

Working paper

(Anonymous version)

Methods to Measure the Gender Wage Gap in the European Union

Abstract When we calculate an employee's average hourly wage from his/her monthly pay, we divide such pay by monthly working hours. The questions are that which pay and working hours should we use? There are international resolutions from the United Nations and European Union that answer this question. When we calculate men's or women's average hourly wage there is a paradox: Many different formulas are used but they are typically not explained. Most often, men's average hourly wage is calculated as an unweighted average of individual men's average hourly wages or as a weighted average of individual men's average wages weighted by working hours. Typically these results are not equal. In the statistical part of this study we concentrate on the question "Which formula is correct when calculating the gender wage gap?" We show that calculating the weighted average is preferable to the current officially and generally used unweighted average method.

Keywords average hourly wage of men, gender wage gap, unweighted average of individual men's wages, weighted average of individual men's wages

**The published version of this study can be read from:
Tutkimus on julkaistu seuraavassa osoitteessa:**

<http://www.ejbss.com/Data/Sites/1/vol4no12march2016/ejbss-1706-16-methodstomeasurethegenderwagegap.pdf>