expenditures, but no participant data is provided. While such interventions are included in the analysis by target group, they are excluded from any participant data analysis, resulting in some LMP expenditure remaining unassigned to LMP participants. Two examples:

- DE-104 (Cat. 2) "Unassigned expenditure on rehabilitative training activities": Participant data is labelled as "not relevant", as "expenditure on rehabilitative training that cannot be assigned to particular interventions" (Eurostat, 2016_[7]). With an expenditure of EUR 1 152.42m in 2015, 14.1% of Germany's total expenditure on LMP measures (Cat. 2-7) cannot be assigned to LMP participants.
- IT-185 (Cat. 4.1.1) "Incentive for hiring under 30": No participant data is provided for this intervention, as regional governments and autonomous provinces have not provided the necessary data to the LMP database respondent in the Ministry of Labour and Social Policies. With an expenditure of EUR 248m in 2015, the intervention represented 3.6% of Italy's total expenditure on LMP measures (Cat. 2-7).
- 22. Table 3.2 provides an overview on the number of LMP interventions (Cat. 1.1.2 and 2-7) and the availability of participant data in each country in 2015. While only a few countries have participant stock data for all of their interventions, most provide stock data for 80% or more of their interventions. Only Italy and Greece provide stock data for less than half of their interventions. In half of the countries the availability of participant stock and entrant data are closely aligned. In the other half of countries there are substantial differences in the two different types of participant data. For example, in Lithuania stock data is available for only 71% of interventions, but entrant data for 93%. By contrast, in Denmark stock data is available for all interventions, but entrant data only for 69%.

Interventions with participant stock data only

23. Missing entrant data is expected for interventions that are discontinued. Stock data exists until all participants exited an intervention, but entrant data will be set to zero (e.g. SI-101, -102, -111, -112, -115, and -116 ended in 2015). However, missing entrant data does not imply that the intervention has ended. For example, for the intervention DE-14 (Cat. 2.1 & 8.2) "Short-time working allowance" Germany has provided entrant data estimates until 2006, but stopped providing such estimates from 2007 onwards. In Denmark, entrant data is missing for DK-30, -31 and -39 in 2015. Both in the German and Danish example the interventions are still running.

⁹ Background for this figure: Across all countries there were 1 229 interventions included in the database in 2015 (excluding intervention categories "R.1", "R.2", and "X" and dummy interventions, which account for double counting). Of those 109 were identified as not having participant or expenditure data. Note that 2014 data has been used for Estonia and Malta; the United Kingdom not included.

¹⁰ The reason such interventions are still kept "live" might be that they have not legally ended and just have not been applied in a certain year (e.g. IT-32 (Cat. 4.1) "Reintegration of managers in SMEs" in 2015).

¹¹ Information based on Italy's validation report for 2015 data.

Interventions with participant entrant data only

24. Missing stock information is expected for some interventions. "For example, stocks are meaningless in relation to redundancy or bankruptcy compensation where there is a one-off payment which does not oblige the recipient to participate in any activity" (European Commission DG EMPL, 2018_[2]). In the LMP database stock data is flagged as not relevant.

Missing unemployment duration information

25. Information on unemployment duration tends to be patchy. Half of all countries track unemployment duration information for around two-thirds of their interventions. However, in the other half of countries duration information is available for fewer interventions and Norway and Poland do not provide any duration information. However, it is important to highlight that unemployment duration data cannot be expected for all interventions and participants. Participants with a different prior status than registered unemployed can, by definition, not have unemployment duration. However, as Table 3.2 shows, unemployment duration information is also often missing when it should theoretically be available.

Table 3.2. Availability of participant data for LMP interventions

LMP interventions (LMP Cat. 1.1.2 and 2-7) in EU countries^a and Norway in 2015^b

Country	Total interventions	Targeted at registered unemployed	Stock data	Stock duration data	Entrant data	Registered unemployed among entrants	Entrant duration data
	Number				Percentage	S	
Austria	27	100	93	81	89	67	67
Belgium	76	88	95	34	74	51	33
Bulgaria	50	98	92	90	94	90	90
Croatia	40	93	83	70	98	73	73
Cyprus ^d	16	88	88	19	63	44	13
Czech Republic	13	85	85	54	100	85	69
Denmark	13	77	100	77	69	69	69
Estonia	24	88	79	71	100	88	83
Finland	22	77	86	68	91	73	73
France	44	93	84	41	82	52	45
Germany	54	87	87	72	83	74	72
Greece	44	93	30	7	77	70	7
Hungary	11	82	100	64	100	82	64
Ireland	23	100	91	52	74	30	30
Italy	50	86	48	2	50	20	0
Latvia	18	89	100	89	100	94	94
Lithuania	14	93	71	64	93	93	86
Luxembourg	23	78	65	30	96	61	30
Malta	17	94	100	88	100	88	82
Netherlands	10	100	100	50	70	50	50
Norway	18	50	100	0	100	0	0
Poland	41	76	78	0	93	63	0
Portugal	63	94	87	75	90	79	73
Romania	19	84	63	26	79	68	26
Slovak Republic	22	77	95	77	100	82	82
Slovenia	24	100	88	88	67	67	63
Spain	41	85	90	37	93	80	46
Sweden	43	95	93	88	95	91	86
Total	860	89	83	52	85	67	52

Notes:

The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".

Note by all the European Union Member States of the OECD and the European Union:

The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

Source: DG EMPL LMP database.

a. Excluding UK, as no recent data available.

b. 2014 data for Estonia and Malta.

c. One of the operational target groups of the interventions are "registered unemployed". d. Note by Turkey:

Issues discovered in the unemployment duration data

- 26. When conducting various quality assurance checks of the LMP participant data a number of issues emerged for the unemployment duration data, usually affecting a number of countries only. Table 3.3 summarises these issues and provides some suggestions for follow up actions.
- 27. Missing duration information often is a result of countries not being able to provide the requested information, as it cannot be properly tracked in the national IT systems. When duration data is reported, there might nevertheless data inconsistencies (Table 3.1). These inconsistencies should be discussed with the countries affected to understand the possible reasoning behind their different reporting. Going forward, the aim should be consistent reporting of participant duration data across all countries. A number of automated validation checks have already been proposed by the LMP Task Force and more could potentially be added.
- 28. For the unemployment duration data, the input mask in LMP software could suppress the option to provide duration data for others than the registered unemployed. In fact, something similar currently is done in the target group data. The option "LTU" can only be ticked when the operational target group "registered unemployed" has been chosen.

Table 3.3. Issues discovered in unemployment duration data

	Issue	Details	Follow-up action
1	Incomplete unemployment duration data for entrants	Countries that generally provide unemployment duration data might, nevertheless, not provide duration information for all entrants who are "registered unemployed". For example, for DK-6 "Wage subsidies" there are fewer unemployed entrants with unemployment duration recorded than the total of registered unemployed (see Annex A1, Table A1.2). Interventions with incomplete duration data for entrants are likely to have incomplete duration data for participant stocks as well. This can, however, not be verified due to the non-existence of prior status information within the participant stock data.	This problem is ignored for the purpose of this report, but could result in underestimating the long-term unemployed benefitting from an intervention. A new automated validation rule for this problem has been suggested at the LMP Task Force in June 2016 (European Commission, 2016 _[8]).
2	Inconsistencies within the duration data provided	For over a quarter of interventions there are (often only minor) inconsistencies within the participant duration data, as the total "Unemployed by duration" does not match the sum of the three duration variables "< 6m "+ "6-12m "+ ">12m".a	For the purpose of this report, this problem has been addressed through using the sums of the three variables instead of using the provided totals. However, it should be investigated why there are such discrepancies. A new automated validation rule for this problem has already been suggested at the LMP Task Force in June 2016 (European Commission, 2016[8]).
3	Unemployment duration collected for non(registered)- unemployed	In the Netherlands and Ireland, unemployment duration information is also provided for entrants with a prior status of "other registered jobseekers" for a number of interventions. Denmark provides unemployment duration for "other registered jobseekers" and also "not registered" (see Annex A1, Table A1.2). Ireland provides this duration data for all those who qualified for a social benefit and not only the registered unemployed. Similarly Danish data are based on the receipt of a benefit. This is, however, not well documented. These data entries do not cause a problem for an entrant data analysis, as the long-term unemployed are identified as those with a prior status of "registered unemployed". However, this is not possible for stock data. Stock data could also contains participants who were not previously registered unemployed, hence, potentially resulting in an overestimate of registered unemployed participating in LMP measures. See Annex A1, Table A1.2 for more details.	This problem should be followed- up with the countries concerned to ensure consistent data reporting across countries going forward.
4	Entrants with unemployment duration but no prior status	A number of interventions have been identified in 2016, where no or incomplete duration data for the registered unemployed is provided, but duration data is provided for the entrant total (e.g. IE-23, IE-40, ES-43, ES-60, ES-67) or registered total, but no separation into registered unemployed and other registered jobseekers was made (e.g. HR-72, HR-73, PT-122).	This problem has been addressed through using the available duration information, even though the data could potentially contain participants who were not previously registered unemployed as for interventions were unemployment duration is collected for non-unemployed. The issue should nevertheless be highlighted to countries, to be avoided in the future.
5	"Too" many registered unemployed with unemployment duration	In Austria in 2016, for virtually all interventions° there are more registered unemployed entrants with unemployment duration then the reported total of previously registered unemployed entrants (for an example see Annex A1, Table A1.3). Whether this problem also exists for participant stock data cannot be assessed, as information on the prior status is not available.	This issue has only been identified for Austria and is the result of data being drawn from different datasources, which cannot be reconciled.

