

LMF1.5: Gender pay gaps for full-time workers and earnings differentials by educational attainment

Definitions and methodology

The gender pay gap is captured here through two measures:

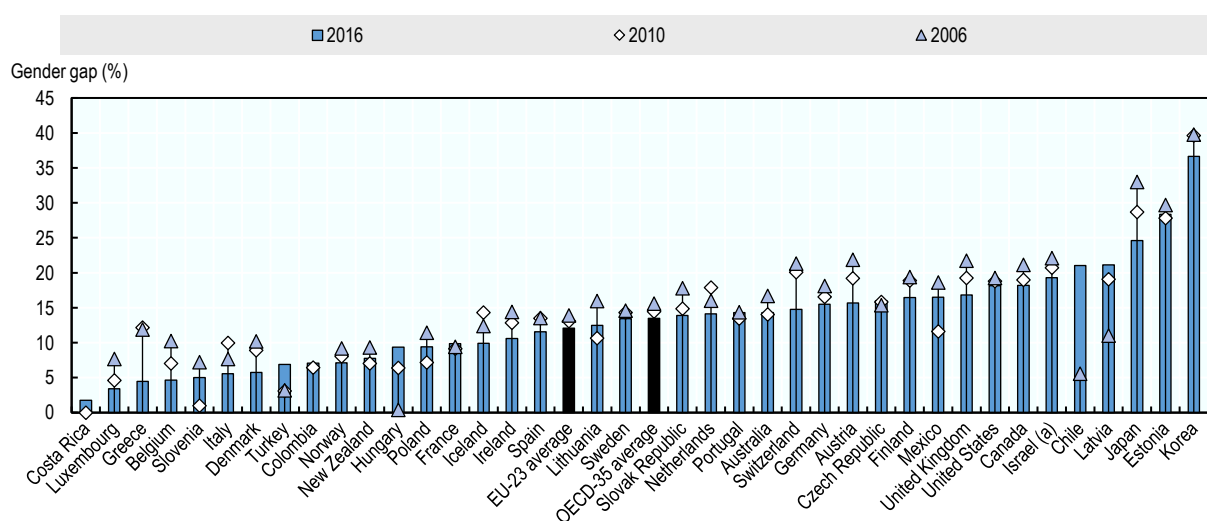
- The *gender gap in median earnings of full-time employees*, defined as the difference between the median earnings of men and of women as a proportion of the median earnings of men. The gap is unadjusted, that is, not corrected for gender differences in observable characteristics that may explain part of the earnings gap. However, to account for gender differences in working hours and part-time employment, the gap is based where possible on earnings for full-time employees only.
- The *gender gap in mean full-time, full-year annual earnings by levels of education*, defined as the difference between the mean average annual earnings of men and of women as a percentage of men's mean average annual earnings, for men and women with a given level of educational attainment. Again, the gap is unadjusted, and is based on the earnings of adults with income from full-time, full-year employment only.

Key Findings

Gender pay gaps vary considerably across the OECD (Chart LMF1.5.A). In 2016 (or nearest available year), the gender gap in median earnings ranged from as high as 36.7% in Korea to as low as 3.4% in Luxembourg, with the gap in most OECD countries somewhere between 10% and 20% and the OECD-35 average 13.5%. The widest gender pay gaps are in the East Asian OECD countries (Japan and Korea), plus Estonia. The narrowest are found in a variety of OECD countries, including Western European countries (Belgium and Luxembourg), Southern European countries (Greece, Italy), Nordic countries (Denmark and Norway), plus Slovenia and Turkey. In some of these countries (such as Greece and Italy) small gender pay gaps are the result of 'selection effects', whereby for various reasons only more highly-qualified female workers tend to remain in the labour force, artificially increasing female median earnings. In some others – including Belgium, Denmark, and Norway – the narrow gap reflects a compressed wage structure and low levels of earnings inequality more generally.

