Homework 3

Answers

1.

    (a)   No. Price and travel time on airline B help to determine Mike's indirect utility he gets from flying on airline B. He must compare this to the indirect utility he gets from using airline A and then choose the airline that provides him with the most utility.

    (b)   Mike's conditional utility will depend on his income. However, his income will have the same impact on his indirect utility from airline A or B. His income will therefore not be a factor in determining his choice of airlines.

2.

    (a)   (1)   Individuals have different preferences for the transportation alternatives.
                (2)   All individuals have identical incomes.
                (3)   All individuals face the level of prices.
                (4)   All individuals have the same socioeconomic characteristics
                (5) T is discrete, with two possible alternatives.
                (6) x is divisible.

$$P_{PU} = \frac{e^{V_{PU}}}{e^{V_{PU}} + e^{V_{SU}}}$$

$$P_{SU} = \frac{e^{V_{SU}}}{e^{V_{PU}} + e^{V_{SU}}}$$

More detailed example of above:

$$P_{PU} = \frac{1}{1 + \exp\left(-\beta_1\left(p_{T_{PU}} - p_{T_{SU}}\right) - \bar{\beta}Y\right)}$$

    (b)   False. The choice will depend on the unobservable and random portion of Norman's conditional indirect utilities, ε_{PU} and ε_{SU} .

    (c)   A *generic variable* has the same impact on the indirect utility of each alternative while an *alternative specific variable* has a marginal effect specific to a particular alternative.