Notes:

- a. The sum of the three duration variables might be less than or greater than the provided total. A comparison for the participant stock data shows that for 21.2% of interventions (Cat. 1.1.2 and Cat. 2-7) the discrepancies are less than 1%; however, for 2.5% of interventions the discrepancies are between 1-10% and for 3.8% the discrepancies are 10% or more.
- b. Other registered jobseekers might contain jobseekers not receiving unemployment benefits or recipients of other income-replacement benefits. However, it is not clear what the duration information then relates to, e.g. time without employment or the LFS definition of unemployment. The Danish measure DK-6, shown in Table A1.2, only has "registered unemployed all" as target, but the participant data indicates that also "other registered jobseekers" and "not registered" benefit from wage subsidies.
- c. Austrian intervention number 6, 7, 8, 11, 12, 13, 14, 15, 16, 17, 25, 27, 66.

3.2.4. Building data aggregates – presenting data by LMP categories

29. The previous sections have focussed on analysing LMP interventions. LMP data, however, usually is presented as aggregate data by categories (e.g. Cat. 2 Training) or as the total of all LMP measures (Cat. 2-7). Usually, not all of a country's interventions in a given year can simultaneously be included in such data aggregates. Aggregates by target group will include all interventions listed for a country due to the completeness of the target group data (see Table 3.1). However, aggregates for participant stocks and entrants will usually include only a subset of a country's interventions in a given year. As Sub-section 3.2.3 highlighted, this results from incomplete participant data provided by a number of countries and some "valid" reasons why stock and/or entrant data is missing for certain interventions. When building aggregates with the participant data it is also necessary to account for potentially double counted participants (Box 3.2).

Box 3.2. Preventing double-counting of participants

While interventions might consist of different components, it is assumed that each intervention is mutually exclusive. As most LMP measures in categories 2-7 are full-time, a person should be able to participate in only one intervention at a time. Double-counting may, however, arise when a participant receives support from two different interventions (e.g. training from one intervention and travel costs from another intervention). If participants are then included in both interventions (i.e. participants have multiple intervention numbers) they would be double-counted when creating aggregates. Therefore countries are requested to create a new dummy intervention, which then can be deducted when creating aggregates (see example below). There is currently **no** method to handle cases of double-counting between categories (European Commission DG EMPL, 2018, p. 40_[2]).

In 2015 LMP data there are six countries, which made adjustments to account for double counting: Austria, Belgium, France, Germany, the Netherlands and Poland. France and Belgium spread the double counted participants over the various sub categories (e.g. by gender, age, duration and prior status for entrants), whereas Austria, Germany, the Netherlands and Poland generally do not provide this level of detail, but participant total only. The approach chosen by the latter countries results in complications when building aggregates, as no double counted participants are subtracted from the subcategories. This problem has been addressed as follows: When countries did not provide participant breakdowns for the double counting dummy interventions, the participant numbers have been proportionally assigned to the subcategories. A similar approach has also been used by (Alphametrics, 2015[9]).

Example: Preventing of double-counting

When considering data for "DE 116 Adjustment for double-counting, category 6" for the years 2007 and 2008 one can see how the double counting works. Participants in the intervention "DE 115 Federal programme 30.000 additional jobs for older people" have already been included in one of the other interventions within category 6 "Direct job creation". In order not to double count them they appear once again as a negative value in intervention 116.

Table. Interventions listed in category 6 "Direct job creation" in Germany

Participant stocks in the years 2007 and 2008.

Intervention number	ntervention name Number of p		participants	
		2007	2008	
Total	Category 6 – Direct job creation	343 919	331 060	
115	Federal programme 30.000 additional jobs for older people	12 306	9 255	
21	Support for job-creation measures (ABMs)	40 452	39 554	
22	Support for structural adjustment measures	1 955	670	
42	Employment generating promotion of infrastructure	713	2	
73_1	[Component] Community service jobs - Additional expenditure variant	300 799	290 834	
116	Adjustment for double-counting, category 6	-12 306	-9 255	

Source: DG EMPL LMP database.

4. LMP interventions targeted at the LTU in 2015

- 30. Cross-country comparisons of the target group data and detailed participant data included in the EC's LMP database are rare. A notable exception is Alphametrics (2015[9]), which is the first attempt to use the LMP data to assess LMP support for the LTU across countries over time. Alphametrics presents results for LMP expenditure targeted at the LTU between 2008 and 2012 and analyses the representation of LTU in LMP measures in comparison to their proportion among the registered unemployed, noting that there is evidence that the LTU are under-represented in LMP measures compared to other groups.
- 31. This current report does not aim to make a quantitative assessment of the size of countries' support for the LTU in comparison to their caseload. Instead this section aims to showcase how the data could be used in the forthcoming work of this project, highlighting difficulties in the underlying data. Results are presented for target group, participant entrant and participant stock data and LMP expenditure.

4.1. Using target group data to identify interventions targeted at the LTU

32. Albeit the drawbacks of target group data discussed before, target group data can nevertheless provide some useful insights into LMP interventions. In theory there are over 536 million¹² target group combinations possible, as countries have the option to choose between 29 detailed target groups and are able to select any possible number of combinations. In praxis a much lower number of combinations are plausible; as many "technically possible" combinations are unlikely to be used (e.g. no intervention targeted at registered unemployed youth will at the same time target older employed). Nevertheless over 350 combinations have been used over the past 10 years. Therefore the target group combinations have been grouped into six different categories to highlight interventions, which benefit the long-term unemployed (Table 4.1).

 $^{^{12}\}sum_{k}\binom{n}{k}$; n=29, k=29

Table 4.1. Target group information can be used to identify LMP measures benefitting the long-term unemployed

Categorising LMP measures (LMP Cat. 2-7)^a on the basis of operational^b and detailed^c target group information

Operational target group:	Regist	tered unem	ployed	Other	
Detailed target group:	All	LTU	Other	<i>Any</i> d	Description
All registered unemployed (RU)	yes			Possible	LTU could benefit from this type of intervention, just as any other type of registered unemployed; non-unemployed might also be among the participants
2. All RU, focus on LTU (& others)	yes	yes	Possible	Possible	Intervention generally aimed at registered unemployed, but there are enhanced provisions for the LTU (and possibly other detailed target groups); non-unemployed might also be among the participants.
3. RU, focus on LTU only		yes		Possible	Intervention targeted at the LTU; some non-unemployed might also be among the participants.
4. RU, focus on LTU and others		yes	yes	Possible	Intervention for specific registered unemployed target groups, one of which are LTU; non-unemployed might also be among the participants.
5. RU, focus on other unemployed			yes	Possible	Intervention for specific registered unemployed target groups, none of which are LTU; non-unemployed might also be among the participants.
6. Non-unemployed				yes	Registered unemployed are not among the beneficiaries of the intervention

Notes:

- a. Dummy interventions accounting for double counting have been excluded.
- b. There are four operational target groups: 1) registered unemployed are shown separately; 2) other registered jobseekers, 3) not registered and 4) employed have been grouped into "Other".
- c. There are eight detailed target groups: 1) all and 2) LTU are shown separately; 3) youth, 4) older, 5) disabled, 6) immigrants/ ethnic minorities, 7) re-entrants/ lone parents, and 8) public priorities and other have been grouped into "Other".
- d. Any of the other detailed target groups can be ticked, but not "LTU", as long-term unemployed have to be registered unemployed by definition.
- e. Long-term unemployed might nevertheless be beneficiaries of these interventions, because other detailed target groups such as "Youth", "Older", or "Disabled" might have long-term unemployed among them.
- 33. Target group information can then be used to assess which LMP interventions are targeted at the unemployed and, hence, potentially the long-term unemployed. It can also be used to assess whether countries prefer to create main-stream measures, i.e. they do not usually define detailed target groups, or whether measures are targeted at specific groups of persons (Table 4.2). Most countries have a number of LMP interventions, which are not targeted at registered unemployed. In Austria, Ireland, the Netherlands and Slovenia all LMP measures are accessible for the registered unemployed and no measure is targeted exclusively at other target groups only. LMP measures in the category All registered unemployed are available for all unemployed registered with the PES, regardless of their unemployment duration. Note that these measures might also be open to other registered, not registered and employed jobseekers. These interventions can be labelled as "mainstream" measures as they do not define any detailed target groups and on average over a third of measures are such mainstream measures. The Czech Republic and Latvia stand out as they only have mainstream measures for the unemployed.

34. Measures included in All RU (registered unemployed), focus on LTU (& others) are also mainstream measures available to all registered unemployed, but they offer enhanced benefits to some participants, including the long-term unemployed. Measures included in RU, focus on LTU only are restricted to the LTU and RU, focus on LTU and others are restricted to the LTU and other detailed target groups. Taking these three groups together shows that across countries just under a fifth (19.1%) of interventions have a focus on the long-term unemployed either through eligibility criteria or special provisions within the measure. An analysis of a time-series of this data will be interesting, as Alphametrics (2015_[9]) reported a decline in the expenditure targeted at the LTU between 2008 and 2012. The Czech Republic, Latvia, the Netherlands, Norway, Poland and Romania have no interventions with such a special focus on the long-term unemployed. While the target group data provides some interesting insights in terms of the intervention mix a country runs, it does not allow a quantitative assessment of how many of the long-term unemployed started on these LMP measures. The main focus of the analysis presented in this note therefore is on the participant data information included in the LMP database.