Chart LMF1.5.A. **Gender gap in median earnings of full-time employees**

Gender gap in median earnings, full-time employees, 2006, 2010, and 2016 or nearest available



Other relevant indicators: LMF1.2: Maternal employment; LMF1.3: Maternal employment by family status; LMF1.4: Employment profiles over the life-course; LMF1.6: Gender differences in employment outcomes

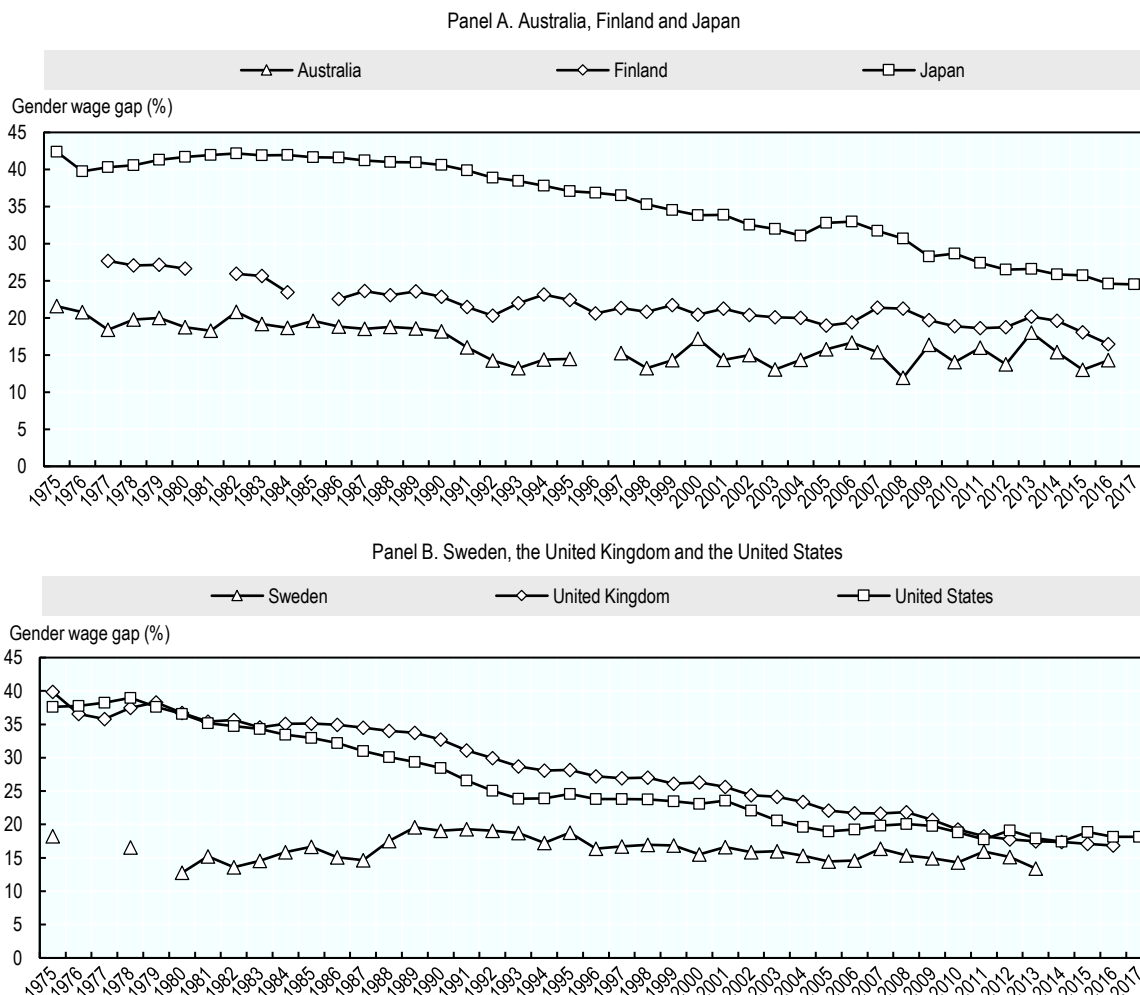
Note: The gender wage gap is unadjusted, and is calculated as the difference between the median earnings of men and of women relative to the median earnings of men. Estimates of earnings used in the calculations refer to gross earnings of full-time wage and salary workers. However, this definition may slightly vary from one country to another; see the OECD Employment Database (<http://www.oecd.org/employment/emp/onlineoecdemploymentdatabase.htm>) and the individual country metadata data available in OECD.Stat (<http://stats.oecd.org/index.aspx?queryid=64160>) for more detail. Data for Sweden refer to 2013, for Estonia, France, Latvia, Lithuania, Luxembourg, the Netherlands, Slovenia, Spain, and Turkey to 2014, and for Belgium, Chile, Iceland, Israel, and Norway refer to 2015. The OECD-35 average is the unweighted average for the 35 countries with data available for all three time points.

a. The statistical 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.

