Economic Perspective on Non-economic Phenomena 2) Family - economic approach

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Evropské strukturální a investiční fondy

Operační program Výzkum, vývoj a vzdělávání



From the previous lecture...

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- Contradicted by data:



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 - Less discrimination of women. More opportunities for woman employment



Previous lecture Family intro Marital gains Decision making

Economic approach to family

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 - What happens inside the existing unions (today)
 - Who marries whom (next week)
- Other family related topics we will discuss
 - Marriage and labor market
 - Fertility and family politics

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A unified approach to the family which is applicable to modern societies was first provided by Gary Becker

Changes in the family structure

• Example of the US:



Marriage rate in the selected countries



• Source: Based on the Eurostat data

Changes in family structure

• Share of children born to non-married women



• Source: Based on the Eurostat data

Change in divorce rate



• Source: Based on the Eurostat data

Change in fertility rate



Trends in Total Fertility Rate by Region, 1950-2050.

Consumption in households (UK data)



Plan for today

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- Approaches to the family preferences and decision making.

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Examples?

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- In practice, most goods display some publicness and some privateness.

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• A possible gain from specialization (due to comparative advantage).

Specialization and Increasing Returns to Scale

• There is evidence that for married couples one partner on average works more than the average of unmarried people of the same sex. The other partner works less than is the average of unmarried people of the same sex.



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- If borrowing is impossible there is no investment in schooling

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- Notice that marriage does not completely eliminate the borrowing constraint, because only one person will invest in schooling.

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- A woman will be hesitant to support her husband through medical school if she expect him to break the marriage (and marry a young nurse) when he finishes.

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- Usual utility function diminishing marginal utility:



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- Implication of efficient risk sharing is that the consumption of each family member varies only with family income.
 - holding family income constant, the idiosyncratic shocks to individual incomes will induce transfers between the partners, but consumption levels will remain the same.

//THOUT DATA YOU'RE JUST ANOTHER PERSON WITH AN OPINION W. EDWARDS DEMING

Economic Perspective on Non-economic Phenomena

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- Rosenzweig and Stark (1989) show that marriages in rural India are arranged between partners who are sufficiently distant to significantly reduce the correlation in rainfall, thereby generating gains from insurance.
- Hess (2004) finds that couples with a higher correlation in incomes are more likely to divorce, suggesting that effects of mutual insurance on the gains from marriage are higher when the partners' incomes are less correlated.
 - Example of such correlation?

Public good: Children

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- Although the biological and emotional gains may dominate here, we can also consider the economic aspects.
- We are going to discuss a simple model of gains to the child who lives with both of his/her parents

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• The parameters α and β represent the efficiency of parents a and b, respectively, in childcare.

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- What is the joint outcome of the parents? (Hint: normalize the total available time to $1 \Rightarrow$ time spent in work for parent $a = 1 t_a$)

reminder:
$$u_k = c_k + \alpha t_a + \beta t_b$$

Children - basic model

The parents would agree to:

$$\max_{t_a,t_b,c_k} \{ (w_a(1-t_a) + w_b(1-t_b) - c_k)(c_k + \alpha t_a + \beta t_b) \}$$

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• We will describe implications of the model on the exercise session

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- Nevertheless, household production persists because it economizes on search, transaction costs and monitoring.
- This shifts attention to the question which types of partnerships are likely to last.
 - Gains from human partnerships need not be confined to a couple of the opposite sex.
- The prevalence of male-female partnerships has to do with sexual attraction which triggers some initial amount of blind trust.

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 - Non-unitary models: bargaining game of the family members
 - cooperative
 - collective approach
 - non-cooperative

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- Most models of family behavior allow two decision-makers-the husband and the wife, children are excluded from decision making

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- The presence of an altruistic parent who makes positive transfers to each member of the family is sufficient to induce the selfish kids to act in an apparently unselfish way.
- The altruistic parent will adjust transfers so that each "rotten kid" finds it in his interest to choose actions that maximize family income .

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- These models have been criticized on both empirical and theoretical grounds
- Dissatisfaction with unitary models on theoretical grounds has been the product of serious study of marriage and divorce.

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- Bargaining models are used. Each partner has own utility function, however, if agreement is not reached, then the payoff received is represented by the "threat point," (outcome of divorce or no-agreement outcome).
- Consequences of these models
 - The higher one's utility at the threat point, the higher one's utility in the Nash bargaining solution
 - Family demands depend, not only on prices and total family income, but also on determinants of the threat point

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 - 1. Total family income first divided between public goods
 - 2. Private expenditures of each individual, and then each individual allocating his or her share among private goods

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- Cooperative models assume binding agreement regarding labor supply, consumption and resource allocation within the marriage. But these agreements are not enforceable.
- Non- cooperative theories focus on self-enforcing equilibria.
- Pareto optimal outcomes are achieved only under certain conditions (threat of punishment).
- Benefit of modeling distribution within marriage as a non-cooperative game is the opportunity to treat efficiency as endogenous, potentially dependent upon the institutions and social context of marriage.

Suggested readings

Suggested readings for today

- Dufwenberg, Martin, 'Marital investments, time consistency and emotions', Journal of Economic Behavior & Organization, 48 (2002), 57-69.
- Becker & Becker, The Economics of Life, McGraw- Hill, 1997, Chapter 5
- Browning, Chiappori, Weiss, Economics of the Family, Cambridge University Press, 2014, Chapter 3 (more technical approach)



EVROPSKÁ UNIE Evropské strukturální a investiční fondy Operační program Výzkum, vývoj a vzdělávání



Národohospodářská fakulta VŠE v Praze



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