Table 4.2. The majority of LMP measures are open to long-term unemployed, but less than a fifth are targeted at them

LMP measures (LMP Cat. 1.1.2 and 2-7) classified by target groups^a; EU countries and Norway in 2015^b

Country	Total number of interventions	All registered unemployed (RU)	All RU, focus on LTU (& others)	RU, focus on LTU only	RU, focus on LTU and others	Interventions with a focus on LTU	RU, focus on other unemployed	Non- unemployed
	Number	(. 10)	(0.00.0)		Percentage	es		
		1	2	3	4	(2+3+4)	5	6
Austria	27	59.3	3.7	0.0	3.7	7.4	33.3	0.0
Belgium	76	28.9	11.8	1.3	9.2	22.4	36.8	11.8
Bulgaria	50	46.0	8.0	4.0	2.0	14.0	38.0	2.0
Croatia	40	25.0	0.0	5.0	15.0	20.0	47.5	7.5
Cyprusc	16	12.5	6.3	12.5	25.0	43.8	31.3	12.5
Czech Republic	13	76.9	0.0	0.0	0.0	0.0	7.7	15.4
Denmark	13	38.5	0.0	7.7	0.0	7.7	30.8	23.1
Estonia	24	33.3	12.5	0.0	16.7	29.2	25.0	12.5
Finland	22	40.9	36.4	0.0	0.0	36.4	0.0	22.7
France	44	47.7	6.8	0.0	4.5	11.4	34.1	6.8
Germany	54	31.5	5.6	3.7	11.1	20.4	35.2	13.0
Greece	44	50.0	6.8	0.0	6.8	13.6	29.5	6.8
Hungary	11	72.7	0.0	0.0	9.1	9.1	0.0	18.2
Ireland	23	26.1	17.4	26.1	8.7	52.2	21.7	0.0
Italy	50	22.0	30.0	0.0	4.0	34.0	30.0	14.0
Latvia	18	44.4	0.0	0.0	0.0	0.0	44.4	11.1
Lithuania	14	50.0	0.0	0.0	7.1	7.1	35.7	7.1
Luxembourg	23	43.5	0.0	0.0	4.3	4.3	30.4	21.7
Malta	17	35.3	5.9	5.9	23.5	35.3	23.5	5.9
Netherlands	10	70.0	0.0	0.0	0.0	0.0	30.0	0.0
Norway	18	44.4	0.0	0.0	0.0	0.0	5.6	50.0
Poland	41	36.6	0.0	0.0	0.0	0.0	39.0	24.4
Portugal	63	46.0	14.3	1.6	11.1	27.0	20.6	6.3
Romania	19	63.2	0.0	0.0	0.0	0.0	21.1	15.8
Slovak Republic	22	50.0	0.0	4.5	4.5	9.1	18.2	22.7
Slovenia	24	45.8	0.0	0.0	8.3	8.3	45.8	0.0
Spain	41	34.1	34.1	0.0	2.4	36.6	14.6	14.6
Sweden	43	25.6	18.6	2.3	4.7	25.6	44.2	4.7
Total	860	39.4	10.0	2.3	6.7	19.1	30.1	11.4

Notes:

The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".

Note by all the European Union Member States of the OECD and the European Union:

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a. For a detailed description of target groups see Table 4.1.

b. Excluding UK, as no recent data available. 2014 data for Estonia and Malta.

Source: DG EMPL LMP database.

c. Note by Turkey:

4.2. Using LMP participant entrant data to identify interventions targeted at the LTU

35. This section presents analysis based on the LMP participant data and aims to showcase what type of analysis can be carried out in the forthcoming report based on the participant data. It shows which types of jobseekers are referred to LMP interventions and what type of interventions countries offer.

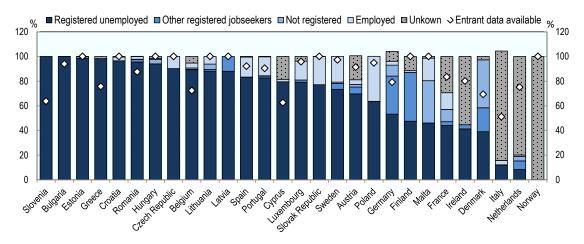
4.2.1. Overview on entrants into LMP measures

- 36. The primary target group of LMP measures in most countries are unemployed persons registered with the PES (Figure 4.1). In Slovenia and Bulgaria all LMP measures are exclusively for the registered unemployed and in Estonia, Greece, Romania, Hungary, Croatia and the Czech Republic 90% or more of the entrants in 2015 were registered unemployed. Some exceptions are Finland, Malta, France and Denmark, where under half of all entrants were registered unemployed at the point of joining an LMP intervention. ¹³ In Denmark, most of the other entrants are other registered jobseekers and not registered individuals. In Finland, two-fifth of entrants are other registered jobseekers and also in Germany almost a third of entrants are other registered jobseekers. Luxembourg, the Slovak Republic, Sweden and Poland stand out as countries with a high proportion of previously employed entrants.
- 37. Figure 4.1 also highlights a few data quality issues, which have been discussed before. In Austria, Germany and Italy the number of entrants with a recorded prior status exceeds the total number of entrants (bar chart exceeds 100%). Furthermore, entrant data is sometimes missing. While missing entrant data is expected for interventions that are closed to new entrants, some countries do not provide entrant data for some of their interventions (see Sub-section 3.2.3). Norway does not provide any prior status information for its entrants. In the Netherlands and Italy prior status information is missing for 80% or more of entrants, in Ireland for 55% and in France for 29% of entrants.

¹³ Low numbers are also observed for Ireland, Italy, and the Netherlands, but data reliability might be low due to a high proportion of entrants with unknown prior status.

Figure 4.1. The vast majority of LMP entrants are registered unemployed

Entrants into LMP measures (Cat. 2-7) by prior status^a in EU countries^{b,d} and Norway in 2015^c



Notes: Data sorted in a descending order by the proportion of registered unemployed entrants.

- a. Entrants with a prior status indicated as unknown and those where no prior status information is provided are grouped into "unknown".
- b. Excluding UK, as no recent data available.
- c. 2014 data for Estonia and Malta.
- d. Note by Turkey:

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- 38. In a next step the LMP entrant can be used to assess, when during an unemployment spell countries refer registered unemployed individuals to LMP measures. The majority of unemployed LMP participants are referred during the first six months of their unemployment spell. The highest proportion is found in Hungary, where only about 10% of unemployed entrants start LMP measures after 6 months of unemployment. ¹⁴ In a number of countries more than half of unemployed LMP entrants have an unemployment duration exceeding six months. In Portugal, Bulgaria, Sweden, the Slovak Republic, France, Slovenia, and Latvia more than a third of LMP entrants have been long-term unemployed and in Malta 60% of entrants into LMP measures have been long-term unemployed prior to joining LMP measures.
- 39. It should be highlighted again that Figure 4.2 cannot be used to benchmark countries in terms of their assistance provided to the long-term unemployed without additional contextual information. A country, which consistently refers all registered unemployed to LMP interventions before they are long-term unemployed (i.e. the unemployment duration is still less than 12 months) would not have any long-term

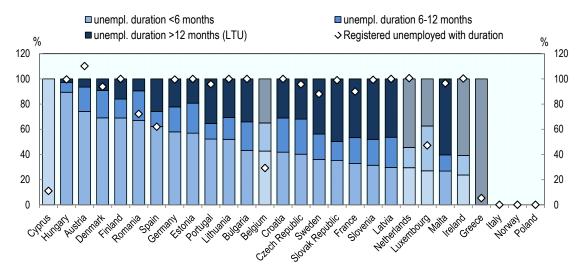
¹⁴ In Cyprus the unemployment duration is less than six months for all registered unemployed entrants. However, data reliability might be low due to missing duration data for almost 90% of previously unemployed entrants.

unemployed among its LMP entrants. However, also countries that "write off or park" long-term unemployed, would not have any long-term unemployed among its LMP entrants.

40. As Figure 4.2 provides data for 2015 only, an important next step of the project will be the analysis of time series to assess in whether the composition of LMP entrants' durations has changed over time, especially in response to the global financial crisis. This will also include linking the data with Labour Force Survey (LFS) information to link the LMP data to general labour market developments, similar to some earlier results presented in Alphametrics (2015[9]). Figure 4.2 also highlights a few data quality issues. Duration data for LMP entrants is not provided by Italy, Norway and Poland. Countries with lighter shading either have incomplete data due to missing prior status information or missing unemployment duration data. In Austria the sum of unemployed entrants with unemployment duration recorded exceeds the total number of registered unemployed (diamond above 100%; compare with Table 3.3).

Figure 4.2. Most unemployed LMP participants are referred during the first six months of unemployment

Registered unemployed entrants into LMP measures (Cat. 2-7) by unemployment duration prior to participation in EU countries^{a,c} and Norway in 2015^b.



Note: Data sorted in a descending order by the proportion of participants with prior unemployment duration of less than six months. The Netherlands and Ireland are shown in lighter shading as prior status information is missing for more than half of entrants. Cyprus, Belgium, Luxembourg and Greece are also shown in lighter shading due to duration data missing for more than half of registered unemployed entrants.

- a. Excluding UK, as no recent data available.
- b. 2014 data for Estonia and Malta.
- c. Note by Turkey:

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Note by all the European Union Member States of the OECD and the European Union:

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Source: DG EMPL LMP database.