Source: [OECD Employment Database](#)

Gender pay gaps have fallen in most OECD countries (Chart LMF1.5.A). Between 2006 and 2016 (or closest available), the gender gap in median earnings decreased in 32 of the 35 OECD countries for which full data are available. Improvements were largest in Austria, Belgium, Greece, Switzerland, and especially Japan, where the gap fell by more than 8 percentage points. However, some other countries saw increases over the same period. Hungary, Latvia and Chile, all saw their pay gaps increase by at least nine percentage points. Gains have also been smaller in more recent years, with a little more than half the countries seeing only small decreases since 2010, and several (e.g. Hungary, Mexico, Turkey) seeing increases.

Chart LMF1.5.B. Trends in the gender gap in median earnings of full-time employees, selected countries, 1975-2017



Note: The gender wage gap is unadjusted, and is calculated as the difference between the median earnings of men and of women relative to the median earnings of men. Estimates of earnings used in the calculations refer to gross earnings of full-time wage and salary workers. However, this definition may slightly vary from one country to another; see the OECD Employment Database (<http://www.oecd.org/employment/emp/onlineoecdemploymentdatabase.htm>) and the individual country metadata data available in OECD.Stat (<http://stats.oecd.org/index.aspx?queryid=64160>) for more detail.

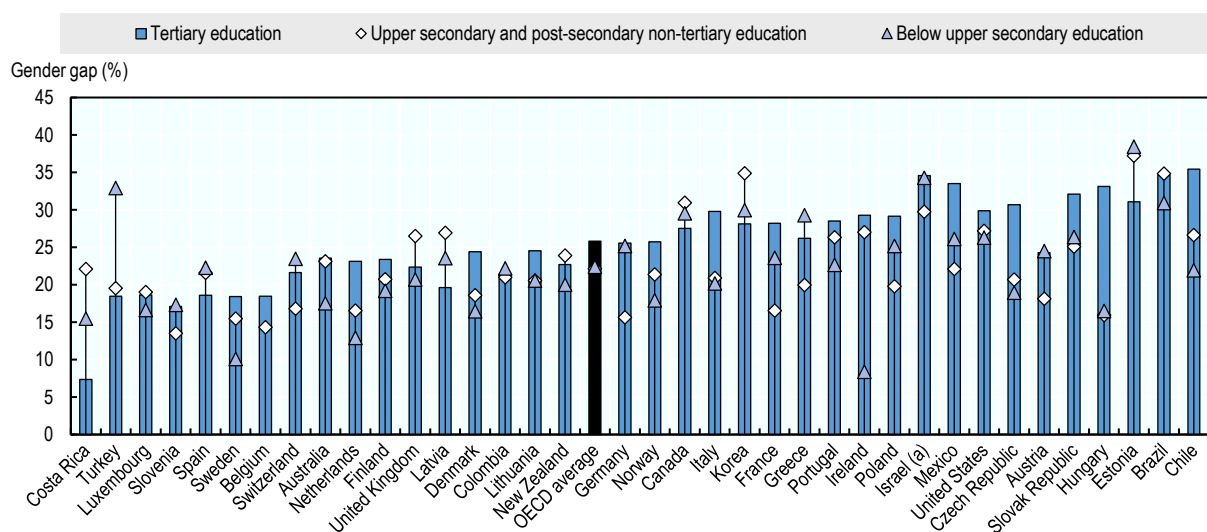
Source: [OECD Employment Database](#)

The gains made in gender earnings equality since the mid-2000s represent the continuation of a long-run trend towards equal pay in many OECD countries. Chart LMF1.5.B shows the evolution of the gender gap in median earnings for full-time employees in six OECD countries between 1975 and 2017. In both the United Kingdom and the United States, the gender gap declined steadily between the mid-70s and the early 2010s, to such an extent that by 2017 (or the nearest available year) the gap in median earnings was less than half what it was in 1975. Japan, meanwhile, saw 22 years of practically unbroken decreases between 1983 and 2004. In both Australia and Sweden, the gender pay gap has stabilised slightly over the last ten years or so. Nevertheless, in both the current gender pay gap is at least 25% smaller than it was in 1975.

