

# Slowing Women's Labor Force Participation: The Role of Income Inequality

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May 25, 2017

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# In a Nutshell

- Empirics:
  1. Rise in women's labor force participation has slowed down since the mid-1990s
  2. College premium rose more for men than women since around the same time
- Model:
  1. Rise in premium for husbands generates negative wealth effect on wives' participation
  2. Also reduces women's premium if skills depreciate while out-of-labor-force

# Model vs. Empirics I

- New facts and neat analysis.  
Empirics are more than compelling
- But the quantitative model is a bit evasive
- Goal: **endogenously** explain participation by **exogenous** changes in premia...for **women**
- Important parameters that differ by gender:
  1. Labor supply (disutility for labor):  $\phi^s, \gamma^s$
  2. Exogenous wage gap:  $\xi_j$
  3. HC accumulation:  $k_j^{is}$

## Model vs. Empirics II

$$u(\cdot) = \frac{c_j^{is1-\sigma}}{1-\sigma} - \phi^s \frac{(l_j^{is} + h_j^{is})^{1+1/\gamma^s}}{1+1/\gamma^s}$$

$$W_j^{is} = \theta^s w^s (1 + \xi_j^s e^{is}) k_j^{is}$$

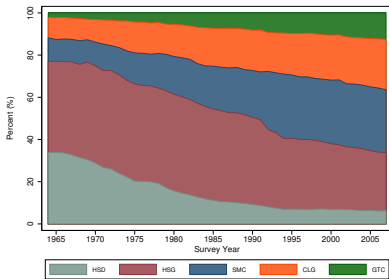
$$k_j^i = f(k_{j-1}^i, l_{j-1}^i)$$

- What are values of  $\gamma^s$ ..?
- Does HC process differ by gender?
- And should we expect gender differences in  $\phi^s$ ,  $\gamma^s$  and  $\xi_j^s$  to also be explained away by model mechanism?

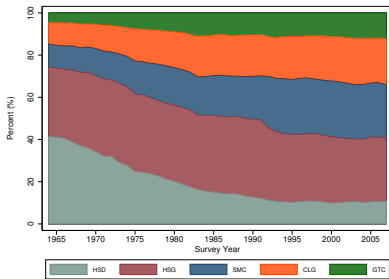
# Equilibrium and Selection Effects

1. Three exogenous assumptions in the model:
  - Educational attainment
  - Gender wage differential (not explained by exp.)
  - Household formation and fertility
2. Fertility may not be important, as suggested by authors. Unclear how it should affect men and women differently, different couples, etc. Also **very** difficult to model
3. **Labor market equilibrium** and **selection** into education and marriage can be first-order
  - \* May (or may not) help with quantitative shortcomings, and also explaining parameter differences between genders

# Educational Attainment by Gender



(a) Women



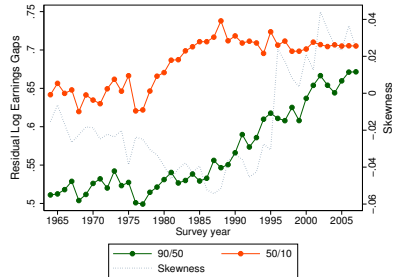
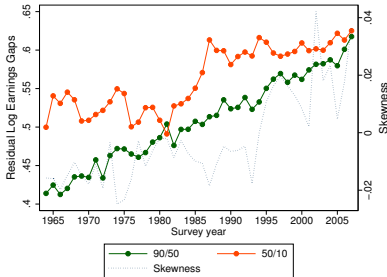
(b) Men

- Flat for men since as early as the 80s, continuously increasing for women
- As documented by authors, premia rose faster for men

► by family income

# Equilibrium Effects: Education

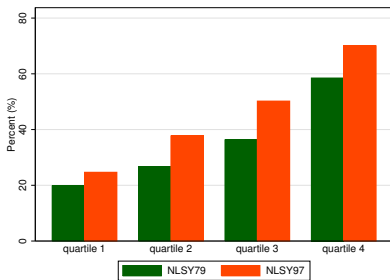
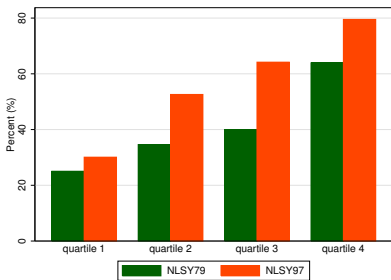
1. Imperfect substitution b/w male/female labor create wage differentials (different tasks, occupations, industries, etc.)
2. If college and hs also imperfectly substitutable, more college women drives skill premia and participation down
3. Even lower premium if negative selection



c.f. First controlled for education:  
larger **unexplained** heterogeneity (skewedness)

# Selection 1: College Enrollment

## by Family Income

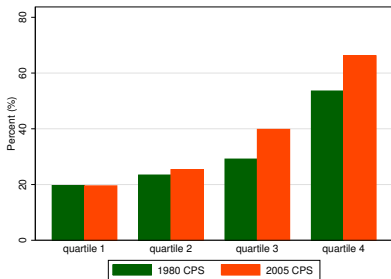
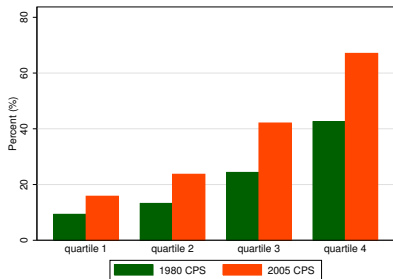


- Women's enrollment rose more than men's, except bottom quartile ► Educ Attain
- Why didn't more **men** go to college despite higher premia?
- ⇔ Why did more **women** go to college despite lower premia?



## Selection 2: Marriage

### College Completion by Own Earnings



- Disproportionately more college graduates among high-earnings women
- Assortative marriage generates extra incentive for women despite lower participation and premia?
- \* Can generate more marriages for college women; selection at marriage can be positive condntl on education

## Selection: Educ and Mariage

- Negative selection of **more women going to college** can endogenously lower women's entry premium, and also drive down participation (for both college and high school women with high school husbands)
  - More educated women getting married: extra incentive for education may come from marriage
  - Interaction between the two may help reconcile quantitative shortcomings
- c.f. If incorporating selection, differences in ability dispersion ( $\sigma^s$ ) maybe more important than premium wedge ( $\xi^s$ )

# Calibration

1. Implications for endogenous premium probably most sensitive to HC technology  $f$

⇒ Should defend choice of Imai and Keane (2004) more

- Different model: e.g., no home production
- Different data: estimated to white males only

2. Home production:  $G = [0.5(h^f)^\rho + 0.5(h^m)^\rho]^{1/\rho}$

- Is it reasonable that women and men are asymmetric in market production but symmetric in home production?
- Also between high school and college (for both women and men)?

⇒ Resulting market premium difference can be due to gender differences in either

# Summary

- Paper highlights new facts and presents a convincing narrative
- Can be more ambitious and try to account for gender differences in broader dimensions
- Simple labor market equilibrium and selection into education and marriage may achieve this, also appeal to a broader audience
- Contrasting home and market production by gender and education may also matter, and can help with model fit