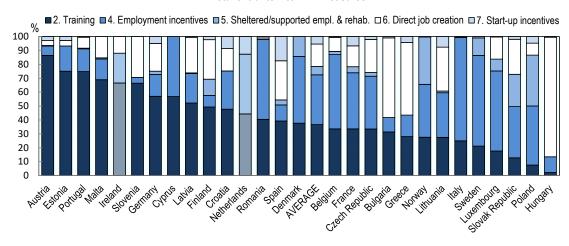
4.2.2. Type of measures jobseekers are referred to

After establishing what types of jobseekers enter into LMP interventions a next step is to consider the type of interventions jobseekers are typically referred to. Figure 4.3 shows entrants into LMP measures by categories, for all entrants in 2015 regardless of prior labour market status (Panel A), registered unemployed with an unemployment duration of less than 12 months (Panel B), and the long-term unemployed (Panel C). On average across countries, training programmes at 37% and employment incentives at 36% have the highest number of entrants, followed by direct job creation (16%), sheltered and supported employment and rehabilitation (6%) and start-up incentives (5%). While on average training programmes is the largest category in all three panels, in many countries the intervention mix changes when considering the registered unemployed only and also the unemployment duration impacts on the LMP mix. For example, whereas around half of the unemployed with duration of less than 12 months are referred to training interventions (Cat. 2), only 36% of the long-term unemployed are referred to training on average. In contrast, unemployed with shorter unemployment duration are less often referred to direct job creation interventions (Cat. 6) than the longterm unemployed. These results are quite different from those reported in Alphametrics (2015_[9]) for the year 2012. The Alphametrics report, however, was based on participant stock data and not entrant data as presented here and, hence, a direct comparison is not possible.

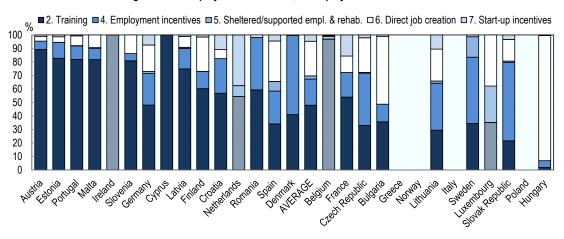
Figure 4.3. Countries' LMP interventions mix changes for different types of entrants

Entrants into LMP measures by category (Cat. 2-7) in EU countries^{a,c} and Norway in 2015^b.

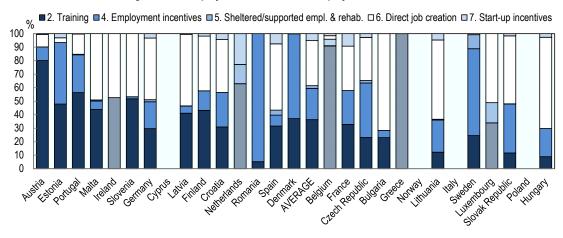
A. Total entrants into LMP measures



B. Registered unemployed LMP entrants, unemployment duration 0-12 months



C. Registered unemployed LMP entrants, unemployment duration 12+ months



Notes: Data sorted in a descending order by the proportion of all entrants referred to training interventions (Cat. 2) and availability of unemployment duration data. The Netherlands and Ireland are shown in lighter shading as prior status information is missing for more than half of entrants. Cyprus, Belgium, Luxembourg and Greece are also in lighter shading in Panel B and C due to duration data missing for more than half of registered unemployed entrants.

a. Excluding UK, as no recent data available.

b. 2014 data for Estonia and Malta.

c. Note by Turkey:

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Source: DG EMPL LMP database.

42. A number of category- and country-specific observations:

- Training (Cat. 2) is most important in Austria, with 80% or more of entrants starting on such interventions. Also Estonia, Portugal, Malta, Ireland and Slovenia offer training to 80% or more of the shorter term unemployed, but use training programmes less often for the long-term unemployed.
- On average, around a fifth of short- and long-term unemployed LMP entrants are referred to interventions offering **employment incentives (Cat.4)**. In Romania, Denmark, Sweden, the Czech Republic and the Slovak Republic employment incentives are used more often: two-fifth or more of entrants start on such interventions. In Estonia, employment incentives are seldom used for shorter term unemployed, but for almost half of the long-term unemployed.
- In terms of participant numbers, **sheltered and supported employment and rehabilitation (Cat. 5)** is a small category across countries and almost half of countries do not use this type of LMP measure altogether. But in Finland, the Netherlands, Denmark, Sweden, the Slovak Republic, Norway and Poland between 12% and 36% of entrants start on this type of interventions. However, among these countries Cat. 5 interventions are targeted at very different types of entrants. In Finland, Denmark and the Slovak Republic Cat. 5 interventions are never¹⁵ used for the registered unemployed. In contrast, in Sweden two-thirds of Cat. 5 entrants are registered unemployed. ¹⁶
- Hungary stands out as almost all LMP entrants participate in **direct job creation** (Cat. 6). Bulgaria uses this type of measure for 50% of the shorter term unemployed and almost three-quarters of the long-term unemployed. Generally, in many countries Cat. 6 is used more often for the long-term unemployed than those with shorter unemployment duration. For example, in Malta, Ireland, Slovenia, and Latvia, less than 15% of the shorter term unemployed are referred to direct job creation measures, but around half of long-term unemployed are.
- Start-up incentives (Cat. 7) tend to be small interventions in most countries. Spain is an exception with 17% of LMP entrants starting on start-up incentives,

¹⁵ There are a few registered unemployed Cat. 5 entrants in the Slovak Republic, representing less than 1% of registered unemployed entrants.

¹⁶ No detailed assessment is possible for the Netherlands, Norway and Poland as prior status information is missing for most or all of LMP entrants.

however, few of them are registered unemployed. In France and Lithuania 8% of LMP entrants start on start-up incentives and the majority of them are shorter term unemployed.

4.2.3. Jobseekers also benefit from LMP services

- 43. LMP measures usually are not available for all jobseekers in countries, but just a subset of them. Labour market services usually tend to be available for a wider set of jobseekers through individual case-management such as counselling, guidance, and job-search assistance. These type of services are included in the LMP category 1.1.2 and countries are also supposed to collect participant data for these type of services. While Table 3.2 and Table 4.2 included information on LMP services in the count of interventions, the participant numbers involved in such interventions have not been included in the Figures in Sub-section 4.2 and 4.3. This is to prevent possible issues of double-counting participants, as participants in LMP measures are likely to benefit from individual case-management services (Cat. 1.1.2) as well. For this reason LMP services should be shown separately, as has been done for example by Alphametrics (2015[9]).
- 44. However, there are also a number of data issues for this LMP category and participant (and expenditure data) for this category tends to be weak. This relates to the fact that countries often find it difficult to collect data on case specific services carried out by their PES staff and, hence, also costs are difficult to separate out (Alphametrics, 2015[9]). Possibly for these reasons there are no interventions in Cat. 1.1.2 included in Demark, Cyprus, Latvia, Luxembourg and Malta, even though such services are for sure offered to jobseekers in these countries. Given these data issues, a Figure for individual case-management services is currently not included in this report.

4.3. Using LMP participant stock data to identify interventions targeted at the LTU

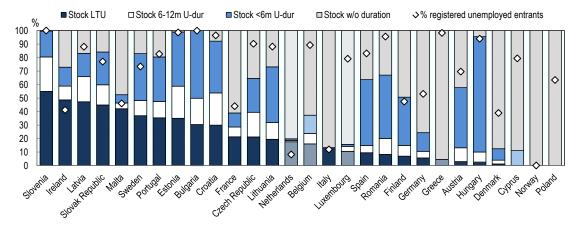
- 45. This section presents information on annual average participant stocks in LMP measures. Analysis of the registered unemployed, however, relies on the fact that stock data by duration is relative complete. Therefore some comparisons with entrant data are made to assess the quality of the stock duration data. Such comparisons, however, require making the assumption that the distribution of the prior labour market status in entrant and stock data is similar.¹⁷
- 46. On average, unemployment duration information is only available for about two-fifth of the participant stock across countries. The diamonds in Figure 4.4 can be used to assess what proportion of the participant stock was likely to have been registered unemployed prior to joining the LMP measure. When the proportion of previously unemployed entrants is close to the proportion of stock with duration recorded the stock duration data is likely to be relatively complete.¹⁸

¹⁷ For example, this does not hold, if a country has a large proportion of interventions offering one-off payments, as such interventions are tracked in entrant data only. Also, if a country has a high number of participants in short-term interventions, entrant data could appear quite different from stock data.

¹⁸ When the proportion of previously unemployed entrants exceeds the stock with duration data recorded possibly underreport the stock that was previously registered unemployed (i.e. stock with recorded unemployment duration). In Ireland, the proportion of previously unemployed entrants is

Figure 4.4. Participant stock data lacks crucial information on LMP participants' prior status

Annual average participant stock in LMP measures (Cat. 2-7) by unemployment duration prior to participation in EU countries^{a,c} and Norway in 2015^b.



Notes: Data sorted in a descending order by the proportion of annual average stock which has been long-term unemployed. The Netherlands and Italy are shown in lighter shading as prior status information is missing for 80% or more of entrants. Cyprus, Belgium, Luxembourg and Greece are also shown in lighter shading due to duration data missing for more than half of registered unemployed entrants (compare with Figure 4.1 and Figure 4.2)

- a. Excluding UK, as no recent data available.
- b. 2014 data for Estonia and Malta.
- c. Note by Turkey:

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Source: DG EMPL LMP database.

