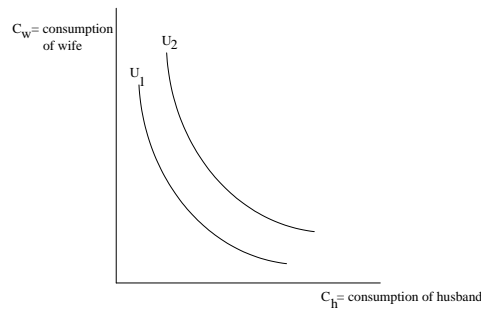


ECN 500/WGS 500 - HANDOUT - FALL 2011
Who Gets What in the Household

Becker’s “Altruist Model”

We present a simplified version of Becker’s model, which illustrates its basic features.

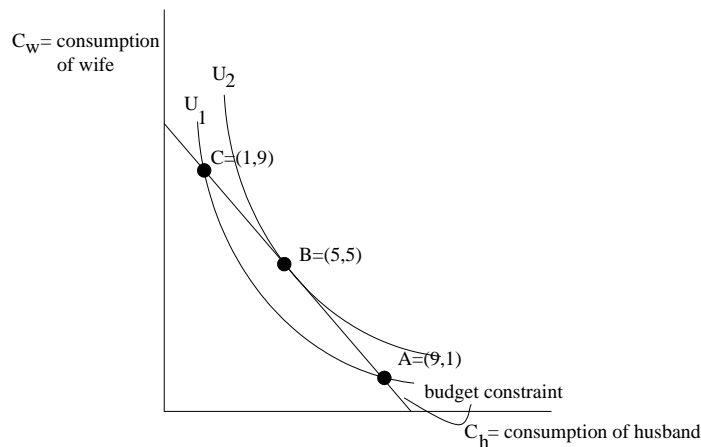
- The husband’s utility is assumed to depend on his own consumption, C_h , and his wife’s consumption, C_w . It is assumed that as his or his wife’s consumption increases, his utility increases. Because of the latter effect, he is said to be an *altruist*. He is assumed to have the usual preferences over his own and his wife’s consumption levels.



- The wife is assumed to be *selfish*, i.e., her utility depends (positively) on her consumption only, not on her husband’s consumption.
- Let I_h be the husband’s income and I_w be the wife’s income. Let the price of consumption be 1. The household budget constraint is

$$C_h + C_w = I_h + I_w.$$

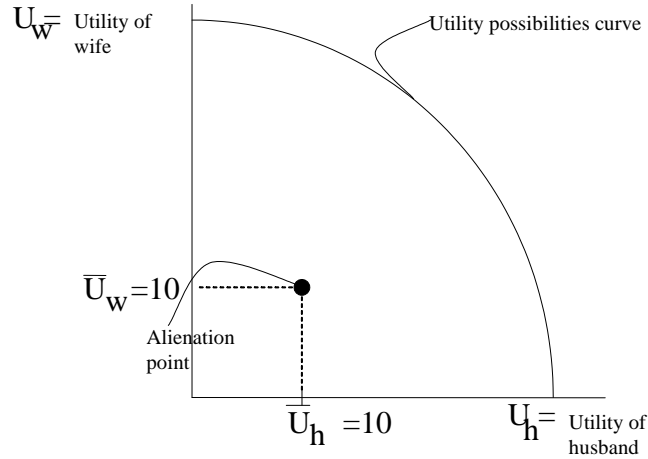
- Choices of consumption levels for husband and wife are made by the husband given the household budget constraint and subject to the condition that his wife not end up with a lesser consumption level than what her income would allow her. Therefore, in the following diagram, if the husband’s income is 9 and the wife’s income is 1, the optimal point is where both the husband and wife have consumption levels of 5. In this case, since the husband consumes less than his income level would allow, he is said to be an *effective altruist*. But if the husband’s income is 1 and the wife’s income is 9, the optimal point is where the husband and wife consume amounts equal to their income levels.



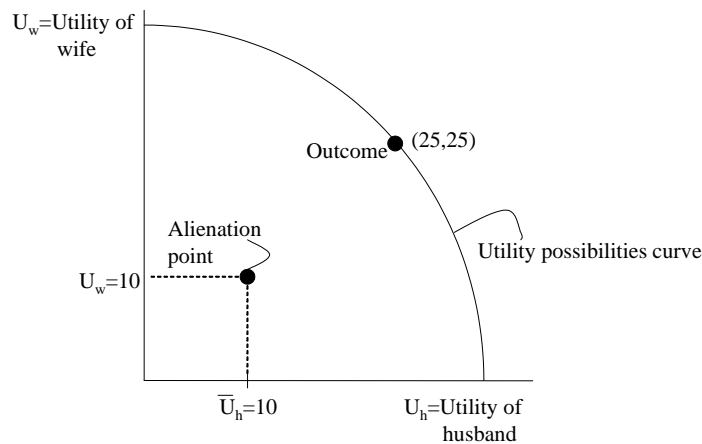
References

- Becker, *Treatise on the Family* (on reading list).

