Self-evaluation Tests

Wages 4

Instructions

- Click **Start**.
- Answer the questions.
- Click **End**.
- The cell **Score:** shows the number of right answers.
- Each question is worth 1 point.
- Click **Correct** to check the correct answers.
- The test starts on the next page.
- Recommended duration: 20 minutes.

Questions

Open the data file `wages.gdt`. Estimate the regression model that determine wages (W) as a function of experience (EX), education (ED), tenure (T), ethnic group, gender and marital status.

$$\begin{aligned} W_i &= \beta_1 + \beta_2\, EX_i + \beta_3\, EX_i^2 + \beta_4\, ED_i + \beta_5\, T_i + \\ &+ \beta_6\, NW_i + \beta_7\, F_i + \beta_8\, M_i + u_i \quad i = 1, \ldots, N. \end{aligned}$$

Start **General Linear Regression Model**

1. The number of explanatory variables is:

(a) 8 (b) 6 (c) 7 (d) 3

2. The number of quantitative explanatory variables is:

(a) 8 (b) 3 (c) 5 (d) 4

3. The number of qualitative explanatory variables is:

(a) 8 (b) 3 (c) 5 (d) 4

4. The first individual in the sample is:

(a) Asian
(b) Female
(c) Male
(d) Married

5. The first individual in the sample:

(a) Does not have any experience
(b) Has not studied
(c) Does not have any tenure
(d) Does not have any children

6. The first two individuals in the sample have something in common:

(a) Years of experience
(b) Gender
(c) Years of education
(d) Years of tenure

7. The expected wage for a just graduated single male worker is:

(a) $\beta_1 + \beta_8$
(b) $\beta_1 + \beta_4$
(c) $\beta_1 + \beta_4\, ED_i + \beta_6\, NW_i$
(d) $\beta_1 + \beta_2\, EX_i + \beta_3\, EX_i^2 + \beta_4\, ED_i$

8. The coefficient of determination is:

(a) 0.398969
(b) 0.390847
(c) 0.083448
(d) 0.294645

9. Compare the estimated wage for the first two individuals in the sample. Which one is closer to the actual value?

(a) The first one
(b) The second one

10. What is upper limit estimated for the difference between the wages of a woman and a man, holding the rest of the characteristics constant? ($\alpha = 5\%$)

(a) -1.26998
(b) -1.78195
(c) -2.29393

11. What is the lower limit estimated for the increment in wages generated by a one year increase in tenure, holding the rest of the characteristics constant? ($\alpha = 5\%$)

(a) 0.133542 (b) 0.0929122 (c) 0.174171

12. Is the variable education statistically significant, holding the rest of the characteristics constant? ($\alpha = 5\%$)

(a) Yes (b) No

13. Is the variable tenure statistically significant, holding the rest of the characteristics constant? ($\alpha = 5\%$)

(a) Yes (b) No

14. Is there evidence in the sample of wage discrimination on the grounds of ethnic group, holding the rest of the characteristics constant? ($\alpha = 5\%$)

(a) Yes (b) No

15. Is there evidence in the sample of wage discrimination on the grounds of gender, holding the rest of the characteristics constant? (α =5%)

(a) Yes (b) No

16. Is there evidence in the sample of wage discrimination on the grounds of marital status, holding the rest of the characteristics constant? (α =5%)

(a) Yes (b) No

End Correct