

## Module 2 – Regression and Prediction

# CASE STUDY ACTIVITY TUTORIAL

### Case Study 2: Gender Wage Gap

#### Contents of Case Study 2:

The video that covers this case study is given in Module 2, Segment 1.6.

1. Codebook.txt contains the description of worker job-relevant characteristics.
2. pay.discrimination.Rdata: the CPS (2012) data on wages and job-relevant worker characteristics, such as experience exp, gender, education.
3. Regression1.6.CaseStudy.R estimates gender wage gap, i.e., difference in predicted wages between men and women with same job-relevant characteristics. The gap is estimated in two steps: (1) residualising the outcome (wages) and covariate of interest (gender) (taking residuals from corresponding regressions on worker characteristics), and (2) computing the correlation between residualised wages on residualised gender. Both linear and quadratic specifications are tried at residualizing step.
4. Regression.1.6.pdf is the set of slides that describes the estimation technique and present the results.