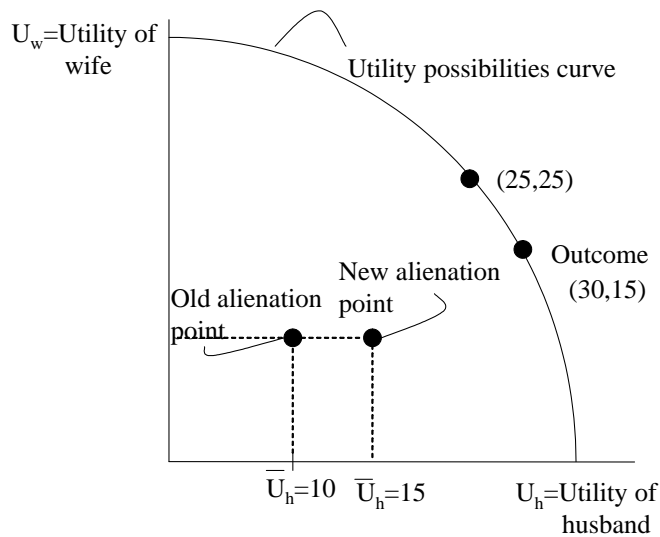
Intrahousehold Bargaining Model and Its Features



- Utility possibilities curve
 - This represents the trade-off between husband’s and wife’s utilities; as one’s utility increases, the other’s decreases.
- Alienation (or threat) point
 - \bar{U}_h = utility of husband living alone; \bar{U}_w = utility of wife living alone; these can depend on a number of things, e.g., wages. As husband’s wage increases, his alienation level of utility (exit option) increases; as wife’s wage increases, her alienation level of utility (exit option) increases.
- Outcome is based on a bargaining process; it is assumed to occur along the utility possibilities curve and it depends on the alienation point. If there is a shift of the utility possibilities curve or the alienation point, then the outcome may well change.
 - The utility of each at the outcome is at least as large as at his/her alienation level.
 - If the utility possibilities curve is “symmetric” and alienation levels are the same, then outcomes are equal.

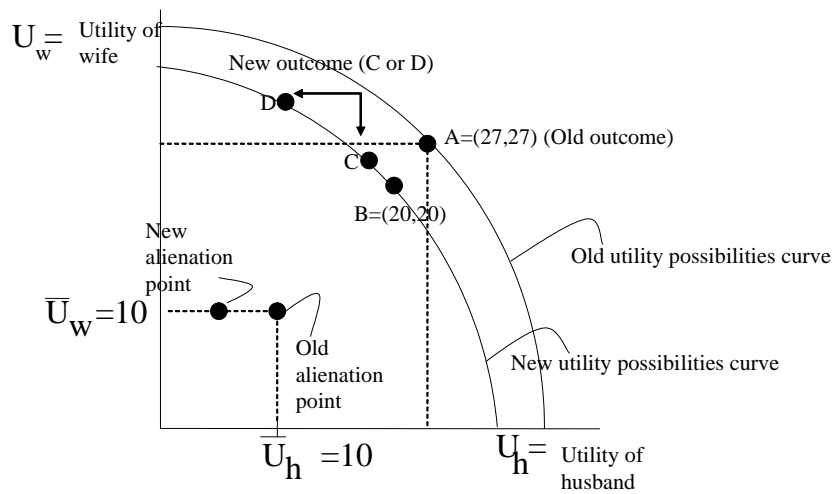


- If the utility possibilities curve is “symmetric” and alienation levels are not the same, the outcome is larger for the individual with the larger alienation level.



Example of Analyzing a Change in this Framework

Assume that the husband's alienation level of utility decreases and that the utility possibilities curve shifts inward (in a symmetric way). We have represented two of the three possible changes in the following.



References

- Marilyn Manser and Murray Brown, Marriage and Household Decision-Making: A Bargaining Analysis, *International Economic Review*, Vol 21, No 1, Feb 1980, 31-44.
- Marjorie B McElroy and Mary Jean Horney, Nash-Bargained Household Decisions: Toward a Generalization of the Theory of Demand, *International Economic Review*, Vol 22, No 2, Jun 1981, 333-49.
- Shelly Lundberg and Robert A Pollak, Separate Spheres Bargaining and the Marriage Market, *Journal of Political Economy*, Vol 101, No 6, Dec 1993, 988-1010.