

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

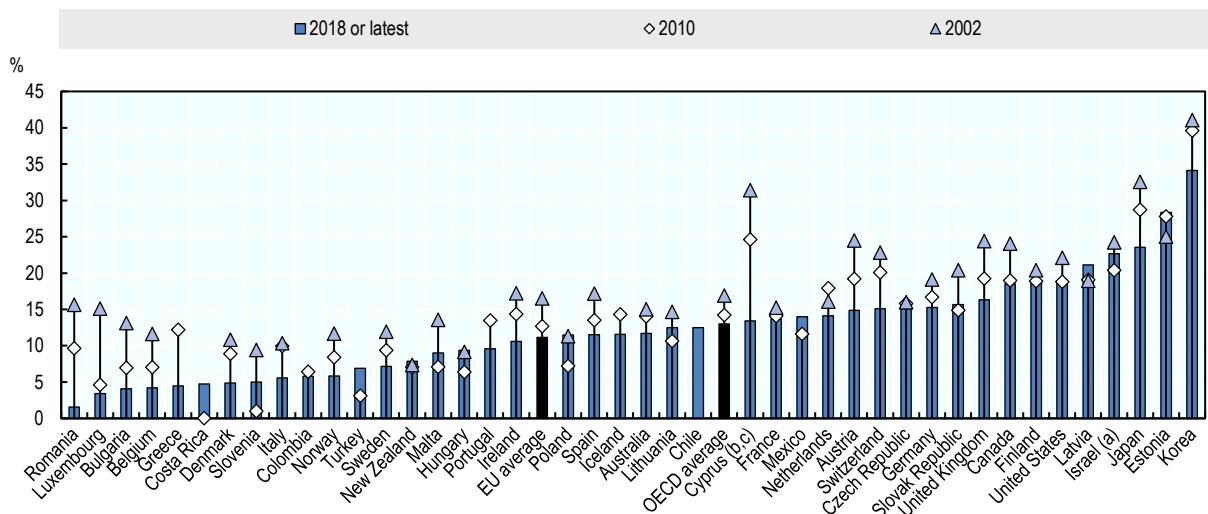
Gender pay gaps vary considerably across the OECD (Chart LMF1.5.A). In 2018 (or latest available year), the gender gap in median earnings ranged from as high as 34.1% in Korea to as low as 3.4% in Luxembourg, with the gap in most OECD countries somewhere between 10% and 20% and the OECD average 13.0%. The widest gender pay gaps are in the two 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), and Latin American country (Costa Rica and Colombia). In some of these countries (e.g. Colombia, Costa Rica, 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, inflating female median earnings. In some others – including Belgium, Denmark, and Norway – the narrow gap is driven more by a compressed wage structure and low levels of earnings inequality more generally.

Gender pay gaps have fallen in most OECD countries (Chart LMF1.5.A). Between 2002 and 2018 (or latest available), the gender gap in median earnings decreased in 26 of the 30 OECD countries for which full data are available. Decreases were largest in Austria, Japan, Luxembourg, and the United Kingdom, where the gap has fallen by more than 8 percentage points. However, some countries have seen increases over the same period: Latvia and Estonia in particular have seen their pay gaps increase by at least two percentage points since 2002. Overall, the OECD average gender pay gap has fallen by just under 4 percentage points since 2002, albeit with progress slowing slightly in recent years. (The OECD average fell by 2.7 points between 2002 and 2010, and 1.2 percentage points between 2010 and 2018.)

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

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

Gender gap in median earnings, full-time employees, 2002, 2010, and 2018 or latest



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 Estonia, Ireland, Latvia, Lithuania, Luxembourg, the Netherlands, Slovenia, Spain, Turkey, Bulgaria, Croatia, Cyprus and Malta refer to 2014, for France, Hungary, Iceland, and Italy refer to 2016, and for Belgium and Chile to 2017.