Gender pay gaps tend to be slightly wider among highly educated men and women than among their less educated counterparts. Chart LMF1.5.C shows the gender gap in the *mean* annual earnings of full-time, full-year workers by levels of education in 2016 (or nearest available). On average across OECD countries, full-time-employed highly-educated women (i.e. those with at least tertiary level education) earn almost 26% less than similarly-educated full-time-employed men, while in comparison the gap among low-skilled full-time workers (i.e. those without upper secondary education) stands at a little over 22%. Differences in the pay gap across levels of education are largest in Chile, Czech Republic, Hungary and particularly Ireland, where the pay gap among full-time-employed highly-educated men and women is almost 21 percentage points higher than the gap for low-skilled workers.

Chart LMF1.5.C. Gender gap in earnings by levels of education

Gender gap in mean full-time earnings by levels of education, 25-64 year olds, 2016 or latest year available



Note: The gender gap is unadjusted and is calculated as the difference between mean average annual full-time, full-year earnings of men and of women as a percentage of men's mean average annual full-time, full-year earnings. Estimates of earnings used in the calculations refer to the gross earnings, except for Ireland, Latvia, Luxembourg, Mexico, and Turkey where data refer to earnings net of income taxes. Data for France, Italy, Lithuania and the Netherlands refer to 2014, and for Belgium, Brazil, Canada, Chile, Czech Republic, Finland, and Spain to 2015.

a. See note a to Chart LMF1.5.A

Source: [OECD Education at a Glance 2018](#)

Comparability and data issues

Data on earnings are collected annually through labour force surveys and household surveys and are presented first in the [OECD Employment Database](#). Depending on the country, the earnings data used can refer to hourly (e.g. Greece, Iceland, New Zealand and Portugal), weekly (e.g. Australia, Canada, Ireland, the United Kingdom and the United States), monthly (e.g. Belgium, Chile, the Czech Republic, Estonia, Germany, Hungary, Italy, Israel, Japan, Korea, Latvia, Lithuania, Luxembourg, Mexico, the Netherlands, Norway, Poland, the Slovak Republic, Slovenia, Sweden, Switzerland, Turkey) or annual (e.g. Austria, Finland, France, Spain) earnings on a gross or net (France, Italy and Switzerland) basis (for more detail, see the [OECD Employment Database](#) and the individual country metadata data available [here](#) in OECD.Stat). Gender differences may be slightly over-estimated where measurement is based on a gross wage because of

the inclusion of taxes and social security contributions (for example, second earners – who are often women – will in some countries be subject to different tax thresholds than their first earners partners). In the same vein, trend data should be interpreted with care as the methodology of surveys across countries changes regularly, creating breaks in the series and causing “artificial” fluctuations from one year to the next.

With the exception of LMF1.5.C, average earnings are measured here through the use of the median, as opposed to the mean. Use of the median to capture average earnings may affect estimates of the size of the gender gap. It is preferred here because mean averages are subject to distortion from extreme values – indeed, use of the mean often produces a wider gender pay gap, largely because in most countries men are over represented among individuals with very high earnings. It should be noted, however, that the use of the median means that the data shown here may not fully capture cross-national or temporal differences in the representation of men and women in the most lucrative positions.

Lastly, the data on gender pay gaps by level of educational attainment (Chart LMF1.5.C) are collected annually through a special questionnaire conducted by the OECD Education directorate. As with the data from the OECD Employment database, there are some differences in how data on earnings by educational attainment are collected across countries. Specifically, while most countries provide data on gross earnings (i.e. before income tax and social security contributions), data for Ireland, Latvia, Mexico, and Turkey are available on a net basis only.

Sources and further reading: *OECD Employment Outlook 2017*; *OECD Employment Database*; *OECD Society at a Glance 2016*; *OECD Education at a Glance 2017*; and *OECD (2017) The Pursuit of Gender Equality: An Uphill Battle*.