

Discussion of:
"Nature or Nurture? Learning and Female
Labor Force Dynamics"
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The Question

- What can account for the increase in the participation of young married women with children?

Net change in LFP of white, non-farm married women across decades
(percentages)

	no children	children < 2	children < 5	children 5 and over
1920-30	62	31	42	50
1920-40	123	116	121	112
1920-50	236	227	238	309
1950-1970	56	200	152	87

Based on IPUMS data. LFP based on EMPSTAT (code = 1-2) in years 1930 to 1970. LFP based on OCC1950 (code = 0-970)

in 1920. Children variables based on NCHILD, NCHLT5, and YNGCH. Restricted to GQ=1, weights=PERWT.

Hypothesis

- Initial low participation due to perceived costs associated with inability to spend time with own children.
- Uncertainty about effect of mother's absence on children's outcomes eventually overcome as more women enter workforce.

Dynamics:

- Women learn the value of nurture from their mothers and from those around them.
- High ability women or low spousal endowment trigger initial rise in participation, starting learning process.

Why learning?

- S-shaped evolution of women's LFP and social attitudes on women's work.
- Falling dispersion of beliefs.

Key Assumptions

- Priors inherited from mother
- Observe a relatively small peer group to learn.
- Value of nurture constant over time.

Key Results

- Can reproduce S-shape
- Can reproduce dispersion of beliefs (but fact is very questionable, science vs opinion)
- Can reproduce declining wage elasticity qualitatively
- Can reproduce rising wages (qualitatively) with career choice

Comments

- Hypothesis plausible based on *current* public debates.
- Elegant stylized model.

Drawbacks:

- Timing and motivating evidence.
- Hard to distinguish from other explanations.

Goal of discussion:

1. Frame hypothesis in historical context.
2. Provide suggestions to empirically support basic mechanism.

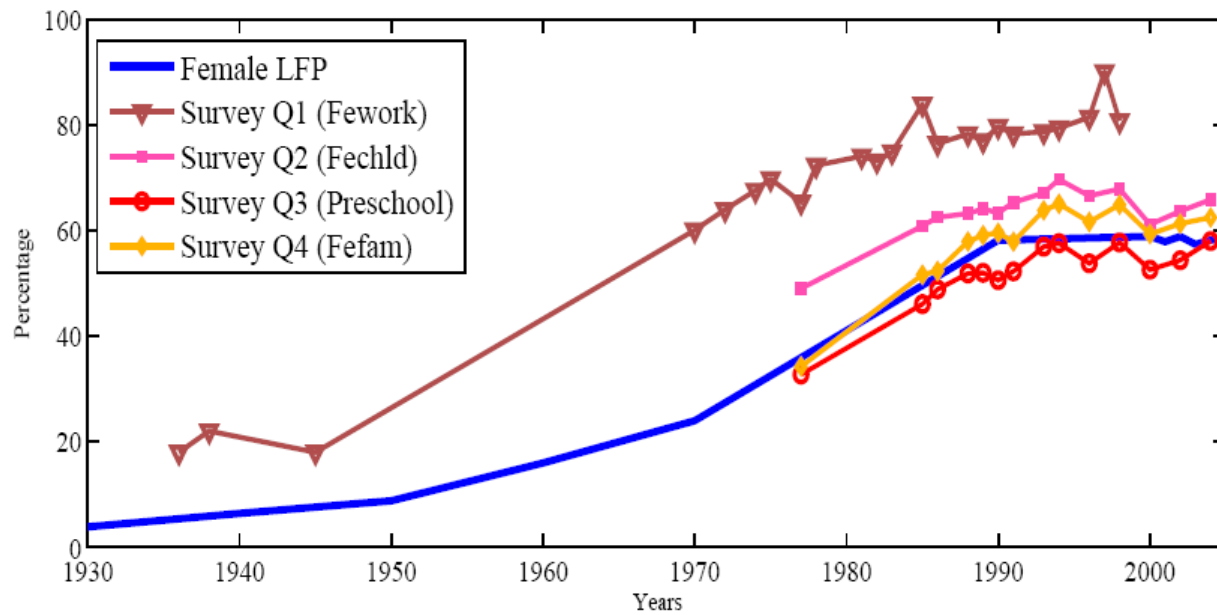


Figure 1: LABOR FORCE PARTICIPATION AND AVERAGE SURVEY RESPONSES.

Labor force participation (LFP) is the S-shaped line with squares. Survey questions are about the effect of women's labor force participation on children. A higher level indicates a more favorable attitude toward participation.

The S-shape in Beliefs

- S-shape in beliefs driven by negative attitudes towards women's work in mid-1930s

Pre-1972 Data (IPOLL data bank), few work

8/1936 Should a married woman earn money if she has a husband capable of supporting her? Yes 18%, 82% No

10/1938 Do you approve of a married woman earning money in business or industry if she has a husband supporting her? 22% approve

11/1945 Do you approve or disapprove of a married woman holding a job in business or industry if her husband is able to support her? 18 approve, 62% disapprove

Social consensus during Great Depression: Rationing of jobs by need, men deserved "family wage."

The S-shape in Beliefs ...

- Restriction of married women's employment in periods of recession (Goldin, 1990)
 - Married women fired after WWI
 - Great Depression:
 - * Marriage bars privately extended in the 1930s
 - * 1932, Federal Order 213: Mandated firing of government employees whose spouses were employed in state or local government. Mostly affected women.
 - * State and local regulations restricted married women's employment by 1940. Affected clerical workers, nurses, librarians.