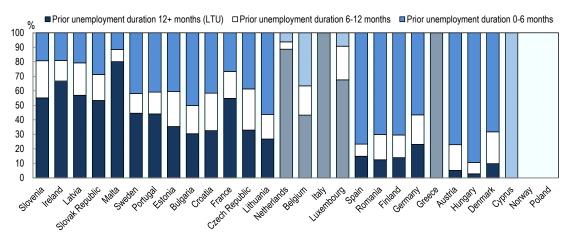
- 47. Norway and Poland do not provide duration information for any of their LMP measures. Also in Italy and the Netherlands the prior labour market status is not known for the vast majority of participants according to participant entrant data. Hence, a high proportion of stock without duration is somehow expected. In Cyprus, Belgium, Luxembourg and Greece around 80% or more of all participants have been registered unemployed prior to joining the LMP measures according to entrant data. However, the entrant data also suggests that unemployment duration information is missing for more than half of the registered unemployed participants (compare with Figure 4.2). Again, missing stock duration data is somewhat expected.
- 48. Figure 4.5 shows only the participant stock with duration information. In Slovenia, Ireland, Latvia, the Slovak Republic, Malta, and France half or more of the registered unemployed stock (with duration information available) has been long-term unemployed prior to joining the LMP measures. In contrast, less than a fifth of the annual

significantly below the stock with duration information, as stock data is more complete than entrant data (compare with Table 3.2).

average stock were long-term unemployed prior to joining in Spain, Romania, Finland, Austria, Hungary, and Denmark. Figure 4.5 shows unemployment duration **prior** to joining an intervention. Hence, these results do **not** suggest that the latter countries generally do not support the long-term unemployed with LMP measures. But unemployed in those countries are seldom referred to measures after becoming long-term unemployed.

Figure 4.5. Countries refer LMP participants at different times during the unemployment spell

Annual average participant stock in LMP measures (Cat. 2-7) with unemployment duration recorded in EU countries^a and Norway in 2015^b.



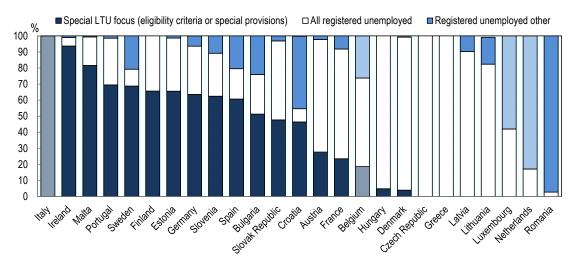
Notes: See Figure 4.4. *Source*: DG EMPL LMP database.

Another interesting insight into countries intervention mix can be obtained through combining participant and target group information included in the LMP database. This allows for an assessment of whether participants typically are referred to main-stream interventions or targeted LMP measures. Figure 4.6 shows the long-term unemployed stock by the LMP target group categories introduced in Sub-section 4.1. The three categories, which have a special focus on the long-term unemployed, are combined into one category Special LTU focus. 19 The countries shown on the left-hand side of Figure 4.6 refer the majority of the long-term unemployed to interventions which are targeted at the LTU (and potentially other target groups) either through eligibility criteria or through special provisions within the measure. Countries towards the right-hand side of Figure 4.1 mainly run main-stream interventions, which are open to all unemployed and do not offer special provisions for the LTU. In Romania and Croatia a large proportions of the LTU are referred to measures that are targeted at Registered unemployed other. These are measures which are targeted at other groups (e.g. youth, older, disabled) and/or offer special provisions for them. LTU might also be among the participants (e.g. if a young person is already unemployed for 12+ months), but participate in these interventions because of other characteristics than their unemployment duration.

¹⁹ The three categories are All RU, focus on LTU (& others); RU, focus on LTU only; and RU, focus on LTU and others. See Table 4.1.

Figure 4.6. Many long-term unemployed benefit from LMP measures targeted at them

Annual average long-term unemployed participant stock in LMP measures (Cat. 2-7) by targeting criterion in EU countries^{a,c} in 2015^b.



Notes: Data sorted in a descending order by the proportion of the stock of long-term unemployed referred to LMP interventions with a special focus on the long-term unemployed. The Netherlands and Italy are shown in lighter shading as prior status information is missing for 80% or more of entrants. Belgium, Luxembourg and Greece are also shown in lighter shading due to duration data missing for more than half of registered unemployed entrants.

- a. Excluding UK, as no recent data available. Excluding Cyprus, Norway and Poland as not long-term unemployed are identified.
- b. 2014 data for Estonia and Malta.
- c. Note by Turkey:

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Source: DG EMPL LMP database.

5. Developments in labour market policies and labour market outcomes for the long-term unemployed over time

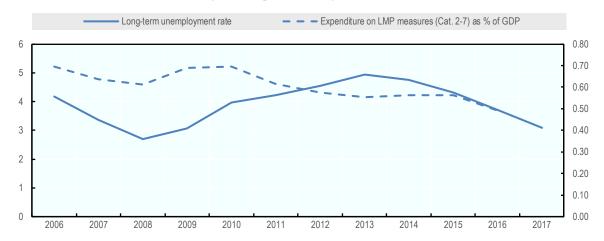
- 50. The purpose of this section is to link this information on LMPs with labour market outcomes. Ideally such an analysis would include indicators on transitions of long-term unemployment into employment, as well as the sustainability of re-employment using exit/destination data of ALMP participants. However, as discussed in OECD (2019_[1]), LMP exit data cannot be used for impact evaluations of ALMPs for three main reasons: i) it shows total exits per year, but not on a cohort basis. Therefore exit data has no direct link with entrant data; ii) information is only available for a single point in time and the timing as to "when" the post-programme destination is measured varies across interventions; iii) the exit data is relatively incomplete (exit data not available for all interventions with entrant data; destination information is not available or characterised through many missing values; information on prior unemployment duration is missing).
- 51. An alternative but still not fully satisfactory way of analysing the labour market effects of LMPs is by combining data from the LMP database on LMP expenditures and participants with aggregate labour market outcomes from other data sources, such as Labour Force Surveys (LFS). Following this last approach, this section provides an analysis of the links between ALMP investments and labour market outcomes as measured through the LFS. Such analysis has been presented in a wide array of literature on active LMPs (Badea and Xavier, 2015_[6]; Ronkowski, 2013_[10]; OECD, 2013_[11]; Card, Kluve and Weber, 2016_[12]). The aim for this section is to augment existing research through a narrow focus on the LTU, paying special attention to data limitations and the interpretation of results.

5.1. Developments of long-term unemployment and LMP expenditure in Europe over the past decade

52. Throughout the EU and OECD the global financial crisis led to an increase in short-term unemployment and with some time-lag a strong increase in long-term unemployment. In the EU, long-term unemployment as percentage of the labour force is at 3.1 percent still above the trough of 2.7 percent in 2008 (Figure 5.1). In the early days of the crisis, spending on active measures – i.e. LMP database categories 2 to 7 – seemed to have followed suit, increasing from 0.61 to 0.69 percent of GDP for the EU on average. However, the rate of increase in LMP expenditure did not match the rise in (long-term) unemployment (Ronkowski, 2013_[10]). While long-term unemployment continued to rise, expenditure on active measures declined in the following years, possibly a result of the increased expenditure on passive LMP supports like unemployment benefits (OECD, 2013_[11]). The decline in spending on active measures halted in 2013 to 2015, but another substantial drop in expenditure is observed for 2016.

Figure 5.1. The development of expenditure on active labour market policies and the long-term unemployment rate in the European Union

Weighted European^{a,b,c} average, 2006 to 2017.



Notes: a. The European average is restricted to countries, where LMP data is available for all years. This includes Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, and Sweden.

b. Note by Turkey: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue"

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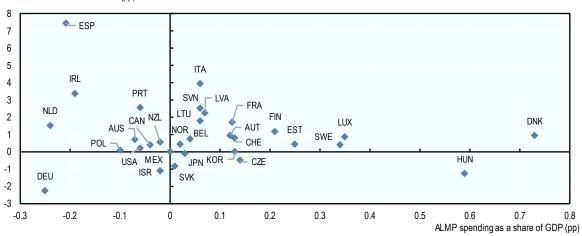
53. To understand the driving forces behind these developments, it is useful to consider the changes in the long-term unemployment rate and expenditure on active measures by country. This is shown in Figure 5.2, which also includes non-EU OECD member states. A large number of countries reduced their spending over this period. The largest reduction is observed for Germany, which also weighs heavily on the EU-average. The reduction in Germany might be justified to some extent, given the drop in long-term unemployment over the same period. A shift from spending on LMP measures towards less expensive LMP services also helps to explain these changes in Germany (OECD, 2019_[1]). Other countries, however, were faced with massive increases in long-term unemployment, yet reduced their expenditure on active measures. Among them are Spain, Ireland, Portugal and the Netherlands. A large number of countries also increased their spending, but spending increases not always matched the increase in long-term unemployment (e.g. Italy, Slovenia, Latvia and France). Larger increases in expenditure on active measures are observed for relatively small countries only, all of which weight little on the European average (e.g. Estonia, Luxembourg, and Denmark). Hungary also increased its expenditure on LMP measures. Its consequent decline in (long-term) unemployment may be explained by the massive expansion of direct job creation measures. These measures have helped to reduce unemployment, but may not lead to the participants permanent integration into the open labour market (Cseres-Gergely and

Molnár, $2015_{[13]}$; Csoba and Nagy, $2012_{[14]}$), 20 as many participants repeatedly participate in the same type of meausres (OECD, $2019_{[1]}$).

Figure 5.2. Change in long-term unemployment expenditure on active labour market policies in OECD countries between 2008 and 2016

Percentage point changes in long-term unemployment as share of the labour force and expenditure on active labour market policies (category 1 to 7) as percentage of GDP.

LTU as a share of labour force (pp)



Note: For Greece, ALMPs are not including PES and administration. For Italy, data refer to 2008-15. Source: OECD-EU Database on Labour Market Programmes. https://stats.oecd.org/Index.aspx?DataSetCode=LMPEXP; OECD (2018), Long-term unemployment rate (indicator), https://dx.doi.org/10.1787/76471ad5-en.

