Decomposing Gender Wage Gaps across the Distribution in Europe: Including Allowance for Sample Selection Adjustment

This paper investigates differences between the log hourly wage distributions of men and women working full-time in a sample of European countries, using data from the European Union Statistics on Income and Living Conditions 2006. The following countries are included in the study: Finland, Germany, Hungary, Italy, the Netherlands, Norway, Poland, Slovenia, Spain and the UK. These countries have sufficiently large sample sizes of full-time workers and information on gross earnings of employees. Substantial earnings gaps are found and evidence of a glass ceiling for women is established in all of the studied countries. Following the Machado and Mata (2005) quantile regression decomposition method, most of the wage gap in log hourly earnings between men and women is found to be due not to differences in the distribution of observed characteristics (such as, for instance, education, labour market experience, and having managerial duties), but to differences in the distribution of returns to these characteristics. The results are compared across the studied countries after allowing for positive self-selection into full-time work by women, since female full-time employment rates differ substantially amongst these countries. This paper updates the work of Arulampalam et al. (2007), who used pooled data for 1995-2001 from the European Community Household Panel (ECHP) to study gender gaps across the earnings distribution in Europe without accounting for sample selection.

Hourly wages are derived from current gross monthly earnings for Spain, Italy, Poland, Hungary, Norway and the UK. For Germany, the Netherlands, Finland and Slovenia, gross 'employee cash or near cash income' in the last income reference period is used instead, since information on gross monthly earnings is not available for these countries. The former measure is likely to be more reliable because it uses current earnings and weekly hours worked, while the latter combines a longer income reference period with current weekly hours of work.