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.

b. Footnote 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 recognizes the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of United Nations, Turkey shall preserve its position concerning the "Cyprus issue";

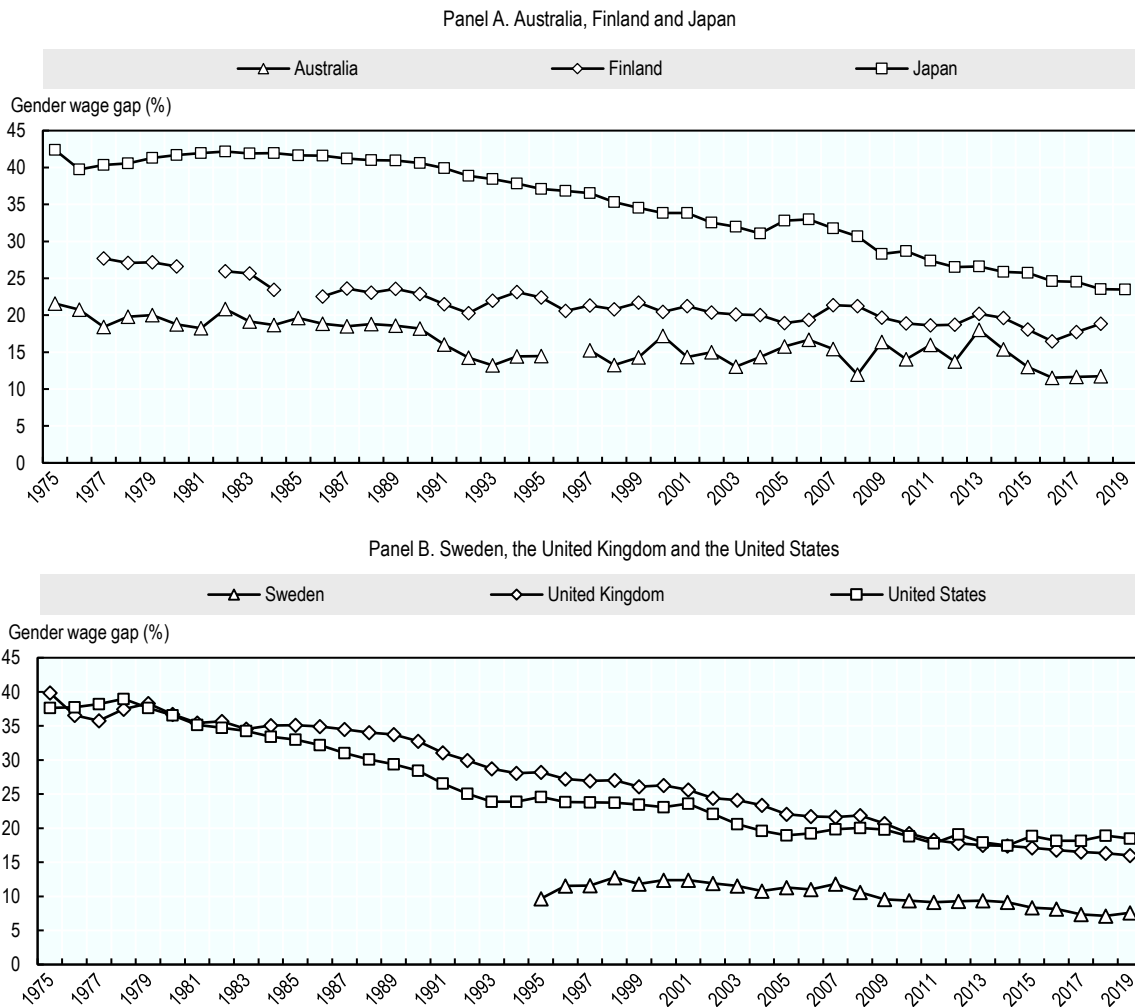
c. Footnote by all the European Union Member States of the OECD and the European Commission: The Republic of Cyprus is recognized by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

Source: OECD Employment Database, <http://www.oecd.org/employment/emp/onlineoecdemploymentdatabase.htm>

The gains made in the gender gap in median earnings since the mid-2000s represent the continuation of a longer-run trend towards equal pay in most OECD countries. Chart LMF1.5.B shows the evolution of the gender gap in median earnings for full-time employees between 1975 and 2019 in six OECD countries: Australia, Finland, Japan, Sweden, the United Kingdom and the United States.

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 2014, the gap was less than half what it was in 1975. The United States has since seen a slight uptick in the gender gap, but in the United Kingdom, progress has continued. Japan, meanwhile, saw 22 years of practically unbroken decreases between 1983 and 2004, with progress continuing for the past ten years. In Australia, Finland and, to a lesser extent, Sweden, the gender pay gap has stabilised slightly over the last ten years or so. Nevertheless, all have pay gaps that are much lower now than in previous decades.

