LMF1.4: Employment profiles over the life-course

Definitions and methodology

This indicator presents age-employment profiles for men and women aged between 20 and 65 based on employment-to-population ratio data for each of the underlying five-year age groups. ‘Employment’ here refers to the ILO definition, whereby all persons who during a specified reference period were either in paid employment or were self-employed for at least one hour are classified as ‘employed’, with the employment-to-population ratio defined as the proportion of the population in each five-year age group that is employed.

To highlight differences between socio-economic groups in patterns of employment over the life-course, this indicator presents information both for all men and women and by level of educational attainment. Educational attainment is measured using the standard three-part ordinal variable based on the ISCED 2011 classification of educational programmes: ‘low education’, corresponding to a highest level of educational attainment at ISCED 2011 levels 0–2 (pre-primary, primary or lower secondary education); ‘medium education’, corresponding to highest level of educational attainment at ISCED 2011 levels 3–4 (upper secondary and post-secondary non-tertiary education); and ‘high education’, corresponding to a highest level of educational attainment at ISCED 2011 levels 5–8 (tertiary education).

Key findings

Age-employment profiles – shown in Chart LMF1.4.A for all OECD and EU member countries in 2018 – cast light on gender differences in patterns of employment entry and exit over the life course. In some OECD countries, men’s and women’s employment profiles are fairly similar. In Sweden, for example, employment rates for men and women remain close throughout the life course with the gender employment gap only 6 percentage points or smaller across all age groups. In Norway, the gap never exceeds 10 percentage points. However, in most countries there are considerable differences in patterns of male and female employment, producing different profiles across age cohorts.

Men’s employment profiles often take the shape of an inverted ‘U’ (Chart LMF1.4.A). Employment rates tend to be low for young men as many have not yet to finished education, but then generally increase steadily between the ages of 25 and 39 and stabilise around the ages of 40-54, before declining again as individual’s approach retirement age. This inverted U is visible to varying degrees in almost all OECD countries, but is perhaps most pronounced in Southern European (Greece, Italy, Portugal and Spain) and Eastern European countries (the Czech Republic, Hungary, Poland, the Slovak Republic and Slovenia).

Women’s age-employment profiles are more diverse. In some OECD countries (e.g. France and Italy) the female profile echoes the inverted U shown by men but at a lower level throughout, while in other countries (e.g. Mexico and Turkey) women’s employment rates remain low and stable across age-cohorts. In certain countries – for example, in Ireland, Luxembourg, the Netherlands, and, most strikingly, in Malta – female employment rates tend to start comparatively high but decline steadily as cohorts increase in age. This decline begins once women reach around 30 years of age, suggesting that in these countries some women simply exit the labour force once they become mothers and do no re-enter even as their children grow up. In several OECD countries, however, the female age-employment profile takes the form of an

Other relevant indicators: LMF1.2: Maternal employment; LMF1.3: Maternal employment by family status; LMF1.5: Gender pay gaps for full-time workers and earnings by educational attainment; LMF1.6: Gender differences in employment outcomes; and LMF2.1: Usual weekly working hours among men and women by broad hours group
Chart LMF1.4.A: Age-employment profiles by gender, 2018
Employment-to-population ratios for 5-year age groups
Chart LMF1.4.A: Age-employment profiles by gender, 2018 (cont.)
Employment-to-population ratios for 5-year age groups

OECD Family database www.oecd.org/els/family/database.htm
OECD - Social Policy Division - Directorate of Employment, Labour and Social Affairs

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Chart LMF1.4.A: Age-employment profiles by gender, 2018 (cont.)

Employment-to-population ratios for 5-year age groups

1. The data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.
‘M’ curve: female employment initially increases before declining around the prime years of family formation – 25 to 35 – only to rebound again as children grow up. In many cases this ‘M’ curve has flattened somewhat in recent years on account of changes in female labour market behaviour and progress in female employment continuity. Nevertheless, the traditional “dip” in female employment around women’s childbearing years remains visible to some extent in Australia, the Czech Republic, Hungary, and the Slovak Republic, and is particularly prominent in Korea and Japan.

Age-employment profiles tend to differ with education (Chart LMF1.4.B). Leaving gender aside, employment across all OECD countries tends to grow quicker and peak higher for people with high educational attainment than for those with moderate and particularly low educational attainment. In fact, in many OECD countries employment rates for people with high educational attainment are higher than employment rates for people with low educational attainment across the entire life-course.

The effects of education on age-employment profiles appear broadly similar for both men and women (Chart LMF1.4.B). In both cases employment rates generally increase quicker for those with high educational attainment, and in both cases employment rates for those with high educational attainment generally remain higher than employment rates for those with moderate and low educational attainment across all age-cohorts. There are some gender differences – in all but a few OECD countries (e.g. the Czech Republic and the Slovak Republic), the employment rate gap between those with high and low educational attainment is, at most points in the life course, normally at least slightly larger for women than for men. In Turkey, the gap for women is at least 2 percentage points larger than that for men across all age groups up to 50-54. However, the wider effect of education on employment across the life-course is generally similar for both men and women – regardless of gender, higher levels of educational attainment increase the likelihood of employment across all (or at least most) ages.

Comparability and data issues

The OECD Labour Force Statistics are a well-established source of labour market information and there are few comparability issues relating to these databases. However, a couple of issues should be noted:

- Cross-national comparisons of employment among individuals of parenting age may be affected by differences in the treatment of individuals on maternity or parental leave. In principle, many individuals on statutory maternity, paternity or paid parental leave (legal or contractual) should be counted as employed. ILO guidelines stipulate that people with a job and on maternity leave should always be considered as employed (but absent), while those on full-time parental leave should be treated in a similar manner to employees absent for any other reason: they should be considered as employed if the period of absence is less than 3 months or if they continue to receive a at least 50% of their previous wage or salary from their employer. However, national treatment of parents on maternity and particularly parental leave varies widely. For example, in Ireland all parents on maternity or parental leave are counted as employed regardless of the duration of the leave as long as they remain attached to a job. By contrast, in Estonia all parents on parental leave are considered inactive. In New Zealand there are no specific rules on how to treat parents on maternity or parental leave, so it is up to the individual respondent to define whether or not they are in employment. (For a summary overview of how different countries treat workers on maternity/parental leave, see: http://www.oecd.org/els/emp/LFSNOTES_SOURCES.pdf). Differences across countries in the treatment of parents on parental leave in particular may affect the age-employment profiles shown in this indicator.
The data on employment-to-population ratios used in this indicator are based on head counts only, and do not account for differences in work intensity (e.g. different weekly working hours). Cross-national differences in the hours worked by men and women may also have a substantial effect on gender differences in the extent of economic activity (see LMF1.6 and LMF2.1).

Chart LMF1.4.B: Age-employment profiles by gender and education, 2018
Employment-to-population ratios for 5-year age groups, by level of educational attainment
Chart LMF1.4.B: Age-employment profiles by gender and education, 2018 (cont.)
Employment-to-population ratios for 5-year age groups, by level of educational attainment

- Low education (ISCED 2011 0-2)
- Medium education (ISCED 2011 3-4)
- High education (ISCED 2011 5-8)
Chart LMF1.4.B: Age-employment profiles by gender and education, 2018 (cont.)
Employment-to-population ratios for 5-year age groups, by level of educational attainment

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Chart LMF1.4.B: Age-employment profiles by gender and education, 2018 (cont.)
Employment-to-population ratios for 5-year age groups, by level of educational attainment

1) See note 2) to Chart LMF1.4.A.
2) See note 3) to Chart LMF1.4.A.
Sources: for all countries: Eurostat Labour Market Statistics