The Economics of The Family

Dr Abigail Adams

Spring 2016

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Outline for Today

I Motivation

II Housekeeping

III Topic Overview

IV Key Changes

V Goldin's Phases

VI Gains to Household Formation

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Why are economists interested?

I Policy

II Empirics

III Theory

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Course Structure

I. Class participation (10%)

II. Problem set (15%)

III. Research proposal (75%)

   i. Question identification (10%)

   ii. Mid-term draft (25%)

   iii. Final proposal inc. preliminary analysis (40%)

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Topics

I Family/Group decision making

II Household formation & Divorce

III Family structure & Children

IV Women in the labour market

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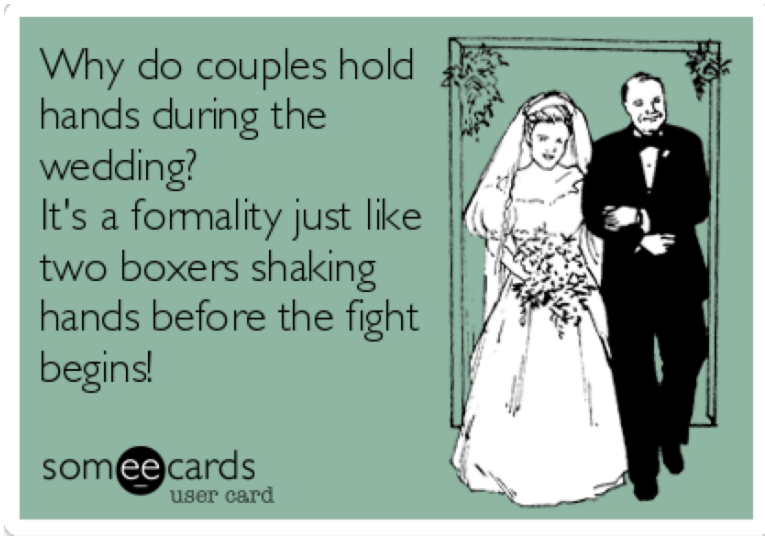
Topics- Family/Group Decision Making

i What happens within existing unions?

ii Cooperative v. noncooperative

iii Degree of commitment



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Topics- Household formation & divorce

i Who marries whom?

ii Explaining rise in divorce

iii Influence on what happens in existing unions

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Topics- Family structure & children

i Modelling children and the choice to have children

ii Cross country differences

iii Birth control

iv Child investment & old age care

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Topics - Women in the labour market

i Choice between home and market work

ii Discrimination

iii Workplace change

iv Higher education

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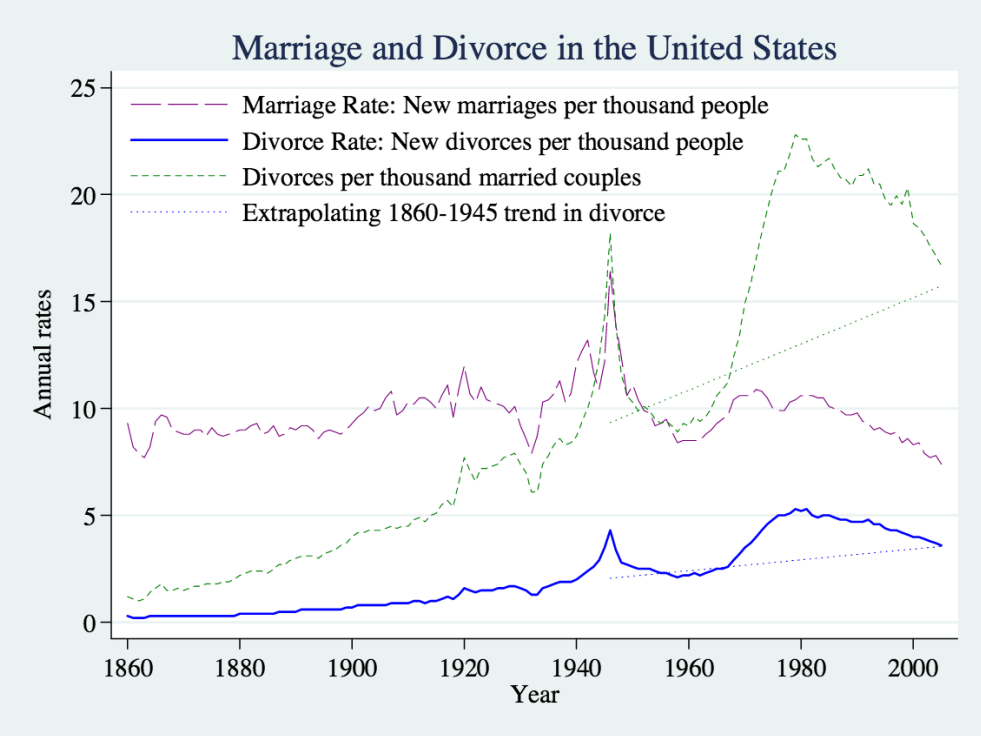
Marriage & Divorce

Figure 1: Marriage and Divorces per Thousand People 1860-2005



Sources: For the United States, data for 1860-1919 are from Jacobson (1959); 1920-1998 from Carter et. al. (2006), *Historical Statistics of the United States, Millenium Edition*; 1999-2005 from *Statistical Abstract of the United States*.

