Discussion Handout #3   **TA: John Stromme**
Econ 302   UW Madison, Fall 2017
Prof. Eudey   Date: 09/29/17

Goals for this session

- Be able to solve for general equilibrium if given any production and utility function.

- Identify results of shocks in the equilibrium solution to our equations. (i.e. what we did last week but no graphs this time)

- Understand Laffer curve and know whether or not our production/utility functions support the existence of the laffer curve.

John's Tips for Studying for Exam

1. Take the old exams *without* looking at your notes. Then go back with your notes and learn what you missed.

2. Look at all of the lecture slides, and put all data facts or definitions or any qualitative information you don't want to memorize on you cheat sheet.

3. If you still have extra time to study, then revisit the quizzes and discussion questions, and finally book problems.

Vocab

- Laffer Curve

Problems (Written by Prof. Eudey)

- For questions 1 and 2 use the following model economy:

  1) $U = C + ln(l)$
  2) $Y = zN$
  3) $C = wN(1 - t) + \pi$
  4) $H = N + l$
  5) $\pi = Y - wN$

1. Solve the firm's maximization problem to solve for the profit maximizing wage.

2. Solve the household's maximization problem for leisure, taking the solution in question 1 as given.

3. In class we solved for a case where leisure/labor decision didn't depend on wages, but in this case it does. Note that the difference depends on a seeming detail about the assumptions in the utility function. Which result do you think makes most sense?

4. Laffer Curve:

(a) Explain what happens when the economy is on the "bad side" of the Laffer curve and the income tax rate falls.

(b) What do we know about the utility function if we are on the bad side of the Laffer curve?

(c) Which of the two utility functions we have discussed is necessary for the laffer curve relationship to be possible?