

Women's Liberation: What's in It for Men?

Matthias Doepke and Michèle Tertilt

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“Once married, a bride was obliged by law and custom **to obey her husband** – a requirement so fundamental to the biblical idea of a wife that it remained in most Jewish and Christian wedding vows until the late twentieth century. After all, **wives were considered a husband's “property,”** alongside his cattle and his slaves.”

Marilyn Yalom, *A History of the Wife*



The Question:

- In developed countries, drastic change in women's rights over the last 200 years.
- In England and the United States, substantial improvements in married women's economic and social rights long before women acquired political rights.
- Early improvements in women's rights thus amounted to a voluntary renouncement of power by men.
- Why did men decide to share power with women?

Why a Separate Theory for Women?

- Acemoglu and Robinson (2000, 2001, 2006)? Women are unlikely to pose a threat of revolution.
- Lizzeri and Persico (2004)? Economic rights were extended before suffrage.
- Parallels to slavery? All men are closely related to at least some women.

Mechanisms in the Literature:

- Women's Movement.
- Women at work.
- Demand for women.
- Left-wing politics.
- Liquor.

Our Approach:

- Formal model of women's rights.
- Focus on the family:
 - Expansion of female rights started long before widespread female labor force participation.
 - Large changes in the rights of married women.
 - Expansion of rights coincided with changing role of family: fertility decline and rise in education.

The Idea:

- Women's rights determine bargaining in marriage.
- Tradeoff between rights of own wife and other men's wives.
- All else equal, men prefer own wife to have no bargaining power.
- However, men may want daughters as well as mothers of their children's future spouses to have some power.
- Strength of motive depends on return to education.

The Model:

- Men and women joined in marriage.
- Specialization in market and home sector.
- Utility defined over market consumption c , fertility n , and children's utility.
- Sons and daughters marry other people's children.
- Key assumption: Mothers care more about children's welfare than fathers do.

The Altruism Gap between Mothers and Fathers:

- Evolutionary justification: uncertainty about paternity.
- Empirical evidence:
 - Pitt and Khandker (1998): credit provided to women more likely to affect schooling for children (Bangladesh).
 - Lundberg, Pollak, and Wales (1997): paying child allowance to mothers increased spending on children's clothing (UK).
 - Attanasio and Lechene (2002): higher transfer to women leads to increased expenditure share of children's clothing and food (Mexico).

Preferences:

- Man:

$$V_m = u(c_m, c_f, n) + \gamma_m \left[\frac{V_{\text{Sons}} + V_{\text{Daughters}}}{2} \right],$$
$$u(\cdot) = \log(c_m) + \sigma \log(c_f) + \delta \log(n).$$

- Woman:

$$V_f = u(c_f, c_m, n) + \gamma_f \left[\frac{V_{\text{Sons}} + V_{\text{Daughters}}}{2} \right],$$
$$u(\cdot) = \log(c_f) + \sigma \log(c_m) + \delta \log(n).$$

- Women value children more:

$$\gamma_f > \bar{\gamma} > \gamma_m > \frac{\gamma_f}{2}.$$

Constraints:

- Home production function:

$$c_m + c_f = A(t_f H_f)^\alpha (t_m H_m)^{1-\alpha}.$$

- Accumulation of human capital:

$$H'_f = \max\{1, (Be^f)^\theta H_f^\beta H_m^{1-\beta}\},$$

$$H'_m = \max\{1, (Be^m)^\theta H_f^\beta H_m^{1-\beta}\}.$$

- Time constraints:

$$t_f + (\phi + e^f + e^m)n \leq 1,$$

$$t_m \leq 1.$$

- Assumption of specialization in child care is not crucial for results.
- Key parameter: Return to education θ .

Economic and Political Decisions:

- No commitment across generations.
- Patriarchy regime: Men make decisions, women obey.

$$\max\{V_m\}$$

- Empowerment regime: Equal power and efficient bargaining.

$$\max\{V_m + V_f\}$$

- Men vote on regime (affects current and future marriages).
- For now: Once-and-for-all voting.

Preview of Results:

- Low return to education:
 - Parents don't educate, and decision problem is static.
 - Political regime only affects consumption share of husbands and wives.
 - Men's incentives for sharing power are low.
- High return to education:
 - Dynasty accumulates human capital.
 - Political regime affects speed of accumulation.
 - For sufficiently high return, men prefer to share power.

The No-Education Regime:

- If return to education is low (θ low), optimal choice is $e^f = e^m = 0$, implying $H_f = H_m = 1$.
- Decision problem is static. Two decisions need to be taken:
 - Allocation of female time between child-raising and work.
 - Allocation of consumption between husband and wife.
- Husbands and wives agree on fertility choice n ;
political regime only affects consumption allocation.

Decision Problem in No-Education Regime:

- Patriarchy: Maximize $u_m(c_m, c_f, n)$ subject to

$$c_m + c_f = A(1 - \phi n)^{1-\alpha}.$$

- Empowerment: Maximize $u_m(c_m, c_f, n) + u_f(c_f, c_m, n)$ subject to the same constraint.
- Outcome: Consumption satisfies $c_f = \sigma c_m$ under patriarchy and $c_m = c_f$ under empowerment.

Political Tradeoff in No-Education Regime:

- If u_m and u_f are (constant) male and female period utilities, total male utility is:

$$V_m = u_m + \frac{\gamma_m}{1 - \bar{\gamma}} \left[\frac{u_m + u_f}{2} \right].$$

- Patriarchy maximizes current utility, empowerment maximizes future utility.
- Men prefer their daughters to have equal rights, but don't want their wives to have rights.
- Empowerment can be optimal, but only if γ_m is very high or if σ is very low.
- Incentive to share power is weak.

Time-Inconsistent Preferences:

- Discounting across generations is quasi-hyperbolic:
 - Men weigh their own versus their children's utility with relative weight γ_m .
 - Men weigh their children's versus their grandchildren's utility with relative weight $\bar{\gamma}$.
- This happens because men evaluate half of their grandchildren through the eyes of their daughters.
- Men disagree with their sons-in-law about the optimal resource allocation across generations.
- However, this matters only if parents invest in children.

The Education Regime:

- If return to education is high (θ high), parents educate their children ($e^f, e^m > 0$), and male and female human capital rises over time.
- Parents have to decide on the education of sons and daughters in addition to choosing fertility and allocating consumption.

Optimal Decisions in the Education Regime:

- Model has a quantity-quality tradeoff: An increase in education lowers the optimal fertility choice.
- As before, patriarchy leads to higher consumption share for men.
- However, empowerment leads to higher investment in education: Under patriarchy weight on next generation is γ_m , under empowerment weight is $\bar{\gamma} > \gamma_m$.
- This may provide an incentive for men to share power.

Male Utility in the Education Regime:

- Value functions can be computed analytically.
- Male value function can be written as:

$$V_m(H_m, H_f, \bar{H}_m, \bar{H}_f) = u_m(c_m, c_f, n) + \gamma_m \left[\frac{V_m(H'_m, \bar{H}'_f, \bar{H}'_m, \bar{H}'_f) + V_f(\bar{H}'_m, H'_f, \bar{H}'_m, \bar{H}'_f)}{2} \right].$$

- Average human capital enters through the quality of the children's spouses.

Political Tradeoff in the Education Regime:

- Tradeoff between more consumption today and equality in the future still present.
- Two additional benefits of empowerment:
 - Commitment within the dynasty: Men value grandchildren more than the grandchildren's fathers do. (Quasi-hyperbolic discounting)
 - Externality across dynasties: Positive effect on education on children's spouses.
- Result: Empowerment optimal if return to education θ sufficiently large.

