“An Analysis of Women’s Fertility and Labor Supply: the Case of Korean Women” by Yonnyoung Cho

Comments

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(1) Labor and Fertility Choices

- Both choices made (simultaneously)
- Labor increses income, less time for child rearing
- Child quality increases utility, costs time and money
  - More children reduces utility by requiring more time for childcare (implicit)

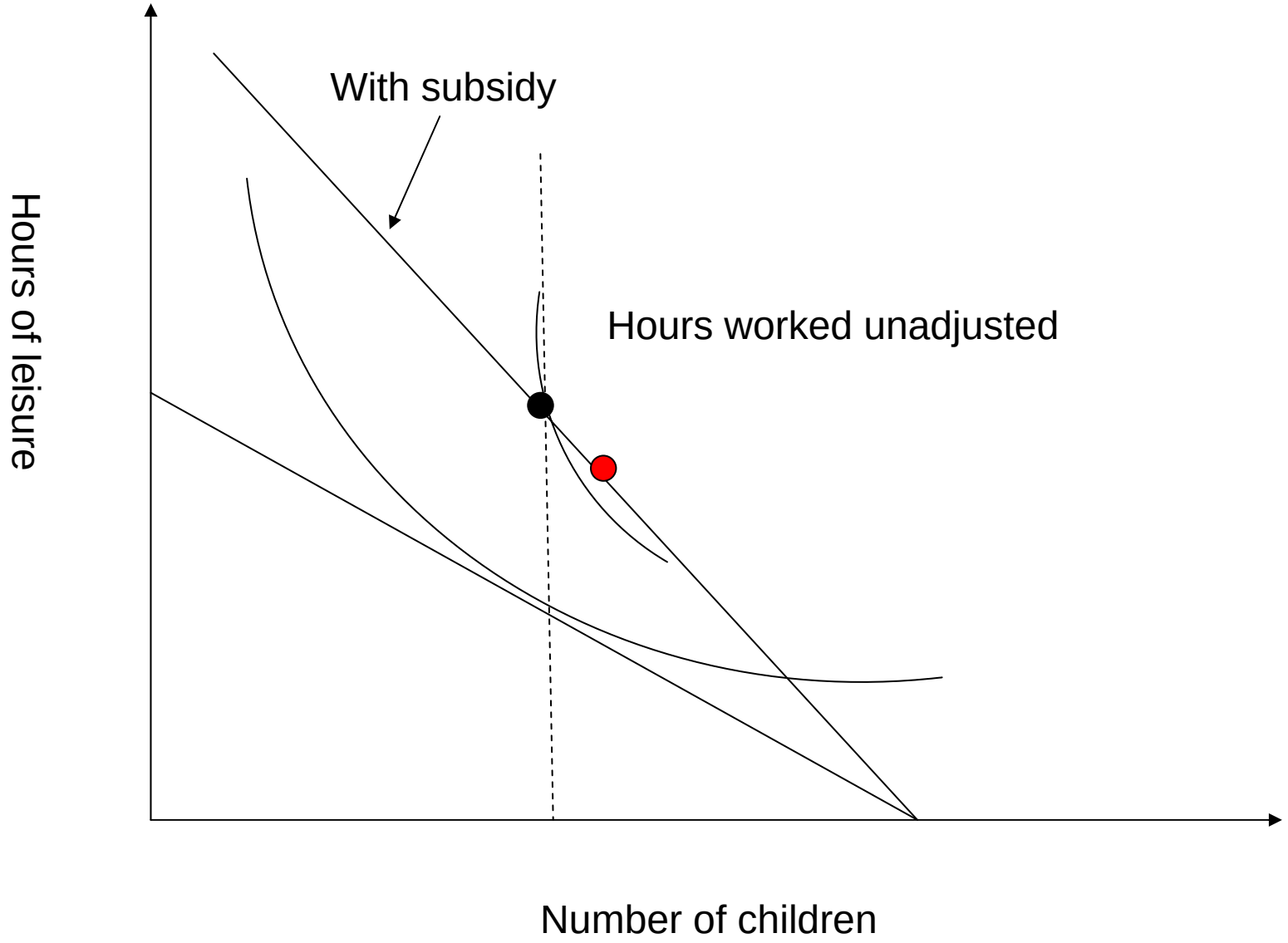
(2) Policy Evaluation

- Multi dimesntional policy evaluation
- Policy targets (hours worked, number of children)
- Costs (net of tax revenue)
- Cost effectiveness
- Utility
- Conditional childcare subsidy cost most effective, similar target accomplishment

Only labor supply endogenous

- May under estimate effect of wage subsidy
- If both could be adjusted
  - Relatively cheaper childcare => more children, less leisure (work more)
  - More disoposable income => more leisure (work less), more children
- Effect on fertility ignored
- Over estimates tax credit (income subsidy)