- 54. The relationship between changes in unemployment and LMP expenditure and participation has been widely studied. Research, which makes intensive use of the LMP database includes Ronkowski (2013_[10]) and Badea and Xavier (2015_[6]) who also document the developments of LMP expenditure in relation to changes in (long-term) unemployment. Both studies highlight the heterogeneity amongst European countries in terms of spending on active labour market policies and the levels of unemployment.
- 55. The current project's intention is to use the LMP data more in depth, making use of the information on prior unemployment status of participants. As has been highlighted in Section 2., such analysis needs to be based on participant data, which distinguishes between different prior labour market statuses of the participants and not on LMP expenditure data which cannot be broken down to this level of detail.

 $^{^{20}}$ In 2016, nearly 5% (over 220 000) of the 4.4 million employed individuals in Hungary were participants in direct job creation measures (Bakó and Lakatos, $2017_{[18]}$). In line with international literature, also evaluation studies for Hungary, however, find that public work schemes significantly reduce the probability of open labour market integration (e.g. Cseres-Gergely and Molnár ($2015_{[13]}$) and Csoba and Nagy ($2012_{[14]}$)).

5.2. Developments of activation rates in Europe over the past decade

- 56. A useful starting point when considering the relationship between LMPs and labour market outcomes are activation rates. These are defined as the number of participants in regular LMP measures (i.e. LMP categories 2 to 7) divided by a suitable denominator. DG EMPL publishes three such rates from the LMP database. These also act as indicators for monitoring the EU Employment Guidelines through the Europe 2020 Joint Assessment Framework (European Commission, 2016_[15]):
 - 1. The indicator on activation support shows the stock of participants in LMP measures (Cat. 2-7) divided by the number of persons wanting to work. The persons wanting to work are the sum of the ILO unemployed plus the labour reserve.²¹
 - 2. The context indicator on activation of registered unemployed shows the stock of participants in LMP measures (Cat. 2-7) that "were previously registered unemployed divided by the stock of registered unemployed plus the stock of participants in regular activation measures that were previously registered unemployed and whose unemployment spell is broken by participation in a regular activation measure" (European Commission, 2016, p. 6[15]).
 - 3. The context indicator on activation of registered long-term unemployed: Same definition as 2) for the LTU.
- 57. Data for the first indicator is possibly the most complete and has fewer quality issues than the second and third indicator. Making use of the headline LMP participant data implies, however, that any issues of low reliability from the headline indicator on LMP participants by type of action (data title lmp_partsumm) are carried over. In 2016, data for Greece and Lithuania were flagged as "low reliability", while data for Belgium and the Netherlands were flagged as "estimated". Reference metadata for the LMP database provides the following definitions for published values and the flag "low reliability" for data aggregates (European Commission DG EMPL, 2018_[16]):
 - [...] participant data are generally less complete and to increase the number of participant aggregates that can be disseminated, the value of a participant aggregate is shown provided that constituent data are complete for at least 80% of the associated expenditure (completion indicator >=80%). All aggregates of participants based on incomplete data are flagged as "u" to alert users that the data are not fully reliable (i.e. may be understated by up to 20%) and this flag always takes precedence over any other flag that might be applicable.
- 58. The second and third indicator on activation rates for the registered (long-term) unemployed (code [lmp_ind_actru]) make use of LMP participant stock data and reference data on (long-term) unemployed registered with the public employment service (PES). While activation rates are published by DG EMPL, not all data for the underlying numerator and denominator are published. Annual data on registered unemployed are published alongside the LMP data (data title lmp_rjru). Data on previously unemployed participants in LMP measures are not published by DG EMPL. While information on the treatment of unemployment spells is available through the qualitative reports, the relevant

²¹ "The labour reserve covers inactive persons who want to work but are either not actively seeking work or are not immediately available for work, i.e. it is a subset of all inactive persons (persons neither employed nor unemployed)." (European Commission, 2016, p. 8_[15])

participant data breakdowns are not published.²² Data on registered unemployed is assumed to be of high reliability. Data for all registered unemployed has no flags attached to it and is relatively complete, with the exception for Italy and Cyprus.²³ Data on the long-term unemployed is less complete, with Denmark, Italy and Norway providing not such data and data being patchy in a number of countries.²⁴

59. Hence, data on activation rates are characterised by many missing values and data are also often classified as "low reliability" (Annex A2, Table A.1). There are even more gaps in the activation rates of the long-term unemployed and a high number of values are flagged as "low reliability" (Annex A2, Table A.2). In terms of coverage over time, a relatively complete time series of activation rates for the registered unemployed is available for Austria, Bulgaria, Croatia (from 2012 onwards), Czech Republic, Estonia (from 2011 onwards), Finland, Germany, Latvia, Portugal, Romania, Slovak Republic, Slovenia, and Sweden. Data is, however, flagged as having low reliability (at least for some years) in the Czech Republic, Germany, Portugal, Romania, and the Slovak Republic.

5.3. Issues of comparability in the analysis of time-series

- 60. Section 3 and 4 highlighted a number of issues relating to missing, incomplete and sometimes inconsistent participant data on the registered unemployed and the prior unemployment duration information included in the LMP database. While Section 4 covered the year 2015 only, this section discusses some additional issues arising in comparisons over time.
- 61. Table 5.2 provides an overview on total participant stocks in LMP measures (Cat. 2-7), as well as those who were registered unemployed before starting on a measure, those with an unemployment duration recorded (sum of < 6 months, 6-12 months and 12+ months), and those with a prior unemployment duration of more than 12 months. The data in this table highlights some of the issues relating to the "low reliability" flags and missing data in the activation rates published by DG EMPL. These data issues are crucial, as they impact on the validity of the LMP data breakdowns by prior unemployment status and duration for cross-country comparisons, but also for comparisons over time for single countries. Among the issues are:
 - Substantial change of the proportion unemployed among the annual average participant stock: This is, for example, the case in Austria, Denmark, Finland, Germany, Latvia, the Slovak Republic and Sweden. Activation rates are generally deemed reliable in these countries. Nevertheless, using the data without further investigation into the drivers of these results is not recommended. While countries

²² Figures for "stock of participants in regular activation measures that were previously registered unemployed and whose unemployment spell is broken by participation in a regular activation measure" (European Commission, 2016_[15]) can only be obtained through cross-tabulations of unpublished data un previously unemployed participants and the information on treatment of unemployment spells.

²³ Italy only provided this data on registered unemployed in 2014; for Cyprus the information is missing from 2013 onwards.

²⁴ Data on the registered long-term unemployed is missing in Greece from 2011 onwards; is missing in Cyprus from 2013 onwards; was not available in some years in Hungary and Malta.

- may have changed their policy focus, the availability of unemployment duration information might also impact on these results.
- 2. **Availability of prior status information has improved**: A positive development over the past decade has been that countries are able to provide unemployment data for a higher number of interventions. For example, the Netherlands improved its coverage of unemployment information for LMP participants over the past decade.
- 3. Coverage of unemployment duration information has improved: Based on columns 3 and 4, column 7 in Table 5.2 shows the proportion of unemployed participants in LMP measures where the duration of the prior unemployment spell is recorded. Ideally, countries would be able to provide duration information for all unemployed participants (i.e. 100%). This is the case in Austria, Bulgaria, Croatia (from 2011), Denmark, Finland, Germany, Latvia, the Slovak Republic, and Slovenia form 2006 onwards. In a number of countries unemployment duration information has not been available in 2006, but became available for some (Cyprus and the Netherlands) or all (Estonia, Hungary, and Poland²⁶) interventions by 2015. In many countries including Belgium, the Czech Republic, Ireland, Lithuania, Malta, Portugal, Spain and Sweden the coverage of unemployment duration data improved over the same period. In contrast, in Luxembourg and Romania, the data quality, however, declined over the same period.
- 62. These changes in the coverage of prior status and especially unemployment duration information impact on the validity of this data for cross-country comparisons, but also for comparisons over time for single countries. For all countries where changes in the data are recorded, a more detailed investigation is needed to understand the driver behind such changes. For example, for Hungary such a change in the data coverage is discussed in OECD (2019_[1]).

²⁵ For simplicity it is assumed that countries providing full data in 2006 and 2015 also provided full data in between. Some smaller discrepancies of less than 5 percent are ignored. For Croatia the comparison is based on 2011 and 2015.

²⁶ Referring to 2016 data.

Table 5.1. Participants in LMP measures (Cat. 2-7)

Annual average participant stocks (total, unemployed, unemployed with any unemployment duration information and long-term unemployed), 2006 and 2015.

