

Review Notes – Household Production, the Family, and the Life Cycle

- Household Production

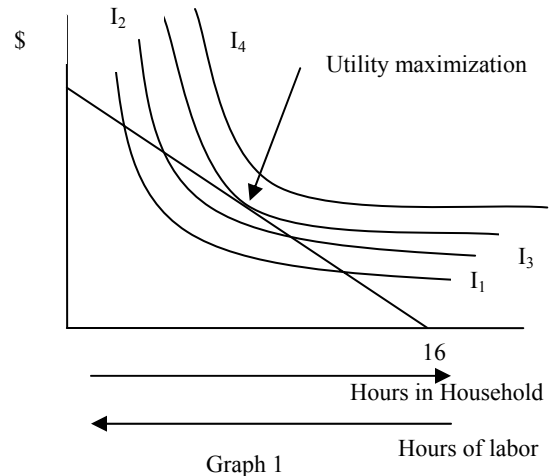
- Instead of labor/leisure tradeoff consider the tradeoff between household production and labor.

- Assume that household work and not leisure is the alternative to paid work.

- What is household production (examples)?

- See Graph 1. How is this different than our original model?

- Hours in household could include both leisure and household production.
- Two methods to “produce” a good like child care – do it yourself at home or earn money to pay someone else to do it => the relative marginal products of these two methods will affect the indifference curves (as well as the relative marginal utilities).



- What does the slope of the indifference curves (the book calls them “isoquants”) represent?

- What is the same as our original model?

- This is still a supply of labor model – just the alternative to working has changed.
- There are still substitution and income effects as discussed in the previous chapter. Those still work in the same manner.
- The budget line is still the same – slope = - the wage rate.
- Utility maximization occurs at the same point – tangency between indifference curve and budget line.

- Empirical results as explained by the model

- Table in book shows details of the four things we can do with our time – labor, leisure, household work, and maintenance. How do we explain these results?

- As women’s LFPR have increased => their previously dominant substitution effect has declined in importance and they have begun behaving more like men in their labor supply decisions.

- Large substitution effect means it dominates income effect and wage increase causes a decrease in household time (leisure and household production).
 - Small substitution effect means it is smaller than the income effect and wage increase causes an increase in household time (leisure and household production).
 - But evidence shows that women’s tend to have more hours than men in household production. What does this say about the relative sizes of women’s’ versus men’s substitution effects?

- Joint Labor Supply Decisions
 - Before just considered a single person making decisions but what if household members make joint decisions regarding these tradeoffs?
 - How might joint decisions be made? We talked about three possibilities in class make sure you know/understand all three.
 - Specialization of labor within households
 - Economic theory says that specialization, even within household, increases productivity => household better off.
 - Who specializes in what? What variables matter in making the decision? What does the empirical work find?
 - Participation decisions – do both adults in a household work?
 - First make sure you understand according to the individual labor supply model the conditions under which an individual would decide to work by themselves.
 - Second, does a partner’s decision affect the individual’s decision to work or not?
 - In the production of household work, the two individuals could be either substitutes or complements. What are the implications of each relationship? What is the empirical evidence?
 - How does marriage itself affect the decision?
 - Marriage Premium – what’s that? Empirical evidence? Why does it exist (theoretical reasons)?
 - Married workers are inherently more productive (i.e., more productive workers are more likely to get married.)
 - Marriage increases productivity
 - What is the empirical evidence on these two explanations of marital premiums?
 - Why get married? Two models (make sure you know the empirical evidence for both):
 1. Sex specialization with men valued more for economic contributions and women valued more for household contributions => men and women are substitutes in household production.
 2. Collaborative model where men and women are complements in household production.
 - Supply of labor in recessions
 - Assume have marriages with men working and women in household production then have a recession with the man laid off and his MP of labor decreasing. Therefore, examine two possible impacts.
 - Added worker effect
 - The man’s MP_L decreases => MP_L/MP_H decreases => more likely to engage in household production => woman more likely to seek work (assumes her wage is constant) => substitution at the household level and an increase in the labor force.

- Discouraged worker effect
 - What is the man's expected wage once he's laid off? $E(w) = \pi w + (1-\pi)0 = \pi w$; where π is the probability of finding a job. The recession causes $E(w)$ to decrease (why?) => the substitution effect of this wage change increases the probability that the individual will choose not to participate => labor force falls.
 - Both effects occur together but to different people => unsure about the total effect in a recession. However, theoretically the added worker effect affects fewer people (only possible for those with only one person working and one not in household) => labor force tends to fall during recessions.

- Life Cycle Labor Supply

- Examine LFPR for married women

- Their LFPR tends to increase with age, especially with age > 30. Why? (Hint: Look at the model we just did.)

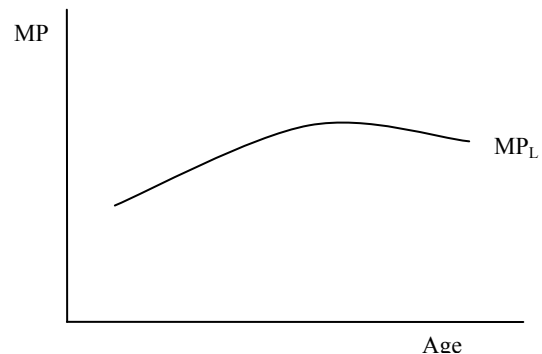
- When do we work over our lifetime?

- The decision depends upon relative productivities in labor and household production over time.
 - What does market marginal product of labor look like over a worker's lifetime? See Graph 2 – why?

- Consider the decision to work vs. household time if MP_{HH} is constant over time or if it also rises then decreases over time.

- Also assume that workers take their expected lifetime earnings (wealth) into account when making supply of labor decisions.

- If expected wage increases => quantity supplied of Labor increases. Why?



Graph 2

- Quantity supplied of labor essentially similar to MP_L over lifetime (see graph 2) and home time just the opposite. Is this true empirically?

- When do you retire?

- What matters in making the decision?

1. How much does the person get in retirement benefits (of any kind)?
2. How much will the person lose in work income?
3. Preferences

- Calculate the following:

1. Present value of income over the remaining years. Depends on wage, discount rate (r), life expectancy, current age, and so forth.
2. The change in the present value of income over the remaining years.

- What is the budget line?
 - The first is like non-labor income (Present value of lifetime income at the current age) and the second (the change in the PV of lifetime income) is like the wage. See Table 7.2 and Figure 7.6.
 - Why is the budget line slightly concave?
 - If Benefits increase by a fixed amount => BL shifts up => only an income effect and we get decreasing retirement age (assuming retirement is a normal good).
 - What else can change and how?
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- Public Policy Application – Child Care Assistance

- How should child care assistance be given?

- Again, recall that for each possible program the crucial question is what impact the program has upon the budget line. We evaluated the following possible programs in class.

1. Give program participants a fixed dollar income for child care. Assumes that child care costs are fixed rather than an hourly cost.

- What does the BL look like?

- Impact depends upon whether the person is working or not before the program. Why? Make sure you can show the following results on a graph. If the person is working before program => works less after program. If the person is not working before program => will work after the program.

2. Give the program participants an hourly subsidy which essentially increases their wage. Assumes that child care costs are fixed rather than an hourly cost.

- What does the BL look like?

- Here there is both a substitution and income effect (of a wage increase). If not working => substitution effect dominant (why?) and may decide to work. If working => don't know which is dominant (why?) => may increase or decrease hours worked.
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