

Goals for this session

- Introductions and Expectations
- Refamiliarize yourself with the budget constraint (BC) / indifference curve (IC) framework
- Apply the BC/IC framework to household decisions about labor participation

TA Contact Info

- Email: jstromme@wisc.edu
- Office hours: Tuesday 3:30-5:00p in Social Sciences 7218
- TA info posted on johnstromme.com

TA Expectations

- Attendance here is never taken; however, Eudey writes the discussion questions and they will show up on exams. This is also a perfect space to ask questions about the week's materials.
- I will post these handouts on my website, but Eudey's questions as well as the answers to her questions will be posted on Canvas.
- What I can do for you as a TA:
 - Help answer your questions in session, office hours, or via email.
 - Give you advice about which professors are good and what classes to register for in future semesters.
 - Be a resource to discuss careers/internships or grad school for people interested in economics
 - Help you choose a private tutor for this course if you want extra help.
- #1 above everything I enjoy helping you to succeed! If you are working hard, I am very generous with my time and availability to meet with you if you find it helpful.

Vocab

- Intensive 'vs' Extensive margin

Problems (Written by Prof. Eudey)

1. Prove that, given our assumptions about utility, indifference curves cannot cross.
2. What is the formula for $MRS(l,C)$?
 - (a) Explain in words why the equilibrium MRS is equal to $w(1-t)$.
 - (b) Use that logic to explain why the slope of the IC = slope of the budget constraint.
3. Consider your answer to Question 2.
 - (a) What happens to $MRS(l,C)$ in equilibrium if there is an increase in the real wage?
 - (b) Given our assumptions about the utility function, what can we infer about the household's choice of C and l given that change in the $MRS(l,C)$?
4. Question 3 highlights the substitution effect of an increase in the real wage w on the household's choice of C and l . An increase in the real wage also has a positive income effect.
 - (a) What assumption in utility allows us to predict the change in C and l resulting from the income effect?
 - (b) What is the overall change in C and l (including both income and substitution effects) implied by a change in the real wage w ?
5. Assume that the representative household maximizes $U(c,l)$ subject to the budget constraint $w(h-l)$ where utility is increasing in both c and l , diversity has value, and both c and l are normal goods.
 - (a) Graph the solution to the household maximization problem
 - (b) Suppose the government imposes a proportional income tax on the representative consumer's wage income. That is, the consumer's wage income is $w(1-t)(h-l)$ where t is the tax rate. What effect does the income tax have on consumption and labor supply? Show graphically in your graph from part a.
 - (c) Explain your results in part b in terms of income and substitution effects.
 - (d) Summarize the data that we've seen regarding the impact of marginal income taxes (aka proportional income taxes) on labor supply.