Dynamic Political Equilibria:

- Consider environment with return to education θ changing over time.
- Time path for θ is perfectly anticipated.
- Men can vote for or against empowerment in every period; future votes are fully anticipated.
- Focus on equilibria in which voting strategies depend only on payoff-relevant variables.
- Result: Vote for empowerment in period T if return to education θ_T sufficiently large.

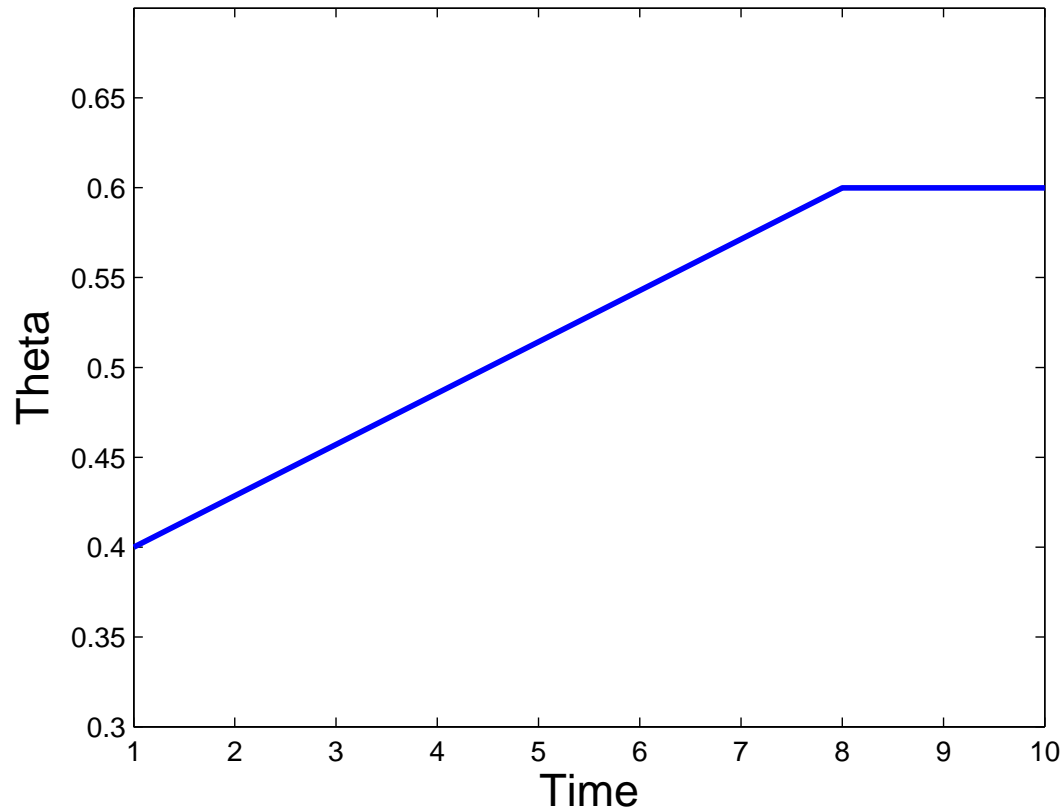
Computed Example of Transition to Empowerment:

- Economy starts out in no-education regime.
- Return to education θ increases over a number of periods.
- In period 4, economy switches to education regime.
- In period 6, θ is sufficiently high for men to vote for empowerment.

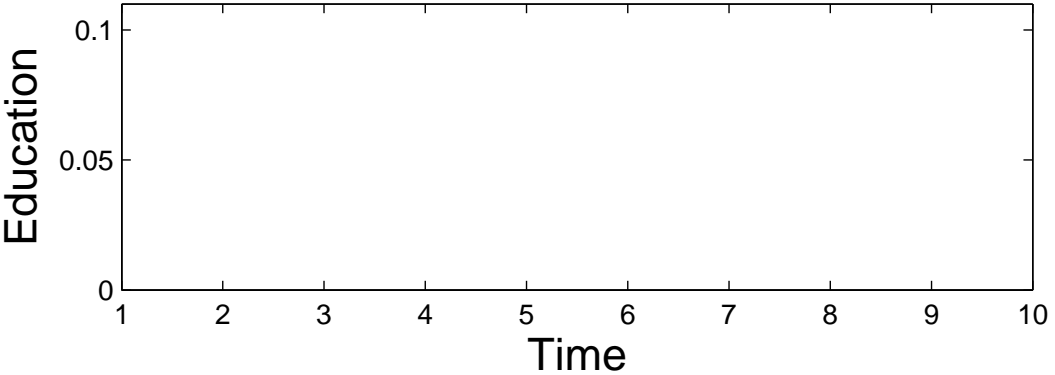
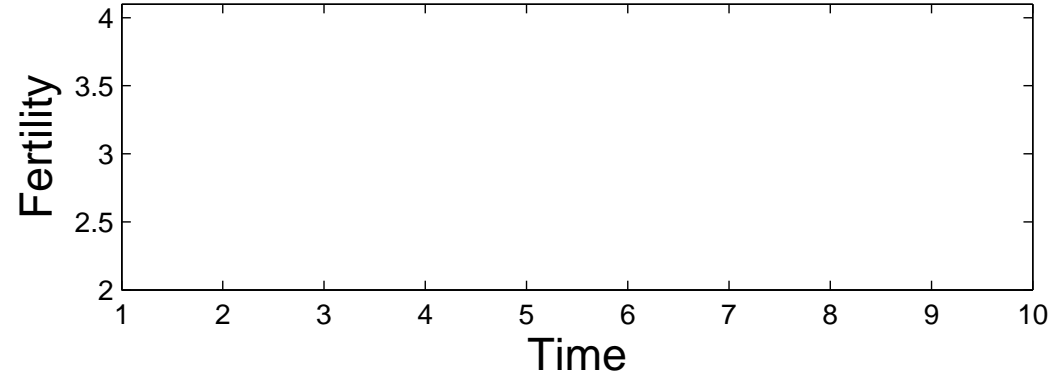
Parameter Values for Simulation:

Parameter	Interpretation	Value
γ_f	Female Discount Factor	0.45
γ_m	Male Discount Factor	0.4
σ	Weight on Spouse	0.66
δ	Weight on Children	0.66
α	Female Share in Production	0.4
β	Female Share in Education	0.5
ϕ	Time Cost	0.25
B	Education Productivity	35

