OECD

Organisation for Economic Co-operation and Development

OECD Regional Quarterly Labour Force indicators
Metadata

Dataset access	OECD Short-term regional statistics http://dotstat.oecd.org/Index.aspx?DataSetCode=REGION_ST
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Objective

In many OECD countries, there are persistent regional (sub-national) disparities in employment performance. There are countries where labour shortages in certain regions coexist with continuously high unemployment in other regions[1]. It is therefore important to assess the extent to which such disparities persist, or are exacerbated notably through the impacts of the recent crisis. High-frequency data on employment and unemployment – especially if disaggregated by age groups – help to better track the trends in the regional labour markets and to understand the heterogeneous impact of the pandemic.

The regional quarterly labour force dataset presents subnational statistics for 36 OECD countries, from 2000-Q1 to the most recent available quarter. Data on a reporting quarter are available four months after the end of the quarter of reference. The data collection is undertaken by the Directorate of Centre for Entrepreneurship, SMEs, Regions and Cities. Statistics are collected through access to the web-sites of National Statistical Offices and are disseminated in OECD the Regional Recovery Platform[2] and OECD DotStat.

The dataset is released in October 2021 as a beta version. In October 2022, harmonised indicators as well as seasonally adjusted series have been added to the indicators collected from the NSOs. Those harmonised estimates are done by the OECD secretariat and allow comparisons cross-countries and over-time that are consistent with quarterly labour force released at national level by the OECD.

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[1] OECD (2005), OECD Employment Outlook 2005, OECD Publishing, Paris, https://doi.org/10.1787/empl_outlook-2005-en.

[2] OECD (2021) COVID-19 Recovery Dashboard. www.oecd.org/regional/recovery-platform.htm

Regional (sub-national) coverage

The data are collected at sub-national level, primarily at the level of large regions (Territorial Level 2, TL2) which represents the first administrative tier of subnational government (see the OECD Territorial grid[3] for further information on the territorial levels of Member countries used in the OECD subnational databases), as well at the level of small regions (TL3) for around 10 OECD countries where the data are available. For countries where subnational data are not available (Lithuania and Turkey), national average are provided, collected from the OECD Short-term Labour Market statistics dataset. The OECD territorial grid (pdf) provides further information on the geographic disaggregation used for regional analysis at the OECD.

International comparability

The sources of the regional quarterly labour market data are primarily based on national labour force surveys following the International Guidelines[4], which ensure international comparability. However, differences in practices occur among countries and may affect the international comparability[5,6]. For Germany, only registered unemployment data are available at regional level, the data are harmonised by the OECD in order to be comparable with other countries.

The National Statistical Offices (NSOs) disseminates yearly LFS indicators for different age ranges, however quarterly data are generally published for only one age range for all population in addition to the youth age range, when available. The age range reported is 15 year olds or more (15+) for 25 countries, 15-74 for 5 countries (Estonia, Finland, Hungary, Norway and Sweden), 15-75 for the Netherlands, 15-64 year for Belgium and Denmark,16-74 for Iceland, 16-84 for Portugal, 16+ for Spain, the United Kingdom and the United States. For quarterly youth labour force, 13 countries report quarterly 15-24 year olds range, 15-29 years olds is reported for Korea and 16-24 for Iceland, Spain, UK and USA.

Harmonisation for inter-country comparison

The heterogeneity in age ranges affects the inter-country comparability, therefore the OECD computes harmonised 15+ age regional indicators that fit the national values used for international comparison.

The estimation of harmonised regional activity and employment rates requires several steps. Firstly, population levels are estimated by target age ranges (15+, 15-64 and 15-24 age), using the yearly regional population data by age adjusted to the national quarterly LFS levels. Secondly, activity and employment rates are recalculated using the denominator estimated in the first step. These estimates help to take into account the specific age structure of each region, however the bias still reside in the numerator (labour force population and employment levels). Therefore - in a third step -, regional rates are further adjusted to national rates published in the quarterly national LFS. Those harmonised indicators give proxies of

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[3] OECD (2021) Territorial grid https://www.oecd.org/regional/regional-statistics/territorial-grid.pdf

[4] ILO (2013), Resolution concerning statistics of work, employment and labour underutilization, 19th International Conference of Labour Statisticians (ICLS), Geneva. wcms_230304.pdf (ilo.org)

[5] OECD (2020) note on Employment and unemployment statistics during the COVID-19 crisis. https://www.oecd.org/sdd/labour-stats/OECD-employment-and-unemployment-statistics-during-the-COVID-19-crisis.pdf

[6] ILO (2020) COVID-19: Guidance for labour statistics data collection https://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/publication/wcms_741145.pdf

indicators when a specific age range is not reported by the NSOs. Only rates (not levels) are harmonised and published in DotStat.

