

Midterm Exam February 8 2006

Do all 3 questions. All count equally.

1. What is the effect on a person's saving of a tax on the return to saving to the following person? The person lives for two periods, earns all of her income in the first period and has preferences which can be represented by a utility function

$$U(C_1, C_2) = \sqrt{C_1} + \sqrt{C_2}$$

defined over consumption in the first and second period of her life. Here C_1 is her first-period consumption, and C_2 is her second-period consumption.

2. What is the excess burden of a tax on clothing consumption, if there are no other taxes, in a one-consumer economy in which the one consumer's preferences can be represented by the utility function

$$U(x_0, x_1, x_2, \dots, x_n) = x_0 + a_1 \ln x_1 + a_2 \ln x_2 + \dots + a_n \ln x_n$$

where x_i is her consumption of good i , where good #1 is clothing, and where the producer price of each good is 1?

3. Why should the marginal tax rate be 0 on the highest observed level of income?