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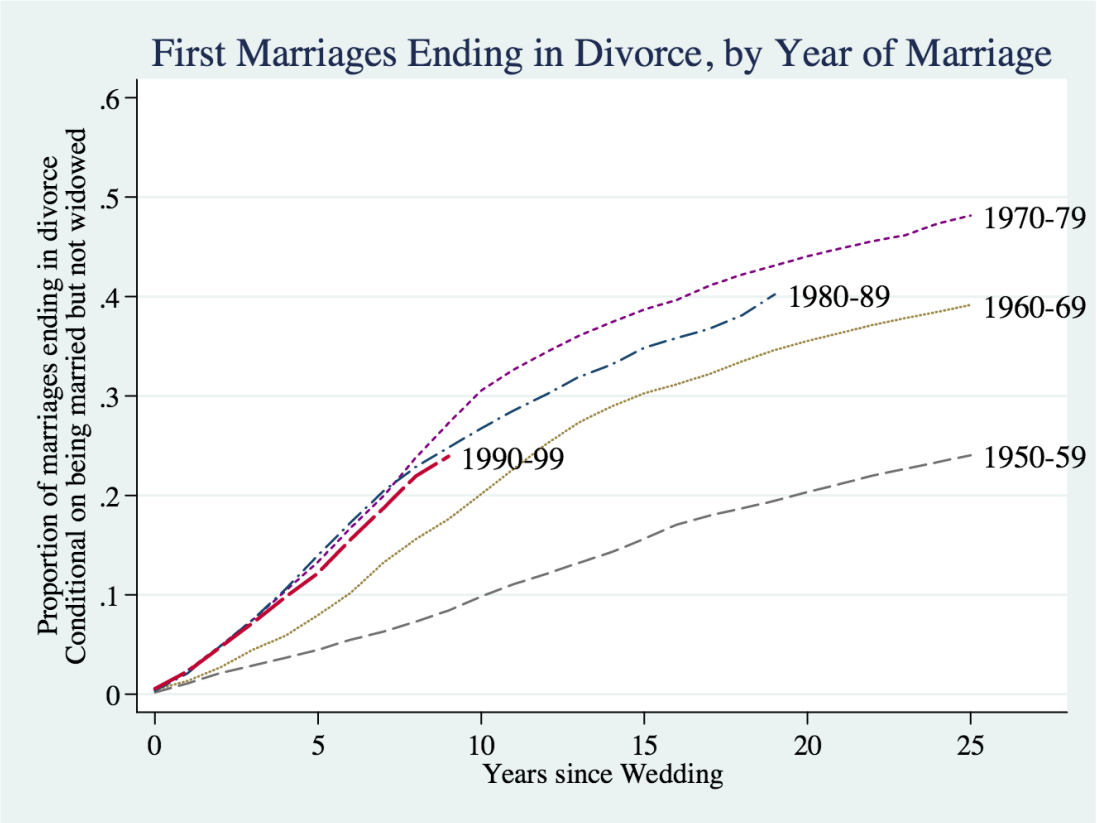
Marriage & Divorce



Source: Retrospective marital histories recorded in the 2001 Survey of Income and Program Participation.