Evolution of societal attitudes

- Towards women's work (Goldin, 1990):
 - Agricultural work:
 - * Most "low class" women worked, though not on the market. Children also worked as early as possible.
 - Urban/industrial work (late 1800s-1920):
 - * "Low class" women worked for piece-rate or salary, their children also worked as early as possible.
 - * Manufacturing work was considered "undignified." Women stopped working upon marriage, if not strictly necessary.
 - Urban/clerical work (starting in 1920s):
 - * Women invested in high school (some college) education to gain "respectable" employment.
 - * Work after marriage considered desirable, marriage bars and dead end positions impeded careers.

Evolution of societal attitudes ...

- Towards children

- Until early 1900s: High demand for unskilled labor and very high infant mortality and fertility rates.
- Starting in 1900: Increased demand for skilled labor, decline in fertility rates, increased survival probability for children.

- * Emphasis on children's health and education

- 1900-1930: Dramatic decline of child labor
Children 10-15 as % employed

1900	1910	1920	1930
18.2	15.0	11.3	4.7

Lebergott (1964)

- 1938: Fair Labor Standards Act outlaws child labor

- * Areas of early industrialization adopt and apply child labor laws earlier.

"Economically valuable and emotionally worthless to economically worthless and emotionally valuable." (Greenwood and Seshadri, 1999)

Evolution of Technology

- Market technologies
 - Technological progress increases returns to children's education (Greenwood and Seshadri, 1999)
 - * Late 1800s: Change in high school curriculum (Goldin, 1998)
 - * 1910-1930: High school movement and sharp rise in high school graduation rates
 - * Compulsory schooling laws introduced in parallel to child labor laws in industrial states
 - 1950s: Demand for skilled labor leads to lifting of marriage bars

Evolution of Technology ...

- Medical technologies

- Binding feasibility constraints on women's participation in fertile years (Albanesi and Olivetti, 2007)
 - * Until 1920s: Pregnancy, childbirth and nursing account for over 60% of women's time endowment in fertile years
 - * Starting in 1850: Improved obstetric practices, notions of bacteriology etc. lead to lower maternal mortalities and postpartum disabilities in 1930s
 - * Starting in 1850: Research on breast-milk substitutes lead to commercialization of humanized infant formula in mid-1920s
- Home production degenerated starting in mid-1920s.

Changes in market and medical technologies precede rising married women's LFP

Alternatives to Mother's Care

- *Availability of childcare demand driven and follows increased participation.*
- *Quality of child care correlated with quality of mothers in the labor force.*(Rose, 1999)
- Early day nurseries to take care of young children whose parents were both at work.
 - Crèche: 1844, Chaillot (France).
 - 1854, New York.
 - * *Provided minimal care for children of poor families. Instituted to fight infant mortality.*
- Expansion of charitable day care centers during Great Depression.
 - Federally sponsored public nursery schools in US.
 - Distinction between nursery schools (educational value) and day nurseries (seen as bad).

Alternatives to Mother's Care ...

- WWII: Full-fledged public debate on child care.
 - CIO women's auxiliaries pressed for daycare to facilitate women's work
 - 1943 Gallup Poll: 56% of mothers would not use govt. provided day care centers, even if free.
 - 1942 Lanham Act: Federal funding for daycare centers established. Linked to public education.
- 1960s onward: "Preschool is childcare. Childcare is preschool."
 - Daycares become educational, childcare seen as basic right (NOW, 1968).
 - Legislation in 1970s and 1980s expands federal subsidies and tax credits for childcare.

Role of Nurture

- Society:
 - Late 1800s and early 1900s: Big concern for infant and children's *health*.
 - * Paternalistic public health projects driven by high infant and child mortality.
 - Concerns for cognitive development and behavioral problems start later.
 - * Post-WII initial evidence on educational performance of daycare children (Rose, 1999)
- Science: Breakthroughs in cognitive and developmental neuroscience are quite recent
 - Brain plasticity: late 1970's and early 1980s
 - Critical periods in language acquisition: mid 1960s, 1970s

Issues

- Timing
- Discriminating from other explanations: Role of wage elasticity
 - Relies in part on prediction that high income mothers less sensitive to bad outcomes for kids. Contradicts evidence.
 - Focus on extensive margin elasticity
 - * Low elasticity on extensive margin possibly due to women's early investment in careers
 - Consistent with technological explanations that allow for initial investments.
 - Elasticity on intensive margin may be significantly higher. Worth exploring.
- Learning networks vs other networks
 - Higher participation generates demand for improved childcare, reducing cost of lack of nurture.

Issues ...

- Discriminating between different forces within learning hypothesis
 - Current flattening of participation rates despite rising wage rates: Alternative explanations consistent with learning
 - * Higher skill premia and wage inequality increase cost of bad outcomes for children
 - * Lower dispersion of beliefs. Hard to measure.
- Additional explanation: Women work to finance children's education.
 - Consistent with evidence on increased returns to children's education
 - Consistent with increased costs of education (higher competition)

Suggestions

- Explanation seems more compelling for post-1950s. Get better evidence on dispersion of beliefs and dependence on history in small learning networks for that time period.
- Cost of lack of nurture should depend on earnings distribution and may depend on potential wages of the mother.

Factors:

- Income mobility.
- Skill premium.
- Cost of higher education and borrowing constraints.

Use data over time and across countries (states) to evaluate dependence.

Suggestions ...

- Evidence on learning networks: Correlation between choices of mothers and daughters.
 - Look within potential networks.
 - * Extended families.
 - * Small communities vs urban areas
 - Evaluate role of shocks to size of learning network.
 - * Rise of mass media.
 - * Cross-sectional availability of public information outlets
 - Measures of generational conflict over the learning process e.g. different choices of mothers and daughters.
 - * Comparison of model and data?

Suggestions ...

- [1] Elizabeth Rose. *A Mother's Job: The History of Day Care, 1890-1960*.
Oxford U. Press