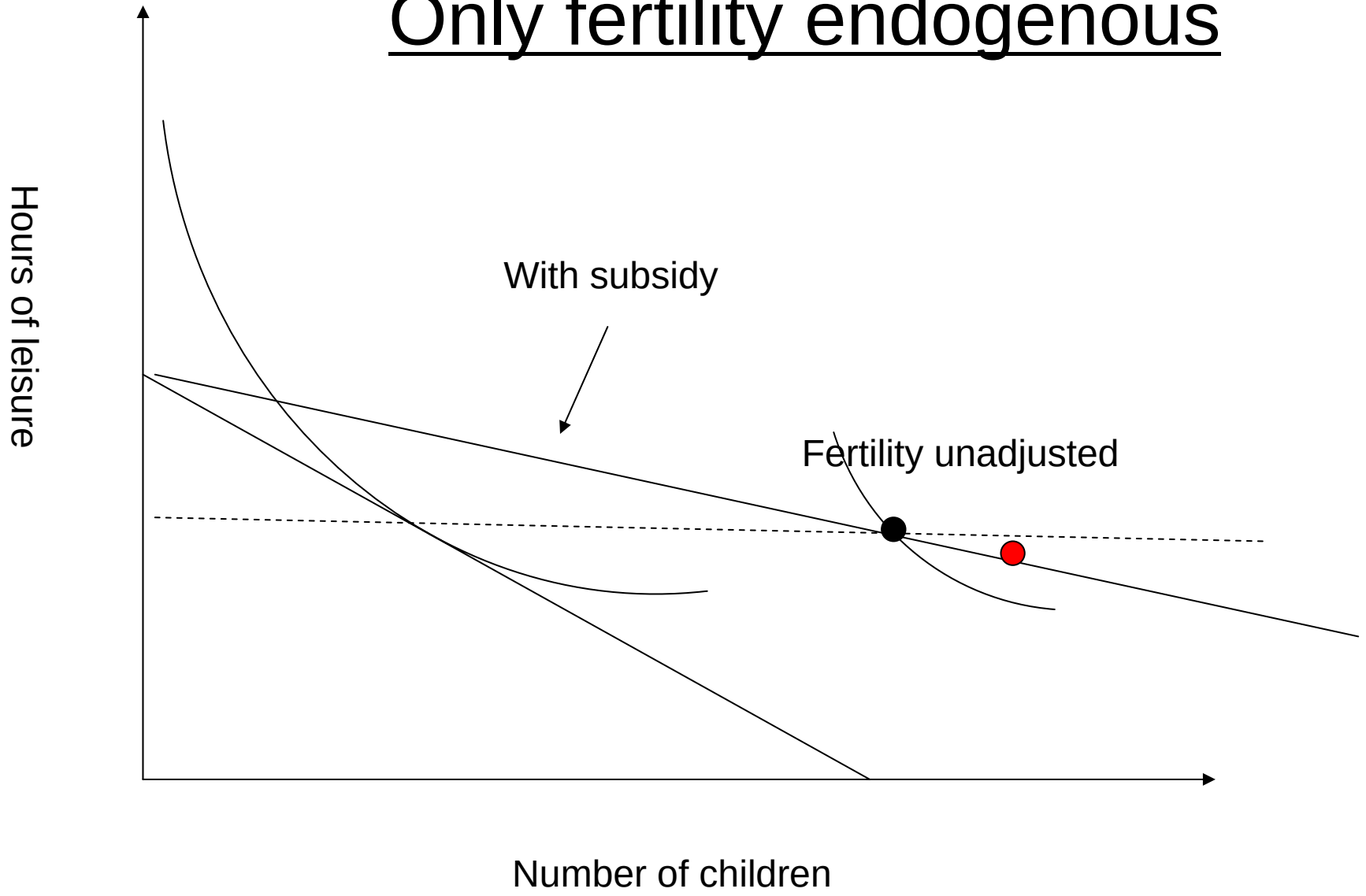
Only labor supply endogenous



Only fertility endogenous

- May under estimate effect of childcare subsidy
- If both could be adjusted
  - Relatively more expensive leisure =>less leisure (more work) , more children
  - More disposable income => more children, more leisure (less work)
- Effect on labor supply ignored
- Over estimate tax credit (income subsidy)
- In-kind subsidy may be over estimated

Only fertility endogenous



When both are endogenous

- Takes into account subsitution between labor (leisure and income) and fertility (leisure and cost)
- Reflects
  - Change in relative price (substitution effect)
  - Change in income (income effect)

Questions and Remarks (1)

1. Model specification : effect of number of children
   - Utility is not directly effected by number of children
     - Only indirect cost thru opportunity cost of time
   - In the policy, more children directly improves utility
   - Seems asymmteric (over values marginal value of extra child)

Model Specification

$$V(y,w,k,a,j) = \max_{c,g,m,h,b,a'} u(c,q,k,l)$$

$$+\beta \int\int V(y',w',k',a',j+1) d\Phi_y(y'|y) d\Phi_w(w'|w)$$

subject to

$$\begin{aligned} c/\phi + g + a' &= wh - \tau(wh) + (1+r)a + y \\ k' &= k + b, \\ l &= 1 - m - z - h, \\ q &= f(g,m). \end{aligned}$$

$z_t = \sum_{j=t-5}^{t} \gamma b_j \phi^{t-j}, \quad 0 < \phi < 1.$ (Fixed time costs)

Conditional Childcare Subsidy

$$q_t = \{(G+g_t)^\eta + m_t^\eta\}^{1/\eta}$$

$$\begin{cases} G > 0, \text{ if } & LFP = 1 \\ G = 0, \text{ if } & LFP = 0 \end{cases} \quad \text{and } G = \bar{g}(k_t - k_{t-5})$$

Question and Remarks (2)

2. What if wage profile is introduce ?
3. What is the relationship between hours worked, age and number of children ?
   - Corresponds to Figure II graphs
4. Which policy is effective in inducing earlier fertility
   - This could be important when probability of child birth declines with age

Question and Remarks (3)

5. “If part time jobs as well as maternal leaves are available, more number of women would work and benefit from maternal leaves” (from Conclusion)
    - Integer problem or bundling of work (hours worked, timing, location) is a constraint