

ECO 450  
Fall 2006  
Professor Yelowitz

Homework Assignment: Due November 30<sup>th</sup>.

1. Assume an individual has preferences over leisure and consumption. He has a time endowment of 200 hours, a wage rate of \$10/hour, and the price of consumption goods is \$2 per unit.

a) Draw the budget constraint, labeling the intercepts and any kink points.

Next, assume a welfare system is introduced with a guarantee of \$400, a tax rate of 50%, and a standard deduction of \$250.

b) Draw the budget constraint, labeling the intercepts and any kink points.

Imagine that the tax rate is lowered from 50% to 25%.

c) Draw the budget constraint, labeling the intercepts and any kink points. Relative to the case when tax rates were 50%, what happens to welfare participation, labor force participation and hours of work?

Now assume that Medicaid – valued at \$80 – is offered to those on welfare, and not offered to those off welfare. Continue to assume the tax rate is 25%.

d) Draw the budget constraint, labeling the intercepts and any kink points. Relative to the case when there was no Medicaid, what happens to welfare participation, labor force participation and hours of work?

e) Is there a region of hours of work/leisure that individuals won't choose regardless of their utility function? Explain.

2. Evaluate the following statements:

a) Lowering the tax rate on welfare increases overall work effort.

b) If the welfare guarantee in question 1 is doubled from \$400 to \$800, then total government expenditure will double as well.

c) Working and welfare participation are mutually exclusive concepts.