Seasonal adjustment

Seasonal adjustment helps to compare the rates over different time periods. When infra-annual data are not seasonally adjusted, only change of the same quarter over different years is meaningful. Since few NSOs provide seasonally adjusted series at the regional level, the OECD secretariat estimates seasonally adjusted time series for harmonised rates. The seasonal adjustment is possible only when the time series is sufficiently long to identify infra-annual patterns. When time series do not allow this correction, the data are adjusted using the same seasonal adjustment as the one done at national level for international comparison.

Indicators types

Indicators are organised under the following structure:

- Harmonised quarterly labour force OECD estimates (15+, rates).
- Harmonised quarterly labour force – seasonally adjusted OECD estimates (15+, rates).
- Quarterly labour force – national age ranges (rates and levels), indicators collected from NSOs. (15-24, 15-64, 15-74, 15-84, 15+). For the sake of simplicity, age ranges starting with 16 age are allocated to 15 age, 15-75 to 15-74, and 15-29 to 15-24. Precise age ranges are detailed in the data source table.

Indicators

Labour market trend is measured with:

Rates:

- Unemployment rate (% unemployed population over active population)
- Employment rate (% employed population over working age population)
- Activity rate (% active population over working age population)

Levels (in thousands):

- Population of active age
- Labour force (employment plus unemployment)
- Employment
- Unemployment
- Inactive population

Data are available by sex (women, men, total), and age groups:

- 15+ (working age population aged 15 year olds and over)
- 15-64
- 15-24 (youth labour market)
- Other national age ranges

The inventory of the indicators and their codification is available in the code book (xlsx).

Data sources with national age ranges collected

Country	Age ranges (s.a.)*	Territorial level (TL)	Source
Australia	15+ 15-24	2, 3 (greater cities)	ABS 6291.0.55.001 Labour Force, Australia, Detailed. Table 02. Labour force status by State, Territory, Greater capital city, Rest of state (ASGS) and Sex. Youth data: Table 03. Labour force status for 15-24 year olds by Age, Educational attendance (full-time) and Sex and by State, Territory and Educational attendance (full-time). abs.gov.au
Austria	15+	2	Austrian Micro census - Labour Force Survey Quarterly Data N, Q, Smetadata. statcube.at
Belgium	15-64 15-24	2	StatBel. Active (working and unemployed) population since 2017 based on the reformed Labour Force Survey, by quarter, region, age class and level of education. statbel.fgov.be
Canada (1)	15+ 15-24	2	OECD estimates based on Statistics Canada table 14-10-0017-01 Labour force characteristics by sex and detailed age group, monthly, unadjusted for seasonality (x 1,000). statcan
Chile (2)	15+	2	Chilean National Statistical Institute. National Labour Force Survey (ENE). Unemployment rate. stat.ine.cl
Colombia (3)	15+ (s.a.)	2	OECD estimates based on DANE Gran encuesta integrada de hogares - Ciudades (23) data. dane.gov.co
Costa Rica	15+	2	INEC. Temas especiales de empleo. Sinopsis de la condición de actividad de las regiones de planificación. inec.cr
Czech republic (4)	15+	2, 3	Source: LFS - labour force survey. Table Code: ZAM01-A/13. czso.cz
Denmark	15-64	2	Statistics Denmark. AKU120K: Labour force status by employment status and region. statbank.dk
Estonia	15-74 15-24	3	Statistika andmebaas - TT467: Labour status of population aged 15-74 by region (quarters). stat.ee
Finland	15-74	2	Statistics Finland, table 11c9 -- Population aged 15-74 by labour force status, sex and major region, quarterly data. stat.fi
France (2)	15+	2, 3	Taux de chômage localisés. insee.fr. Unemployment rate.
Germany	15+	2	OECD estimates based on registered unemployment.
Greece	15+	2	Hellenic Statistical Authority. Labour force (Quarterly data) - Table 02B. Population 15+ (employment status, region). statistics.gr
Hungary	15-74 15-24	2	Economic Activity Measures of Population Aged 15-74 by Sex Non-institutional population. Table LD4F04. statinfo.ksh.hu
Iceland	16-74 16-24	2	Statistics Iceland. px.hagstofa.is
Ireland	15-74 (s.a.)	2, 3	CSO - QLF08 Persons aged 15 years and over. data.cso.ie
Israel	15+	2, 3	Central Bureau of Statistics Israel. cbs.gov.il
Italy	15+ 15-24	2	ISTAT Unemployment rate : Regional data – age. dati.istat.it
Japan	15+ (s.a.)	2	Labour Force Survey / Basic Tabulation Historical data. e-stat.go.jp
Korea	15+ 15-24	3	Statistics Korea, Economically Active Population Survey - Summary of economically active pop. by city & province / gender. kosis.kr
Latvia	15+ 15-24	2	OECD Short Term Labour Market statistics. dotstat.oecd.org
Lithuania	15+ 15-24	1	OECD Short Term Labour Market statistics (no regional data available). dotstat.oecd.org
Luxembourg	15+ 15-24	2	OECD Short Term Labour statistics database. dotstat.oecd.org
Mexico (2)	15+	2	INEGI. Encuesta Nacional de Ocupación y Empleo. inegi.org.mx
Netherlands	15-75	2	CBS - Labor participation; province. opendata.cbs.nl
New Zealand	15+ 15-24	2, 3	Household Labour Force Survey - HLF - Table: Labour Force Status by Age Group by Region Council (Qrtly-Mar/Jun/Sep/Dec). stats.govt.nz
Norway	15-75	2	Statistics Norway, table 13497: Population, by labour force status, age and region.
Poland	15+ 15-24	2	Statistics Poland // Category K4 Labour Market // Group G419 Economic activity of the population (quarterly data) // Subgroup P2567 Economic activity of the population by place of residence. stat.gov.pl
Portugal	16-84	2	Statistics Portugal - Unemployment rate (Series 2011 - %) by Place of residence (NUTS - 2013) and

