

# **Examining of Gender Differences in Wages by Penalized Iteratively Reweighted Least Squares: The Case of Turkey\***

**Ebru Caglayan Akay**

*Department of Econometrics, Marmara University  
Goztepe Campus, Kadikoy, Istanbul, Turkey*

Email: ecaglayan@marmara.edu.tr

**Sinem Guler Kangalli Uyar**

*Department of Econometrics, Pamukkale University  
Kinikli, Denizli, Turkey*

Email: skangalli@pau.edu.tr

**Abstract:** This study analyzes the empirical performance of Mincerian wage equation. The wage equation is estimated separately using data on male and female employees. Household Labor Force Survey micro data set is used for the year 2013 in Turkey. The estimation results show that experience variable, is added as quadratically into the Mincerian wage equation, should be added as linearly based on male employees but in cubic form for female employees.

**Keywords:** Mincerian equation, Penalized Iteratively Reweighted Least Squares, Gender differences, wages, semiparametric regression

**JEL Classification Number:** J31, C1, C140

## **1. Introduction**

Mincer (1974) defined logarithmic wages as a function of education and experience based on theoretical information and empirical findings. Since Mincer wage equation was introduced, there has been a substantive expansion in micro data and estimation techniques available to labour economists. The empirical studies related estimation of wage equations increased together with these improvements. While in some studies wage models were estimated in different functional forms, in many studies the wage models were estimated in quadratic form as well as in standard Mincer wage equation. Accordingly, it should be

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