

Economics 11; Weekly Assignment Sheet for Week 5 -- Choice Under Uncertainty

A. Text and workbook

1. Text: Chapter 6; omit nothing.

a. Note: You MAY find sections 6.1,2,&3 to be rather difficult; section 6.4 should be no less readily intelligible than chapters 1 through 5.

1. In any event: You will NOT be held responsible for being able to use contingent commodity analysis on examinations; BUT you will need to have a basic understanding of this mode of analysis both to comprehend key conceptual results that appear in the chapter (and will be discussed in lecture) AND to comprehend various discussions that appear throughout chapters read later in the semester.

2. Lectures will use von Neumann - Morgenstern utility in a different manner than the text to demonstrate the key conceptual results about choice under uncertainty. In this respect, the lectures parallel the Kohler text.

b. Error: There is an error in the text; in Fig. 6.13 on p. 174, the 45° line should not be shown as going through the origin -- it should be shown intersecting the horizontal axis well to the right of the origin.

2. Study guide: Chapter 6; omit nothing.

a. NOTE: The answers given in the back of the Study Guide to the following questions are wrong either in whole or in part (thus it is left to you, at least for now, to find the right answers!): p. 63, #10; p. 64, #16; p. 65, #18; p. 66, #7.

3. Kohler text and workbook on TriReserve.

B. Reading(s)

1. "In a perfectly competitive market, a single price -- the market price -- will usually prevail" (Pindyck & Rubinfeld in another Micro text, p. 10). How, if at all, can one reconcile this statement with the dispersion of prices found in the real world? In view of the reality that there seldom is a uniform or single price, how should "a market" be defined (or identified)? [NOTE: One of the readings motivates these questions, but it does not answer them; this is a "thought" question.]

2. Relative to the average asking price (respectively, for each car), would you expect the dispersion of asking prices for a high cost luxury car such as the Rolls Royce to be more or less than the dispersion of asking prices for a low cost functional car such as the lowest price car in the Hyundai line of cars? Why?

3. Why aren't all contracts between farmers and landowners identical in basic form? Is the world a better place for the diversity of arrangements under which land is farmed by non-owners of the land?

C. Puzzles

1. Draw the von Neumann - Morgenstern utility function -- utility as a function of (expected) consumption (expenditure; or, “income”) -- of an individual (like many!) who takes small gambles (buys lottery tickets) but does not take large ones (gamble her house at poker, for example).

How does your drawing of the function change, if at all, if the individual ALSO buys insurance against catastrophic events, like the loss of her house due to fire?

2. Two otherwise identical fast-food restaurants are located very close to one another. At the first there are five separate lines, each leading to a server. At the second, there is a single line leading to five servers, with the next person in line going to the next available server. Do risk averse people prefer one restaurant over the other? If so, which; why? Do risk loving people have a distinct preference for one restaurant over the other; if so, which and why?

3. Suppose that I offered you a gamble having a positive expected value that you turned down because of risk aversion. Now suppose that I offered that you could make the same gamble as many times as you wished, stopping after any number of repetitions whenever you wished. Isn't it true that you would certainly, regardless of risk aversion, want to accept the latter offer? After all, given that the expected value of each gamble is positive, aren't you bound to come out ahead if you are able to repeat the gamble as many times as you like? That is: risk aversion is perhaps sensible when a single gamble is being contemplated; but it is senseless when considering many repetitions of the same gamble, for then the only sensible thing is to go with the long-run averages. The question:

a. Is this assertion (the last statement) correct? Does it really make a difference whether the (same) gamble can be repeated or not? Explain.

4. “BONUS Puzzle” (try it!): Consider the von Neumann - Morgenstern utility function versus a utility function (or, indifference curve map) for two contingent commodities. Demonstrate that risk aversion (seeking / loving, neutrality) in the former implies the same in the latter.