	15-24		Sex; Quarterly - Statistics Portugal, LFS. Statistics Portugal - Web Portal (ine.pt)
Slovak Republic	15+	2, 3	Statistical Office of the Slovak Republic, Unemployed by age, tables pr3117qr, pr3817qr. statistics.sk
Slovenia	15+	2	OECD estimates based on Population by activity, sex and cohesion regions (in 1000), Slovenia, quarterly. pxweb.stat.si
Spain	16+	2	OECD estimates based on INE - Economic activity, unemployment and employment rates, by province. ine.es
Sweden	15-74	2	Statistics Sweden - table AM0401UZ. Population aged 15-74 (LFS) by region, labour status and sex. Quarter 2005K2 - 2020K4. statistikdatabasen.scb.se
Switzerland	15+	2	OFS - Taux de chômage au sens du BIT selon le sexe et les grandes régions. bfs.admin.ch
Turkey	..	..	n.a.
United Kingdom	16+ (s.a.)	2	ONS - annual population survey - regional - labour market status by age. nomisweb.co.uk
United States (1)	16+ (s.a.)	2	OECD estimates based on US BLS - Local Area Unemployment Statistics. data.bls.gov

*   (s.a.) is reported when series are seasonally adjusted by the NSO in the raw data collected.

(1)   Canada and United States: quarterly data OECD estimates based on averages of monthly data.

(2)   Chile, France and Mexico: only unemployment rate data are available.

(3)   Colombia: Due to data unavailability for Departemientos (TL2 regions), Labour Force data are based on 23 ciudades: Riohacha (La Guajira - CO44), Cúcuta (Norte de Santander - CO54), Quibdó (Chocó - CO27), Ibagué (Tolima - CO73), Neiva (Huila - CO41), Valledupar (Cesar - CO20), Bogotá DC (Bogotá Capital District - CO11), Tunja (Boyacá - CO15), Villavicencio (Meta - CO50), Popayán (Cauca - CO19), Manizales (Caldas - CO17), Cali (Valle del Cauca - CO76), Armenia (Quindio - CO63), Medellín (Antioquia - CO05), Montería (Córdoba (CO) - CO23), Florencia (Caquetá - CO18), Santa Marta (Magdalena - CO47), Pereira (Risaralda - CO66), Sincelejo (Sucre - CO70), San Juan de Pasto (Nariño - CO52), Bucaramanga (Santander - CO68), Barranquilla (Atlántico - CO08), Cartagena (Bolívar - CO13).

(4)   Extraordinary revision September 1, 2021 due to a methodological change in the economic status of persons on parental leave.