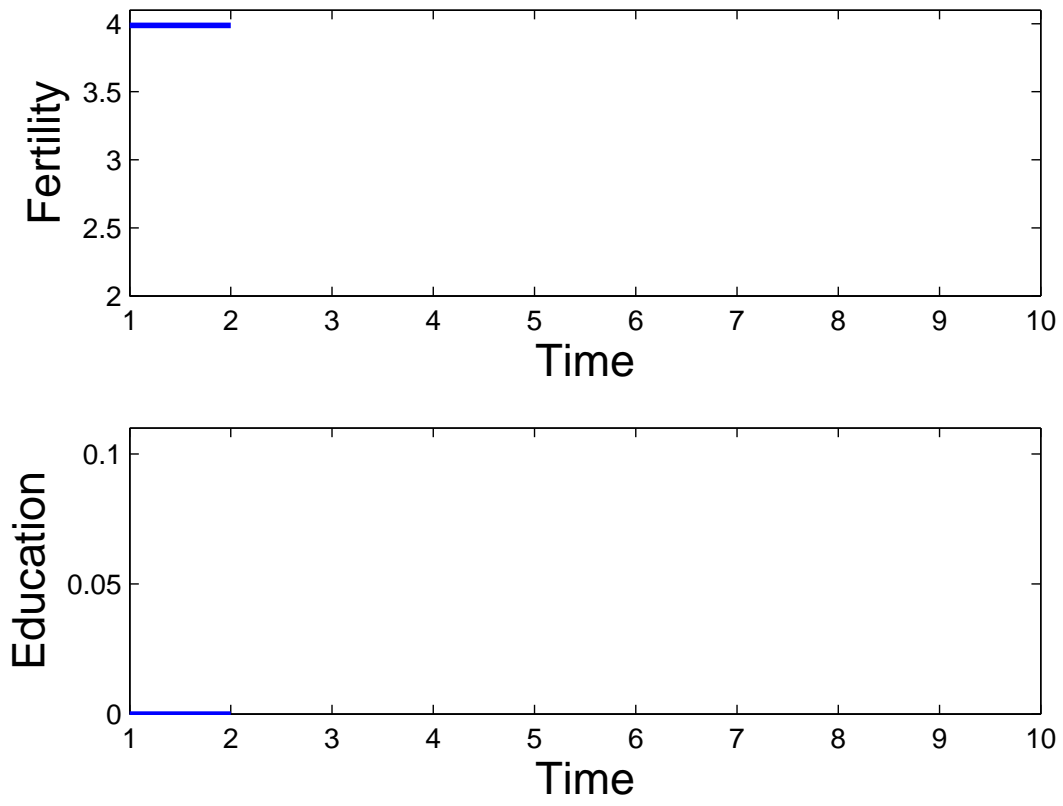
The Assumed Path for θ (Return to Education):



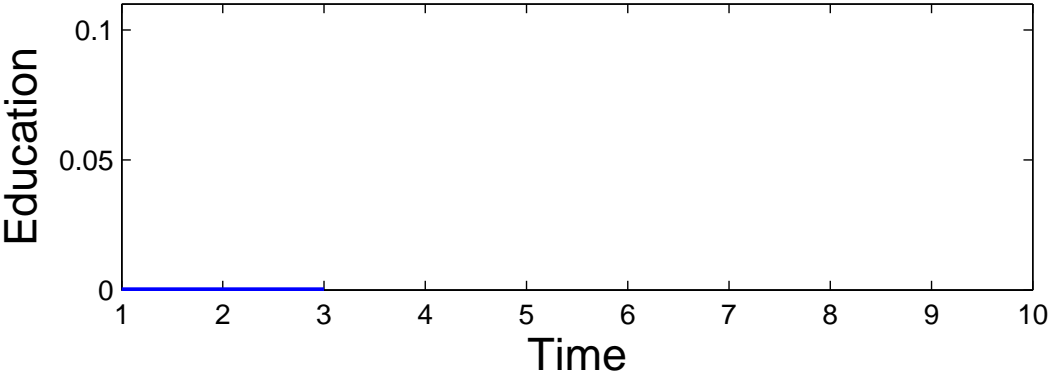
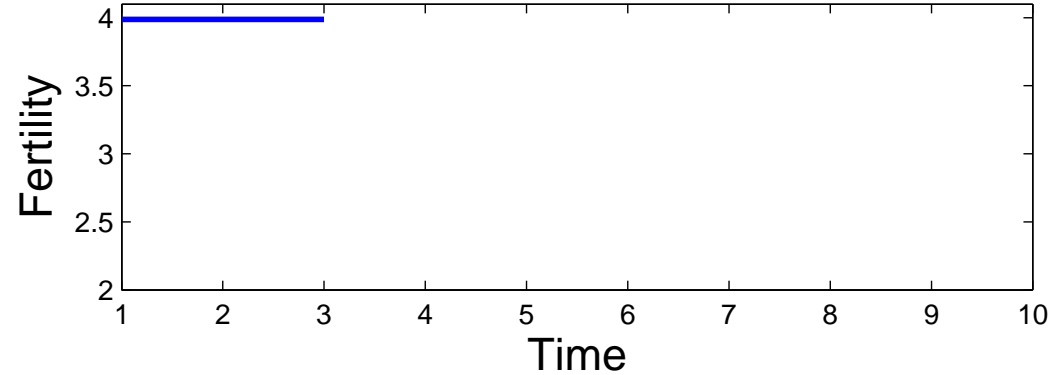
The Outcome under Permanent Patriarchy:



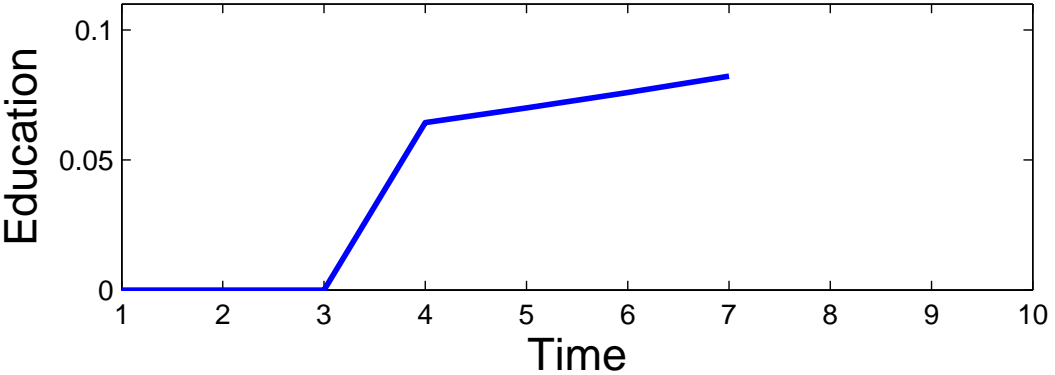
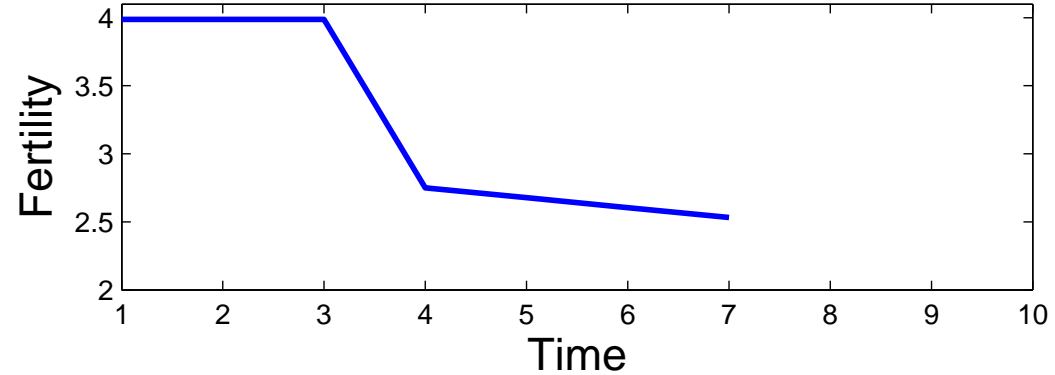
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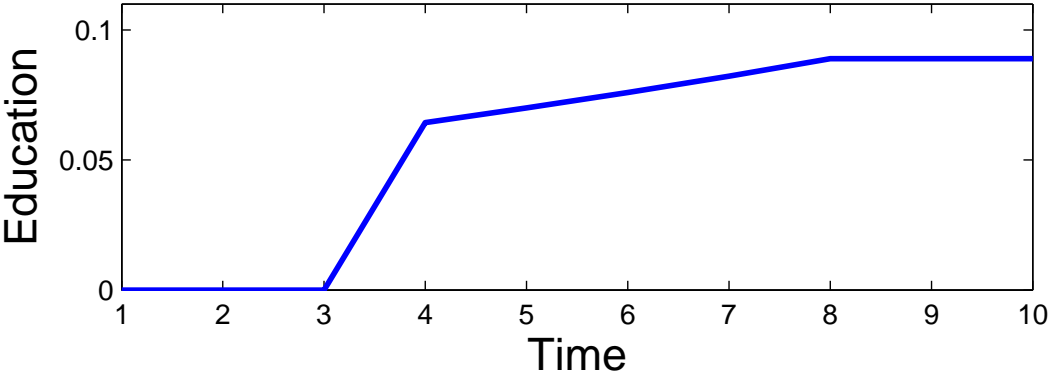
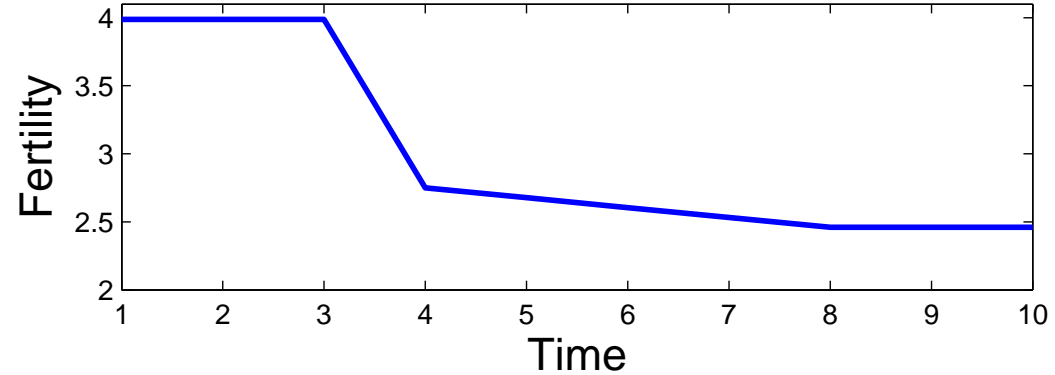
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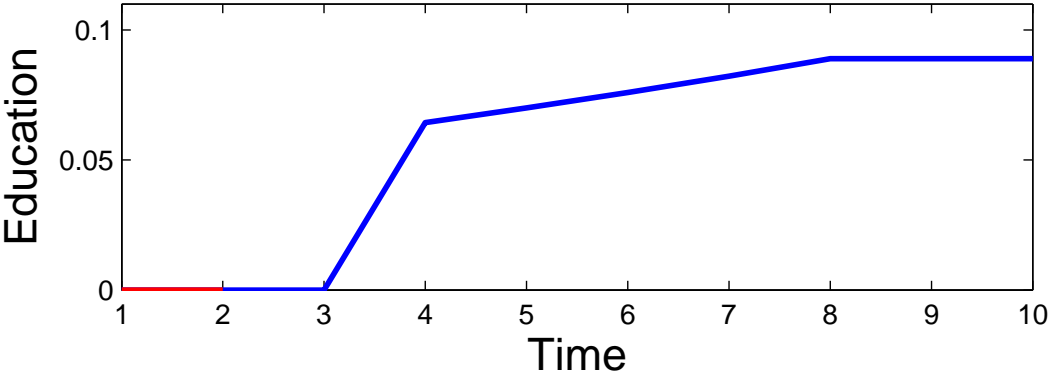
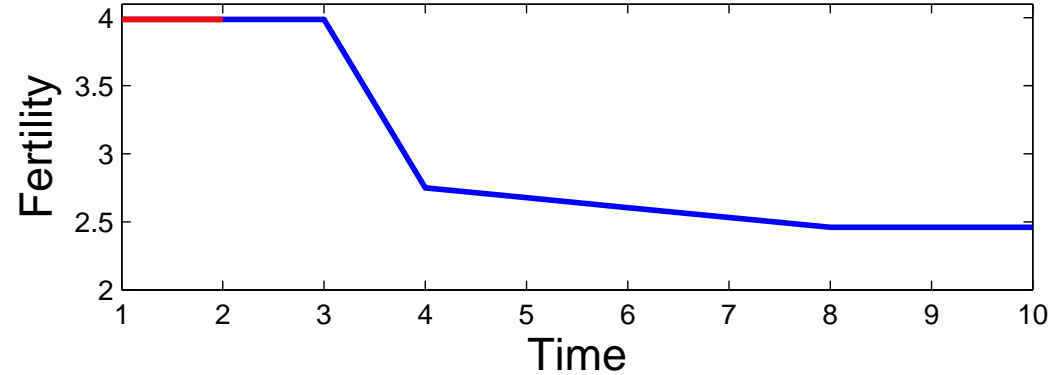
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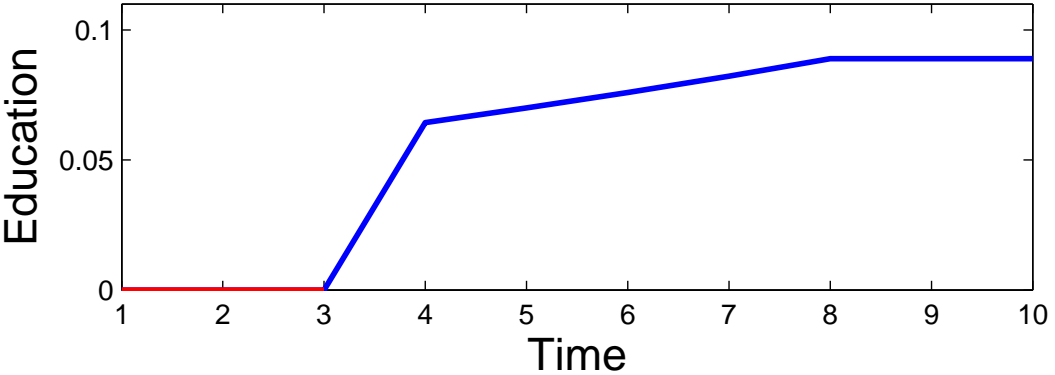
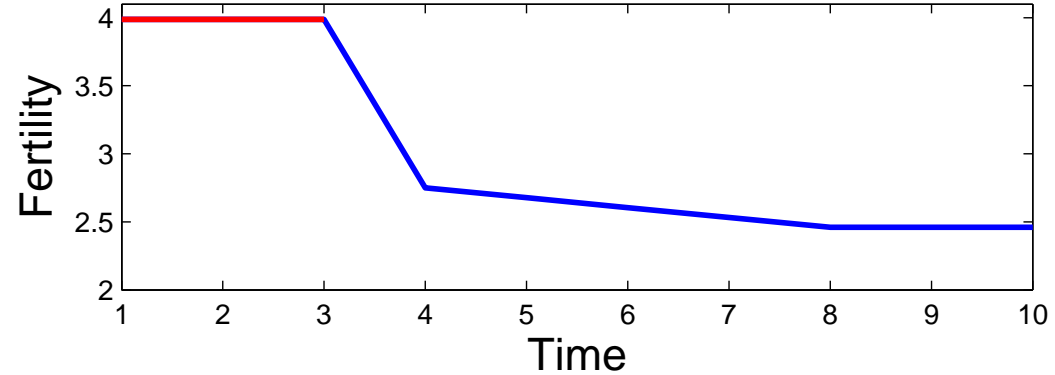
The Outcome under Permanent Patriarchy:



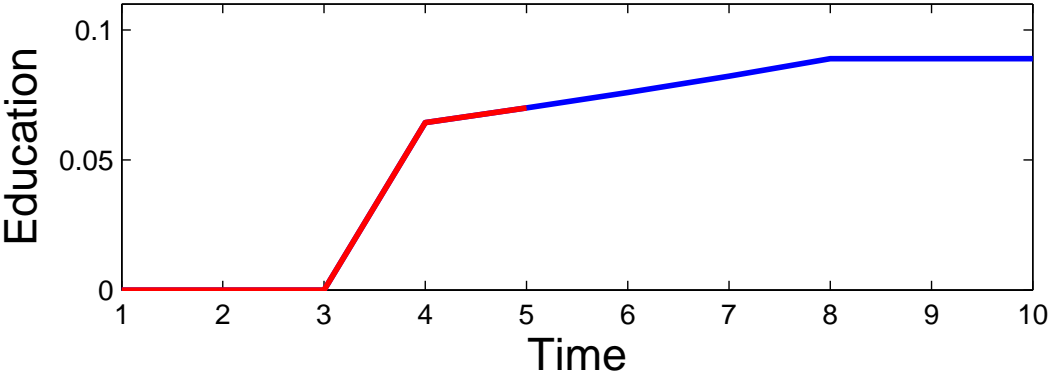
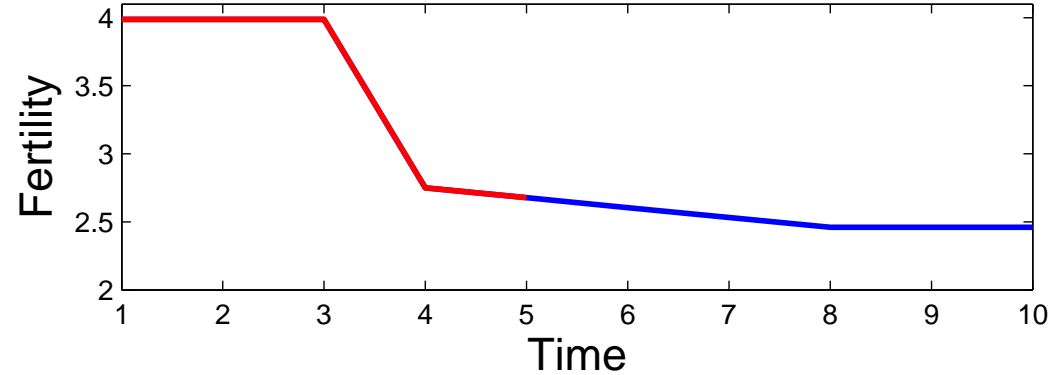
The Outcome under Optimal Female Empowerment:



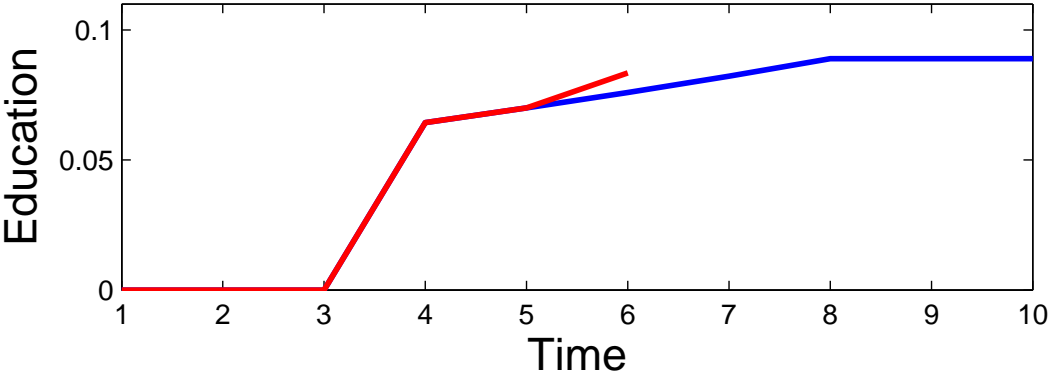
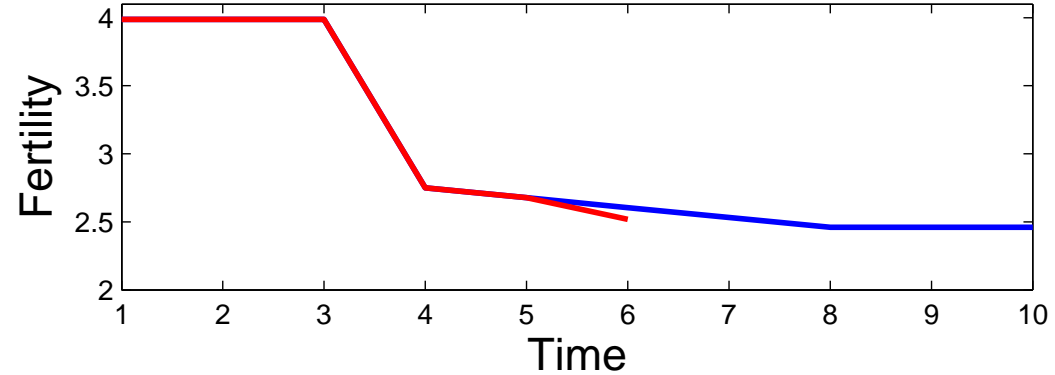
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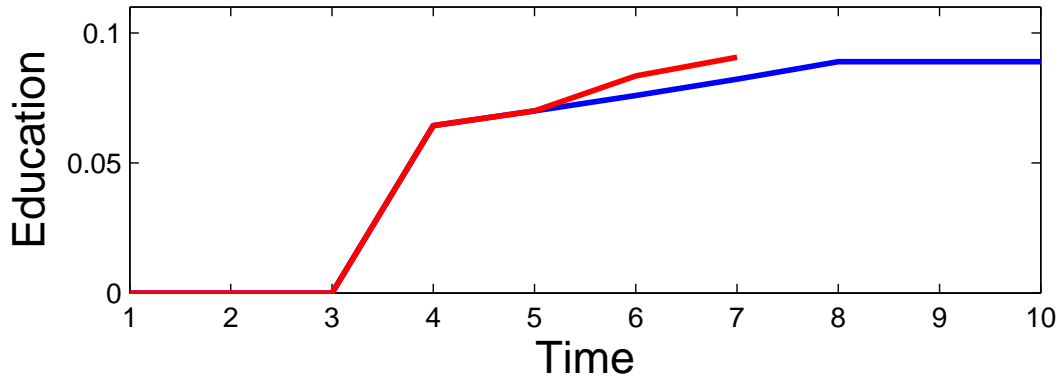
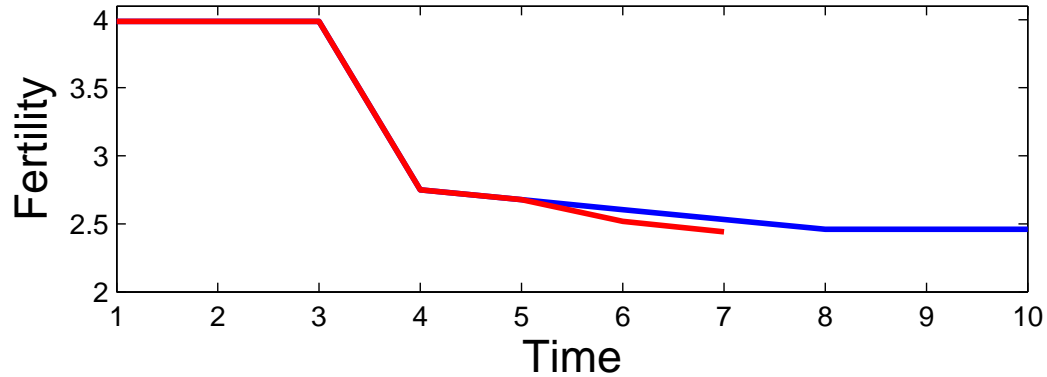
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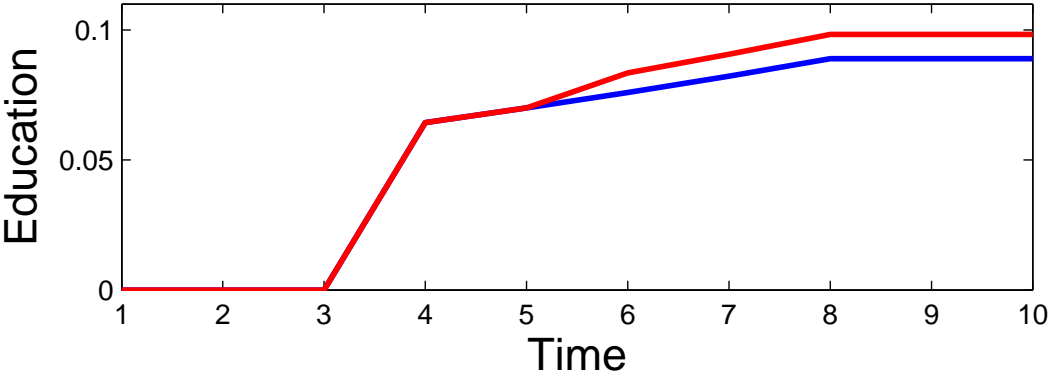
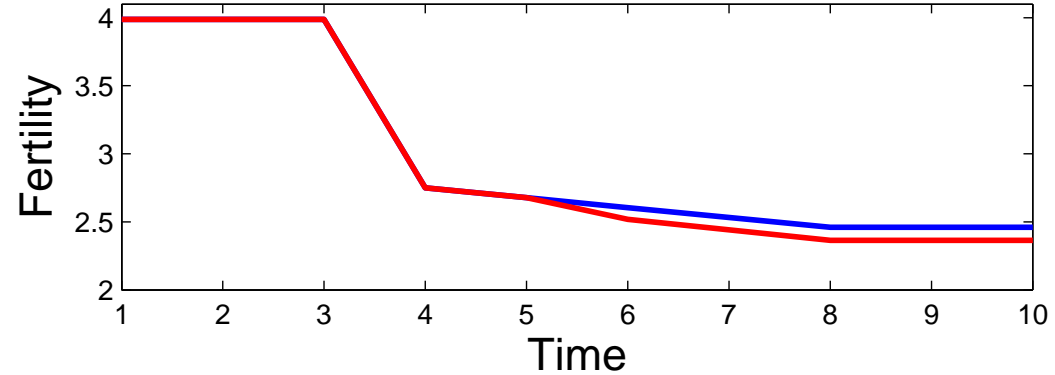
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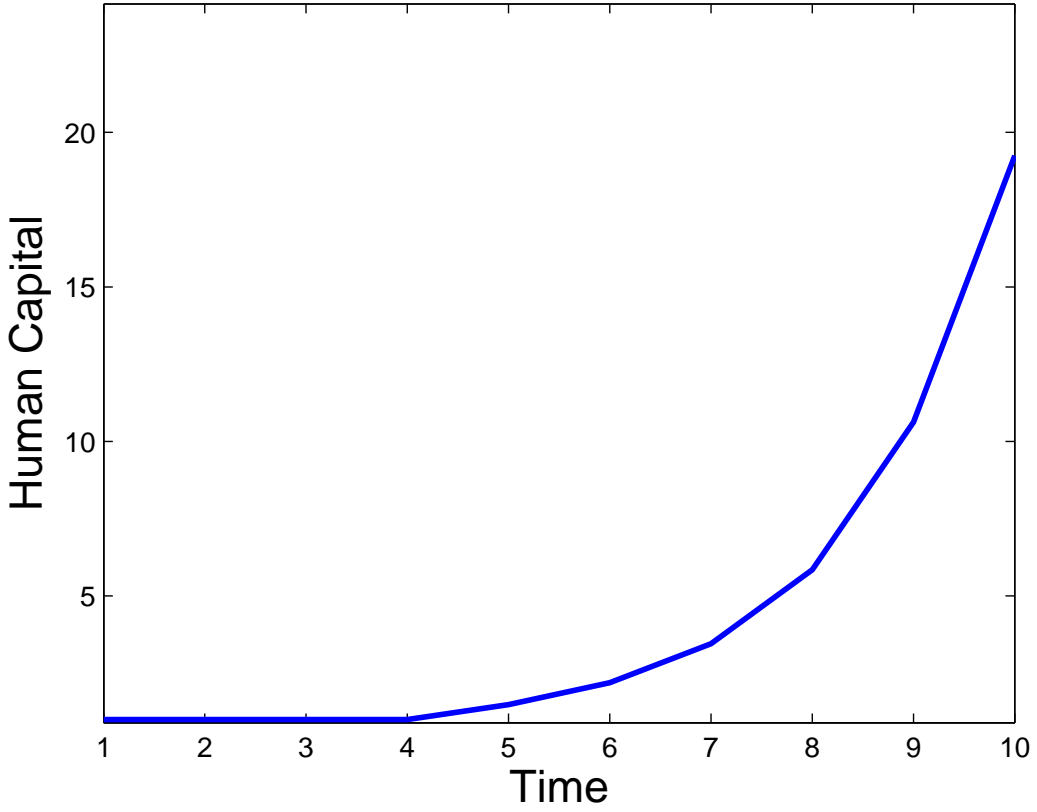
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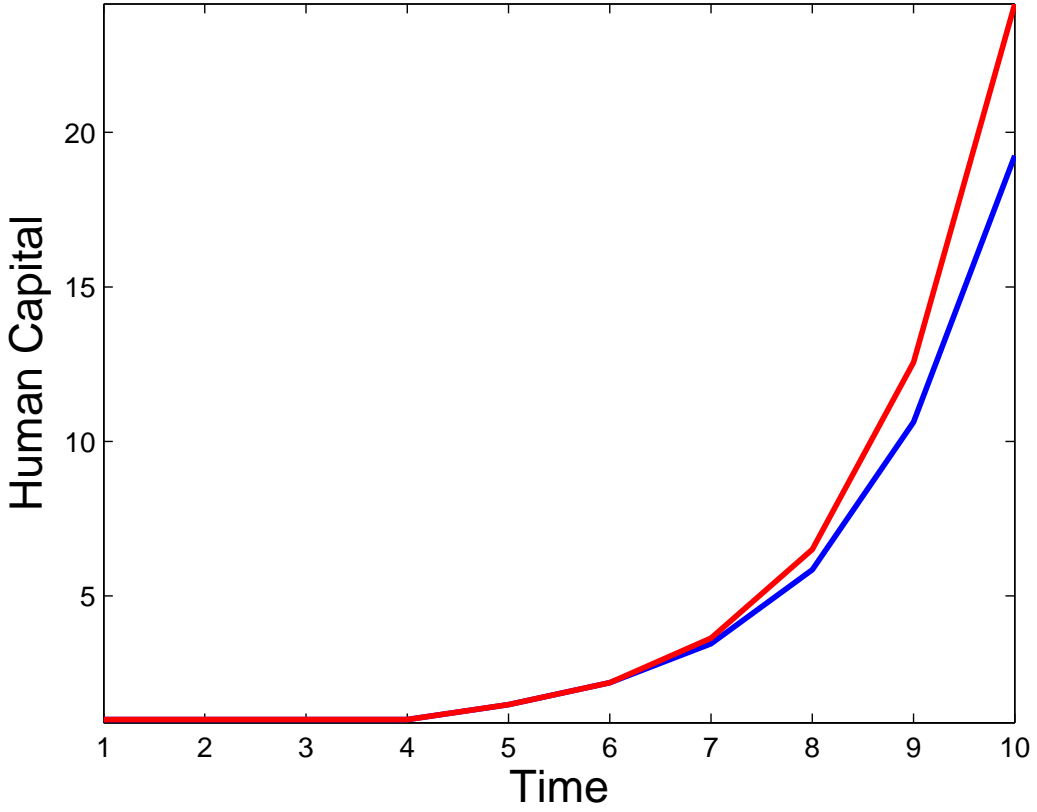
The Outcome under Optimal Female Empowerment:



Human Capital under Permanent Patriarchy:



Human Capital under Optimal Female Empowerment:



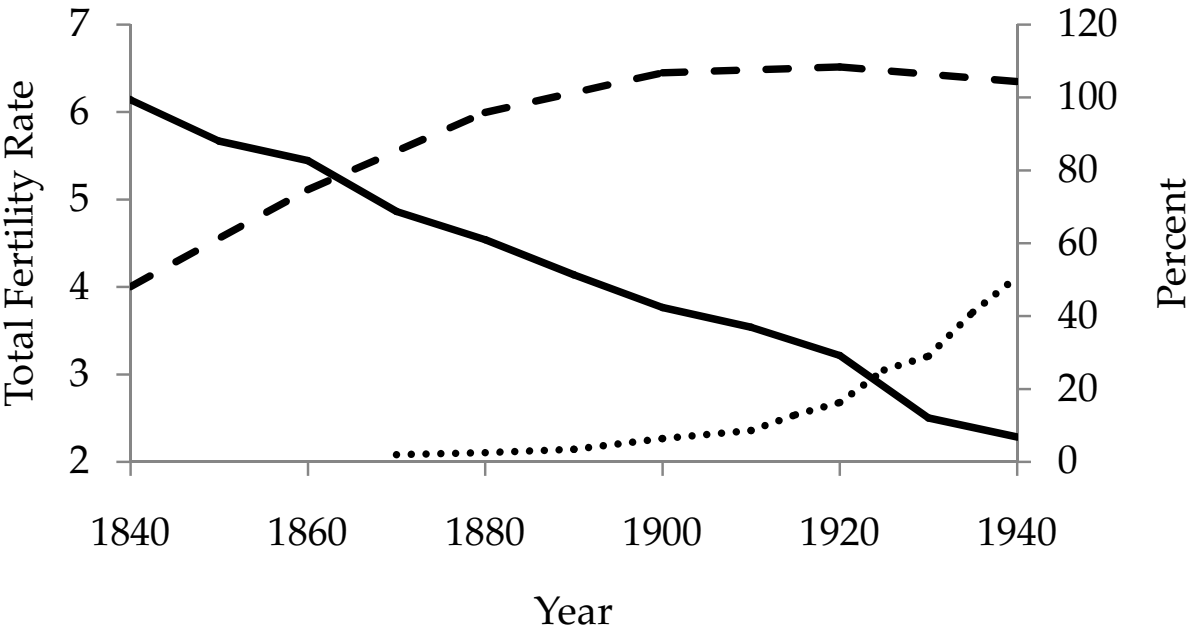
Timing Implications:

- Fertility decline and rising demand for education starts before expansion of female rights.
- Once female rights are extended, fertility decline and expansion of education accelerate.

Timing of Female Empowerment in the United States:

- 1769: “The very being and legal existence of the woman is suspended during the marriage.”
- 1839: Mississippi grants women the right to hold property with their husband’s permission.
- 1869: Wyoming passes the first women suffrage law.
- 1900: Every state has passed legislation granting married women some control over their property and earnings.
- 1920: 19th amendment granting all women right to vote.

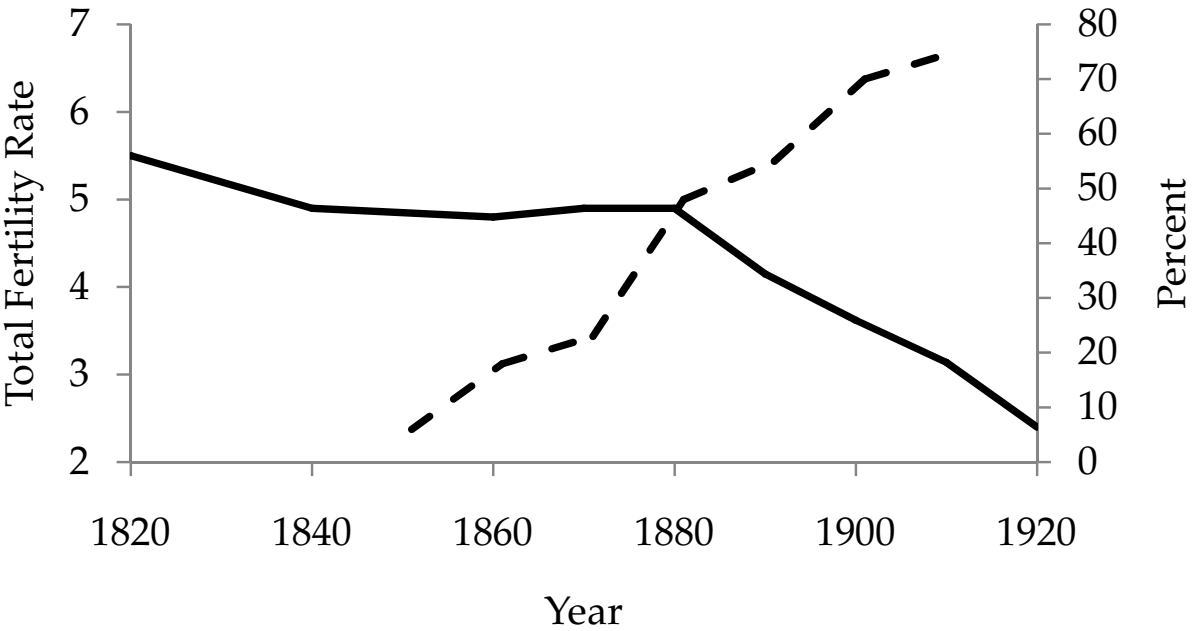
Fertility and Education in the United States:



Timing of Female Empowerment in England:

- 1839: Custody of Infants Act. Divorced and separated women can apply for their children under the age of seven.
- 1857: Matrimonial Causes Act. Women can apply for divorce, regain full property rights after divorce.
- 1870, 1882: Married Women's Property Act. Married women gain control over their earnings and property, can enter into contracts.
- 1918: Woman Suffrage Act.

Fertility and Education in England:



Extension I: Changes in Labor Market

- Geddes and Lueck (AER 2002) argue that changes in technology made female work more profitable.
- This in turn accentuated an agency problem between husband and wife (if effort is unobservable).
- Cost from not giving self-ownership to wives became too high.
- Men extended rights.