	Year 1	Participant stock (annual average) in LMP measures 2	Stock unemployed (total) 3	Stock unemployed (with duration recorded)	Stock long-term unemployed 5	Unemployed as % of total stock 6	Unemployed with non- missing duration as % of total unemployed 7
Austria	2006	162 271	79 412	79 416	2 407	49	100
	2015	149 908	89 566	89 568	4 522	60	100
Belgium	2006	212 809	168 557	41 448	23 579	79	25
· ·	2015	343 879	267 336	128 111	55 333	78	48
Bulgaria	2006	114 166	110 570	109 512	62 038	97	99
-	2015	15 894	15 834	15 838	4 772	100	100
Croatia	2011	20 493	20 005	20 004	7 501	98	100
	2015	38 273	35 891	35 893	10 176	94	100
Cyprus ^{a,b}	2006	1 323	6			<1	
	2015	8 507	5 231	941	0	61	18
Czech Republic	2006	58 666	38 148	33 878	10 229	65	89
	2015	89 212	60 119	57 581	18 938	67	96
Denmark	2006	136 545	34 359	34 359	4 461	25	100
	2015	194 372	24 289	24 347	2 360	12	100
Estonia	2006	2 063	2 063			100	
	2015	4 241	4 150	4 148	1 152	98	100
Finland	2006	100 050	66 748	66 219	11 024	67	99
	2015	125 596	63 674	63 678	8 805	51	100
France	2006	1 577 097	607 231	447 520	354 226	39	74
	2015	1 926 431	1 024 079	776 415	417 955	53	76
Germany	2006	2 838 135	1 040 764	1 020 330	267 534	37	98
	2015	1 229 310	299 776	299 779	69 228	24	100
Greece	2006	41 646	41 306	27 449	7 124	99	66
	2015	39 419	2 550	4 032	4 032	6	158
Hungary	2006	83 238	46 177			55	.,
5 ,							

	2015	247 763	237 789	236 467	6 405	96	99
Ireland	2006	61 898	42 258	38 295	29 287	68	91
	2015	97 821	72 772	72 772	47 782	74	100
Italy	2006	1 793 869	1 124 372	327 445	327 445	63	29
	2015	1 643 265	718 908	219 002	219 002	44	30
Latvia	2006	9 627	8 664	8 727	2 336	90	101
	2015	7 689	6 388	6 388	3 635	83	100
Lithuania	2006	22 334	21 313	20 011	4 660	95	94
	2015	25 234	19 866	19 191	4 913	79	97
Luxembourg	2006	9 693	5 709	4 145	2 020	59	73
Ŭ	2015	22 511	13 168	3 525	2 382	58	27
Malta	2006	912	378	264	148	41	70
	2015	3 410	1 435	1 435	1 017	42	100
Netherlands	2006	318 227	6 097			2	
	2015	356 010	137 160	70 060	62 155	39	51
Norway	2006	59 821					
	2015	53 575	**	**	**	**	**
Poland	2006	509 166	114 204	12 119	12 119	22	11
	2015	640 163	267 403	**	**	42	**
Portugal	2006	158 739	147 393	93 208	40 990	93	63
	2015	290 776	267 765	236 064	104 612	92	88
Romania	2006	112 956	102 257	102 347	15 803	91	100
	2015	32 766	30 128	21 947	2 717	92	73
Slovak Republic	2006	142 384	142 275	141 318	15 856	100	99
	2015	57 452	48 363	48 338	25 781	84	100
Slovenia	2006	21 075	21 075	20 563	18 036	100	98
	2015	11 561	11 526	11 526	6 353	100	100
Spain	2006	3 194 417	2 773 034	125 944		87	5
	2015	1 886 906	1 523 795	1 202 310	179 927	81	79
Sweden	2006	202 875	83 102	61 883	4 779	41	74
	2015	272 840	226 491	226 488	100 802	83	100

Notes: .. missing value/not available.

- a. Note by Turkey: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".
- b. Note by all the European Union Member States of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

Source: DG EMPL.

6. Main findings and recommendations

- 63. This report provides an initial assessment of the quality of the information available in the LMP database for identifying and assessing LMP interventions targeted at the long-term unemployed. The main focus of the report is on LMP measures, which cover government interventions that provide temporary support for groups that are disadvantaged in the labour market. LMP measures can be distinguished from LMP services, which are interventions where the main activity of participants is job search related and LMP supports, which provide financial assistance. The most important findings with respect to quality and interpretation of the data are:
 - Target group data has an important advantage in that it is available for all interventions across countries and over time and thus can be used to see which interventions are intended to benefit the LTU. Target group data can, however, not be used to make a quantitative assessment on how many LTU participate in a country's LMP interventions. The analysis of target group and participant data revealed some inconsistencies between the two types of information (registered unemployed are among the participants, but the intervention is not intended for registered unemployed; or an intervention is targeted at LTU, but there are no LTU participants). These could be addressed through additional automated validation checks of the database.
 - Data on annual average participant stocks is the most important participant variable, as it is usually used to compare LMP across countries and over time. Explicit information on participants' prior labour market status is, however, missing from the stock data and therefore complicates the analysis of unemployed and especially the LTU benefitting from LMP interventions.
 - Missing unemployment duration information often is a result of countries not being able to provide the requested information. As the report highlights, when duration data is reported there are various issues of inconsistent data reporting. These inconsistencies should be discussed with the countries affected. Going forward, the aim should be consistent reporting of participant duration data across all countries. A number of automated validation checks have already been proposed by the LMP Task Force and more could potentially be added, as well as a modification to the participant data input mask in the LMP software.
 - Analysis of time series: Over the past decade, the coverage of the LMP participant data has improved in many countries with respect to prior labour market status of the participants, as well as, prior unemployment duration. This is a very positive finding. Nevertheless, for a large number of interventions across countries, crucial information on prior status and unemployment duration is still missing. An analysis of long-term unemployed participants in LMP interventions is consequently just a partial one. Furthermore, when considering changes for the LTU over time, it is not clear whether changes are driven by policy changes or merely because the coverage of the prior status/unemployment duration data has changed. Going forward, DG EMPL should continue to encourage countries to

- obtain and include data on prior status/unemployment duration in the LMP database. Once the information on prior status/unemployment duration is (more) complete, it will be possible to compare how investments in LMPs for the (long-term) unemployed differ across countries and over time.
- 64. Notwithstanding the issues of data quality, the LMP database can be used for some interesting cross-country comparisons in terms of countries' interventions mix and the main beneficiaries including the LTU of LMP interventions.
 - Analysis of the **target group information** shows that most countries have a number of LMP measures, which are not intended for the unemployed (hence, neither the LTU). In Austria, Ireland, the Netherlands and Slovenia stand out as all LMP measures reported in the LMP database can be accessed by the unemployed. Interventions can also be differentiated between mainstream measures which are open to "all unemployed" and those which are targeted through eligibility criteria or special provisions to specific groups, e.g. the LTU. Across countries just under a fifth of interventions have a focus on the LTU (but other groups might also be among the beneficiaries). The Czech Republic, Latvia, the Netherlands, Norway, Poland and Romania have no interventions with such a special focus on the LTU. The Czech Republic and Latvia stand out as they only have mainstream interventions.
 - Analysis of **participant entrant** data allows for a quantitative assessment of these finding: In Slovenia and Bulgaria all LMP measures are exclusively for the registered unemployed. In Estonia, Greece, Romania, Hungary, Croatia and the Czech Republic 90% or more of the entrants in 2015 were registered unemployed. Some exceptions are Finland, Malta, France and Denmark, where under half of all entrants were registered unemployed at the point of joining an LMP intervention.
 - Considering only **registered unemployed LMP entrants** shows that the majority of unemployed LMP participants are referred during the first six months of their unemployment spell. The highest proportion is found in Hungary, where only about 10% of unemployed entrants start LMP measures after more than 6 months of unemployment. In Portugal, Bulgaria, Sweden, the Slovak Republic, France, Slovenia, and Latvia more than a third of LMP entrants have been long-term unemployed and in Malta 60% of entrants into LMP measures have been long-term unemployed prior to joining LMP measures.
 - Analysis of changes over time showed that there is no simple relationship between participation in/expenditure on LMP measures and labour market outcomes.
- 65. The report also highlighted a very **important issue for the interpretation of the information on LTU participating in LMP measures**. For LMP measures the unemployment duration recorded for participants refers to the unemployment spell of participants **before** they joined the measure. This has an important consequence for the interpretation of participant duration data: A country, which consistently refers all registered unemployed to LMP interventions before they are long-term unemployed (i.e. the unemployment duration is still less than 12 months) would not have any long-term unemployed among its LMP participants. However, also countries that "write off or park" long-term unemployed, would not have any long-term unemployed among its LMP participants. Hence, the results above on their own cannot be used to benchmark countries in terms of their assistance provided to the LTU without additional contextual information.

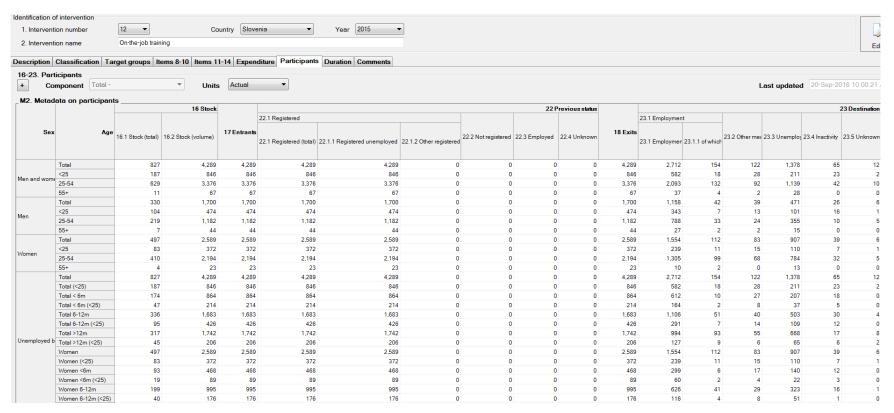
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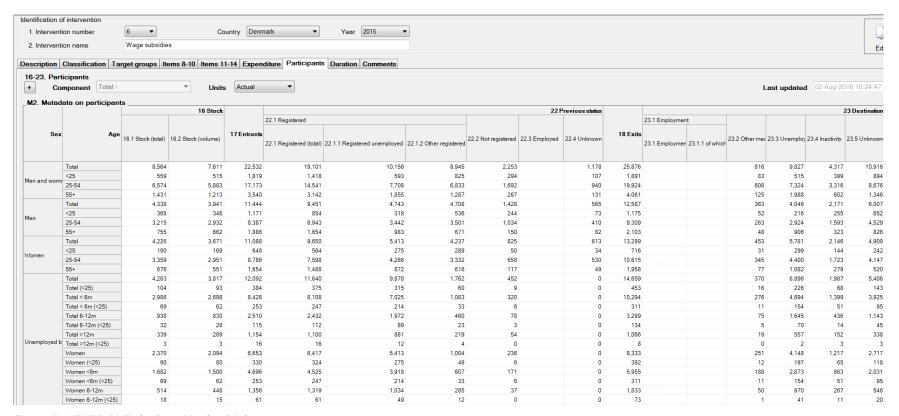
Annex A1: LMP database participant data examples

