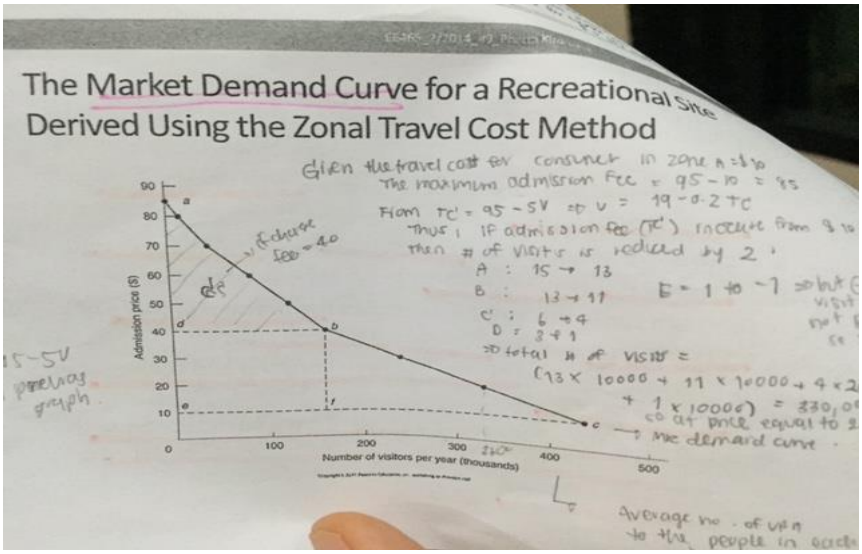
EE465/EE463 Semester 2/2014

Q&A – Set 2

1. About hedonic price method, does W(view,y,z) represent the difference between each household? And the way we derive the market demand to measure wtp is by accumulate every point where r(v) intersect W(view,y,z)? If that right, do we need to assume large size of household in order to claim that the r(v) line is the market demand curve ka?

Ans. The function $r_v = W(view, y, z)$ is the inverse demand function, which tells the WTP (r_v) as a function of view (v). So, for each household (or person), r_v should vary across different levels of view (v). The market demand is simply the horizontal sum of different individuals' demand curves. We do not need to assume large size of households.

2. Do we need this graph in order to know the value of recreation site by using travel cost method or we just knowing the individual's inverse demand curve ka?



Ans. When calculating the net social benefits, we need to know the market demand curve. So, yes, we need to derive the market demand curve from individuals' demand curves. Again, the demand curve tells the WTP, and the area under the market demand is total consumer surplus.

3. Why hedonic price method can use to overcome both omitted variables and self-selection bias?

Ans. The hedonic pricing method relies on multivariate regression analysis (i.e. it includes multiple variables in the regression). As a result, we can control for differences in other characteristics, such as age, education, experience, etc., that may have effects on the dependent variable (such as wage). For instance, in estimating the impact of fatality risk on wage, we can include age, education, and experience as other explanatory variables in the hedonic regression. This would allow us to control for omitted variable bias; i.e., the coefficient on 'fatality' will not be biased.

The sample selection problem has to do with asking people who 'self-select' themselves into certain situation. For instance, when analyzing the impact of job risk level on the wage, we could face sample selection problem if we ask only people who work in a risky job (say, mine workers). The impact of risk level on wage may be smaller than it should be because these mine workers may be more risk-loving than the general population do.

4. Why we don't need to use probability of the future generation placing the value on wilderness area in the second period ka?

Ans. This is about the value of information, which is the difference between the expected outcomes with information and the expected outcomes without information. In the example on the development of a wilderness area, the value of information is obtained when we have more information about how future generation will value the wilderness area. In the case of 'no learning', how future generation places the value on wilderness area will not be taken into account. However, in the case of 'learning', we need to consider how the future generation value wilderness area. This information (i.e. learning) is exogenous when it is independent to the action in the first period, and it is endogenous when it is dependent on the action in the first period.

5. Could you please explain more about the health index method that use to find the value of HRQoL ka?

Ans. The health index method is a method used to calculate the quality of life based on various dimensions of well-being (such as visibility, mobility, absence of pain, etc.). For each dimension of well-being, an index can be obtained from other methods (such as health-rating method, standard gambling, etc.). Once indices for different dimensions of well-being are obtained, they will be combined into one single measure of health-related quality of life. Given that there are many dimensions of well-being, the health index method can vary substantially. In practice, researchers use questionnaires containing questions that ask about all dimensions of the well-being (such as SF-36).