Extension I: Changes in Labor Market

- Geddes and Lueck (AER 2002) argue that changes in technology made female work more profitable.
- This in turn accentuated an agency problem between husband and wife (if effort is unobservable).
- Cost from not giving self-ownership to wives became too high.
- Men extended rights.
- Problem 1: Timing. Married FLFP by 1900 about 5%. Large changes in 20th century.
- Problem 2: No correlation between FLFP and rights on state level (Evan Roberts 2006).

Female Labor Market in Our Model

- Market production: $Y = A l_f^\alpha l_m^{1-\alpha}$
- Effective labor supply: $l_f = t_f H_f$ and $l_m = t_m H_m$
- Wages: $w_f = A \alpha l_f^{\alpha-1} l_m^{1-\alpha}$ and $w_m = A(1 - \alpha) l_f^\alpha l_m^{-\alpha}$
- Family budget constraint: $c_m + c_f \leq w_f l_f + w_m l_m$
- Analysis: increase in α .

Comparison: $\alpha_L < \alpha_H$

- Education: $e_f^H > e_f^L$.
- Market work: $t_f^H > t_f^L$.
- Fertility: $n^H < n^L$.
- Wage ratio (wages per unit of time): $\frac{w_f^H H_f^H}{w_m^H H_m^H} > \frac{w_f^L H_f^L}{w_m^L H_m^L}$
- Thus, by many conventional measures, an increase in α increases importance of women.

Optimal Regime Choice

- However, can show that the value function comparison does *not* depend on the regime.
- Thus, optimal regime choice *independent* of female involvement in labor market.

Extension II: Public Education

- Free public education was introduced during the same period when women's rights were first expanded.
- Is a public education policy a substitute for women's rights?
- Answer: Depends on whether public and private inputs in the production of human capital are substitute or complements.
- When inputs are complementary, education policies and expansion of women's rights are mutually reinforcing.

The Model with Public Schooling

- Consider production function for human capital that involves a public schooling input s :

$$H' = B(e^\eta s^{1-\eta})^\theta H_f^\beta H_m^{1-\beta}$$

- s is in units of teacher's time.
- Public schooling financed through tax τ on (male) income.
- Each teacher can educate S children:

$$s = \frac{\tau S}{2n}.$$

- Tax is determined each period through vote among the male population.

Results for Extended Model

- Increase in θ leads to more spending on public education and to adoption of women's rights.
- Incentive for adopting women's rights higher when public education is present (i.e., critical θ is lower).
- Men may have an incentive to vote for female school suffrage.

The Changing Role of the Family:

- New view of childhood developed in 19th century: innocent beings who should be nurtured and protected.
- Increasing separation between work and home spheres.
- Heightened appreciation of motherhood.

The Political Debate in England:

- Child custody: Gradual shift from rights of fathers to needs of children and nurturing role of mothers.
- Divorce: Administrative simplification, wider access to divorce, improved legal position of separated and divorced women and their children.
- Property laws: Emphasis on protecting women and children from irresponsible husbands; protection of working women's earnings; effects on the education of women and children.

Times of London Editorials:

- 1864: *“We must here, as ever, adapt human laws to the natural inequality of the sexes, and give the superiority of right to that which cannot but have the superiority of power.”*
- 1868: *“The proposed change would totally destroy the existing relation between husband and wife. That relation is at present one of authority on the one side and subordination on the other. . . . If a woman has her own property, and can apply to her separate use her own earnings, . . . what is to prevent her from going where she likes and doing what she pleases? The family would lose its unity, and the basis of our whole social life would be destroyed.”*

- 1869: *“It is true that theoretically he is liable to maintain her, as well as their children. But this liability is practically qualified. . . . As for children, no degree of neglect short of criminal maltreatment brings the father within the penalties of the law . . . While the Common Law makes the husband master of all his wife’s personal property, no equivalent obligation to support her or their children in tolerable comfort is imposed upon him.”*
- 1873: *“Indeed, the gross inhumanity of taking away infants, perhaps hardly able to walk or talk, from the mother’s care could not be seriously defended. . . . but was it less [indefensible] to take them from her, against their will and hers, . . . after they had grown up in her society, had become accustomed to her love, her sympathy, and her watchful guidance, and had developed morally and intellectually under her training?”*

More Evidence from the Political Debates:

- Mary Ann Mason (1994) on the United States:

It was not necessarily sympathy for the cause of women's rights that prompted men to vote for women's property rights but rather . . . because they perceived plainly that their own wealth, devised to daughters, who could not control it, might be easily gambled away.

- Southard (1993) on India:

Professional men seeking upward mobility found that uneducated wives limited by the parda system could not take the lead in the education of their children nor provide wifely support for their professional careers.

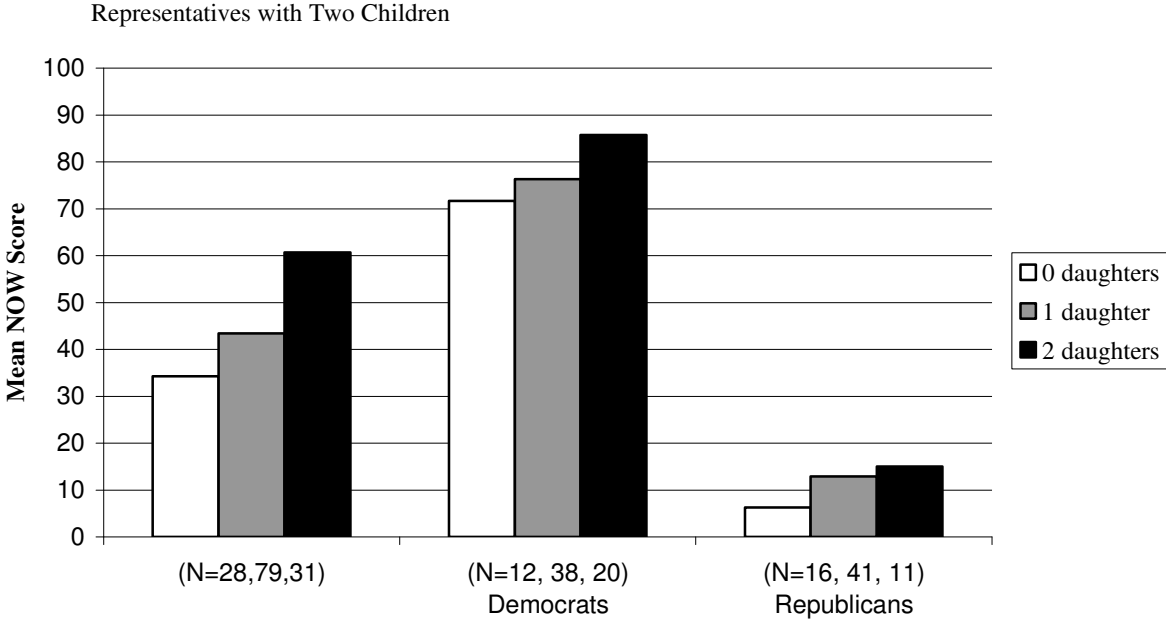
More Evidence from the Political Debates:

- Nolte (1986) on Japan:

[Proponents of women's rights stressed the] importance of the nurturing mother and argued that more rights would lead to more informed homemakers.

Evidence from U.S. Congress:

NOW: National Organization of Women



Extensions:

- Gradual introduction of rights.
- Gender education gap.
- Role of wars.
- Implications for development.

Conclusions:

- Extension of female rights is a prime example of voluntary power sharing.
- Power sharing can be generated in model with tradeoff between rights of one's own and other men's wives.
- Theory explains why rights were extended when increased importance of education changed role of the family.
- Theory leads to reassessment of relationship between traditional role models and women's liberation.
- Two-way interaction between development and female empowerment.