Table A 1.1. Slovenia, Intervention No. 12: On-the-job training



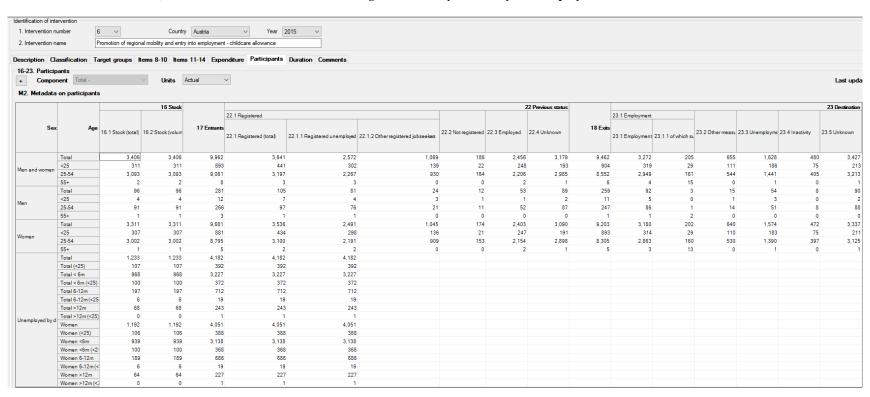
Source: DG EMPL LMP database, Version 7.1.9.

Table A 1.2. Denmark, Intervention No. 6: Wage subsidies



Source: DG EMPL LMP database, Version 7.1.9.

Table A 1.3. Austria, Intervention No. 6: Promotion of regional mobility and entry into employment - childcare allowance



Source: DG EMPL LMP database, Version 7.1.9.

Annex A2: Activation rates of the registered unemployed

The following tables show the activation of registered unemployed (Table A 2.1) and registered long-term unemployed (Table A 2.2).

Table A 2.1 Activation rates of the registered unemployed

	2006	Flags and footnotes	2007	Flags and footnotes	2008	Flags and footnotes	2009	Flags and footnotes	2010	Flags and footnotes	2011	Flags and footnotes		Flags and footnotes	2013	Flags and footnotes	2014	Flags and footnotes	2015	Flags and footnotes	2016	Flags and footnotes
Belgium	22.8	u	29.0	u	34.7	u	36.5	u	37.2	u	39.6	u	33.1	u	28.6	u	30.8	u	32.2	u	31.1	u
Bulgaria	23.7		21.0		27.1		16.9		7.0		5.1		6.6		12.2		5.5		4.5		8.4	
Czechia	7.5		8.1		7.5		5.6		6.1		4.6		4.6	u	5.8	u	9.3		11.4		9.5	
Denmark	21.3		21.2		27.2		21.1		25.4	е	27.1	е	22.8	е	20.9	е	18.6	е	17.5	е	17.5	е
Germany a)	20.5	r	23.5	r	26.7	r	22.1	r	21.0	г	17.9	r	13.9	r	10.9	r	10.7	r	10.0	r	10.1	r
Estonia	13.3		9.6	е	5.0	е	5.1	е	7.4		10.3		14.5		12.5		12.4		13.9		16.5	
Ireland	21.2	u			11.5	u	12.4		11.5	е	15.2		15.3	u	16.2	u	18.0	u				
Greece	8.6		8.8		9.8		13.7	е	13.7	е	:											
Spain	59.1	u	64.1	u	50.9	u	35.8	u	28.9	u	20.8	u	20.8	u	18.8	u	23.8	е	26.9	е	26.8	е
France											23.1	u			19.8	u	20.7	u	21.0	u	23.8	u
Croatia													3.7		6.4		6.0		9.0		10.3	е
Italy																						
Cyprus																						
Latvia	11.6		8.9		7.8		8.9		15.7		17.5		11.3		13.8		11.6		7.8		10.9	
Lithuania	19.2	u	22.7	u	13.9	u	6.2	u	4.7	е	5.0	u	7.7	u	6.9	u	9.3	u	10.3	u	9.6	u
Luxembourg																						
Hungary							13.4	u	24.0		16.6	u	36.1	е	35.8		33.8		38.6		44.3	
Malta			8.1	е	4.3	е	5.9	е	12.7		12.9		11.5		4.3		32.8	u	27.6		29.5	
Netherlands					35.7	u	31.4	u	30.1	u	29.5	u	24.3	u	18.4	u	16.7	u				
Austria	36.8	u	36.7	u	35.9	u	35.9		40.0		36.2		37.1		35.5		33.9		27.7		28.7	
Poland							13.3	е	13.6	е	8.5	е	7.9	е	6.7	е	9.1	е	14.1	е	16.1	
Portugal	24.3		26.4		27.4		24.8	b	22.8		21.7	b	19.1		22.0		29.6		33.7		29.4	
Romania	13.7	е	16.5	е	16.4	е	6.7	е	6.0	е	8.3	е	10.8	е	7.4		6.7		6.3		10.0	
Slovenia	21.2		14.9		10.4		14.4		19.0		15.9		9.4		13.4		13.6		9.5		7.2	
Slovakia	44.1		33.6		33.8	b	16.7		23.6		16.3		14.9		12.4		13.6		12.6		17.9	
Finland	21.2	b	21.0		20.5		16.3		19.9		20.8		19.4		15.1		16.0		15.3		15.5	
Sweden	28.3	е	27.8	е	33.4		26.0	е	32.1	е	32.8	е	34.3	е	39.9	b	45.4	е	45.6	е	42.3	е
United Kingdom																						
Norway																						

Notes: Activation of registered unemployed shows the stock of participants in LMP measures (Cat. 2-7) that were previously registered unemployed divided by the stock of registered unemployed plus the stock of participants in regular activation measures that were previously registered unemployed and whose unemployment spell is broken by participation in a regular activation measure" (European Commission, 2016, p. 6_[15])

^{..} not available; flags: b break in time series, e estimated, r revised, u low reliability.

a. German data is based on the updated LMP data, which has not been published at the time of writing. Source: DG EMPL.

Table A 2.2 Activation rates of the registered long-term unemployed

	/		,				,		,				·						/			
		Flags and		Flags and																		
	2006	footnotes	2007	footnotes	2008	footnotes	2009	footnotes	2010	footnotes	2011	footnotes	2012	footnotes	2013	footnotes	2014	footnotes	2015	footnotes	2016	footnotes
Belgium																						
Bulgaria	23.3		21.1		19.3		4.9		4.8		2.8		4.3		12.8		4.2		3.2		4.5	
Czechia	4.9	u	5.7	е	5.7	е	5.4	е	5.3	е	3.5	е	3.0	u	4.5	u			8.2	u	9.6	е
Denmark																						
Germany a)	13.9	r	15.1	r	16.1	r	13.9	r	12.4		9.5	r	8.0	r	6.8	r	6.4	r	5.9	r	6.1	r
Estonia											14.7		23.3		24.0		27.0		30.4		36.4	
Ireland					28.9	u	21.2	u			21.1	u	20.0	u			21.4	u				
Greece																						
Spain											12.2	u										
France													**									
Croatia													3.8		6.5		4.6		7.4		6.6	е
Italy																						
Cyprus																						
Latvia	12.4	е	13.0	е	20.6		23.1		25.1		26.0		19.6		22.9		18.4		14.2		20.1	
Lithuania	19.7	u	21.4	u			5.7	u	4.3	u												
Luxembourg																						
Hungary									34.2				30.6	е	21.0	е					15.2	
Malta					4.5	е	9.7	е	9.0	u	18.5	u	12.4	u					40.6		41.3	
Netherlands					28.3	u	29.7	u	28.1	u	27.3	u	26.8	u	19.2	u	14.0	u				
Austria	32.0	u	31.7	u	25.8	u	29.7	u	35.5	u	34.4	u	36.6	u	33.7		25.4		15.3		16.9	_
Poland																					109.0	
Portugal	17.7	u	17.2		18.5		17.8	u	14.7	u	16.1	u	14.9	u	15.4	u	22.8	u	28.4	u	24.3	
Romania	11.4	е	13.7		13.3		7.3		62.0	е	2.5	е	6.0	е	2.1	u	1.9	u	1.6	u	2.2	
Slovenia	33.9		24.9		12.7		15.8		16.0		14.4		9.0		11.8		14.0		9.8		8.1	
Slovakia					46.9		22.9		27.3	u	12.4	u	18.2	u	10.4		14.1		12.7		17.5	
Finland	14.7	b	11.7	е	10.9	е	10.2	е	11.2		10.4		8.5		5.9		6.9		7.5		8.1	
Sweden	20.5	u	15.3	u	25.4	е	22.2	е	27.1	е	25.1	е	27.3	е	53.6	b	55.9	е	54.2	е	47.9	е
United Kingdom																						
Norway																						$oldsymbol{ol}}}}}}}}}}}}}}}}}}$

Notes: Activation of registered long-term unemployed uses in the numerator the stock of participants in LMP measures (Cat. 2-7) that were previously registered unemployed for more than 12 months. The denominator is the stock of registered long-term unemployed plus the stock of participants in regular activation measures that were previously registered unemployed for more than 12 months and whose unemployment spell is broken by participation in a regular activation measure.

- .. not available; flags: b break in time series, e estimated, r revised, u low reliability.
- a. German data is based on the updated LMP data, which has not been published at the time of writing. *Source*: DG EMPL.