FINM3123 Introduction to Econometrics

Chapter 07

Class exercises

Multiple Choice Questions

1. In a regression model, which of the following will be described using a binary variable?

   a. Whether it rained on a particular day or it did not

   b. The volume of rainfall during a year

   c. The percentage of humidity in air on a particular day

   d. The concentration of dust particles in air

2. Which of the following is true of dummy variables?

   a. A dummy variable always takes a value less than 1.

   b. A dummy variable always takes a value higher than 1.

   c. A dummy variable takes a value of 0 or 1.

   d. A dummy variable takes a value of 1 or 10.

3. The following simple model is used to determine the annual savings of an individual on the basis of his annual income and education.

   Savings = $\beta_0 + \partial_0$ Edu + β_1Inc+u

   The variable 'Edu' takes a value of 1 if the person is educated and the variable 'Inc' measures the income of the individual.

   The inclusion of another binary variable in this model that takes a value of 1 if a person is uneducated, will give rise to the problem of _____.

   a. omitted variable bias

   b. self-selection

   c. dummy variable trap

   d. heteroskedastcity

4. The quarterly increase in an employee's salary depends on the rating of his work by his employer and several other factors as shown in the model below:

   Increase in salary= $\beta_0 + \partial_0$Rating + other factors.   The variable 'Rating' is a(n) _____ variable.

a. dependent variable

b. ordinal variable

c. continuous variable

d. Poisson variable

5. Which of the following is true of dependent variables?

a. A dependent variable can only have a numerical value.

b. A dependent variable cannot have more than 2 values.

c. A dependent variable can be binary.

d. A dependent variable cannot have a qualitative meaning.

True or False

6. A dummy variable trap arises when a single dummy variable describes a given number of groups.

7. The dummy variable coefficient for a particular group represents the estimated difference in intercepts between that group and the base group.