Chart LMF1.5.B. Trends in the gender gap in median earnings of full-time employees, selected countries, 1975-2019



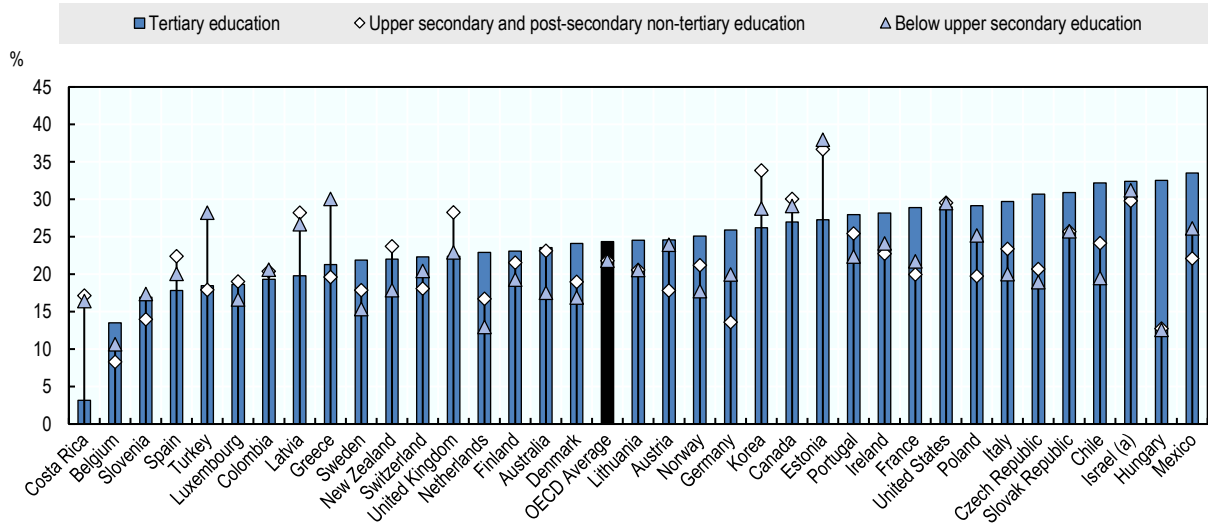
Note: The gender wage gap is unadjusted, and is calculated as the difference between the median earnings of men and of women relative to the median earnings of men. Estimates of earnings used in the calculations refer to gross earnings of full-time wage and salary workers. However, this definition may 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, <http://www.oecd.org/employment/emp/onlineoecdemploymentdatabase.htm>

Gender pay gaps tend to be slightly wider among highly educated men and women than among their less educated counterparts, though a handful countries (e.g. Costa Rica, Estonia, Greece, Korea and Turkey) show wider gender pay gaps among low-skilled men and women. Chart LMF1.5.C shows the gender gap in the mean annual earnings of full-time, full-year workers by levels of education in 2017 (or nearest available). On average across OECD countries, full-time-employed highly-educated women (i.e. those with at least tertiary level education) earn about 24% 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 less than 22%. Differences in the pay gap across levels of education are largest in Chile, the Czech Republic, and particularly Hungary, where the pay gap among full-time-employed highly-educated men and women is almost 20 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, 2017 or nearest 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 Lithuania refer to 2014, Czech Republic and France to 2015, Australia, Canada, Finland, Luxembourg, Mexico, Poland and Spain to 2016.

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

b. No data for Iceland and Japan.

Source: OECD Education at a Glance 2019, <http://www.oecd.org/education/education-at-a-glance-19991487.htm?refcode=20190209ig>

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. Denmark, 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, France, 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, Spain) earnings on a gross or net (e.g. 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, Luxembourg, Mexico, and Turkey are available on a net basis only.

Sources and further reading:

OECD (2019), OECD Employment Outlook 2019: The Future of Work, OECD Publishing, Paris, <https://doi.org/10.1787/9ee00155-en>.

OECD (2019), Society at a Glance 2019: OECD Social Indicators, OECD Publishing, Paris, https://doi.org/10.1787/soc_glance-2019-en.

OECD (2019), Education at a Glance 2019: OECD Indicators, OECD Publishing, Paris, <https://doi.org/10.1787/f8d7880d-en>.

OECD (2017), The Pursuit of Gender Equality: An Uphill Battle, OECD Publishing, Paris, <https://doi.org/10.1787/9789264281318-en>.