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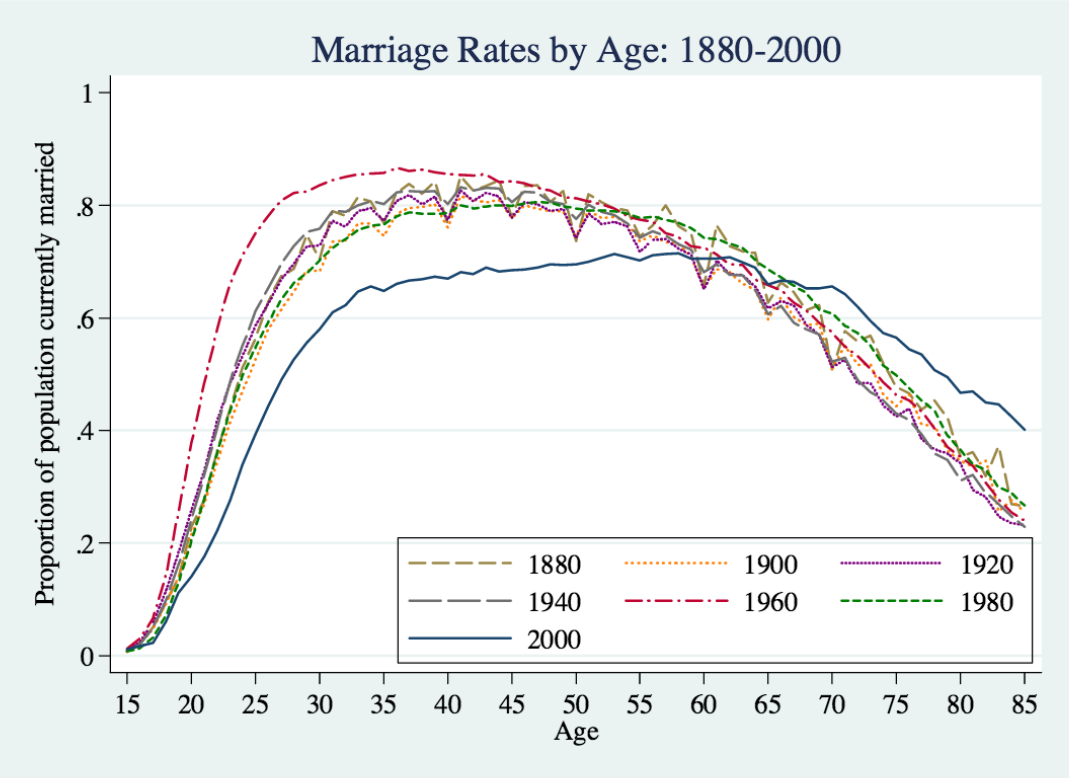
Marriage & Divorce



Source: U.S. Censuses of Population, 1880-2000.

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Time Spent in Marriage

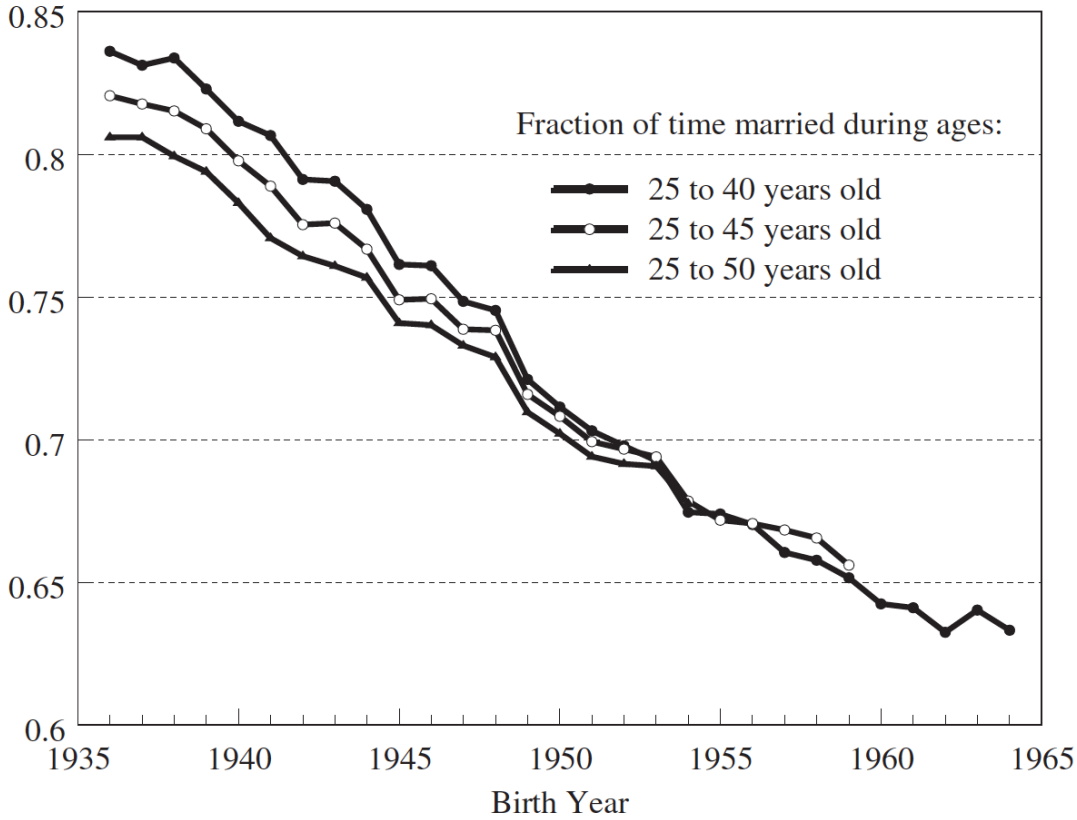

FIGURE 9. FRACTION OF YEARS SPENT MARRIED FOR ALL WOMEN

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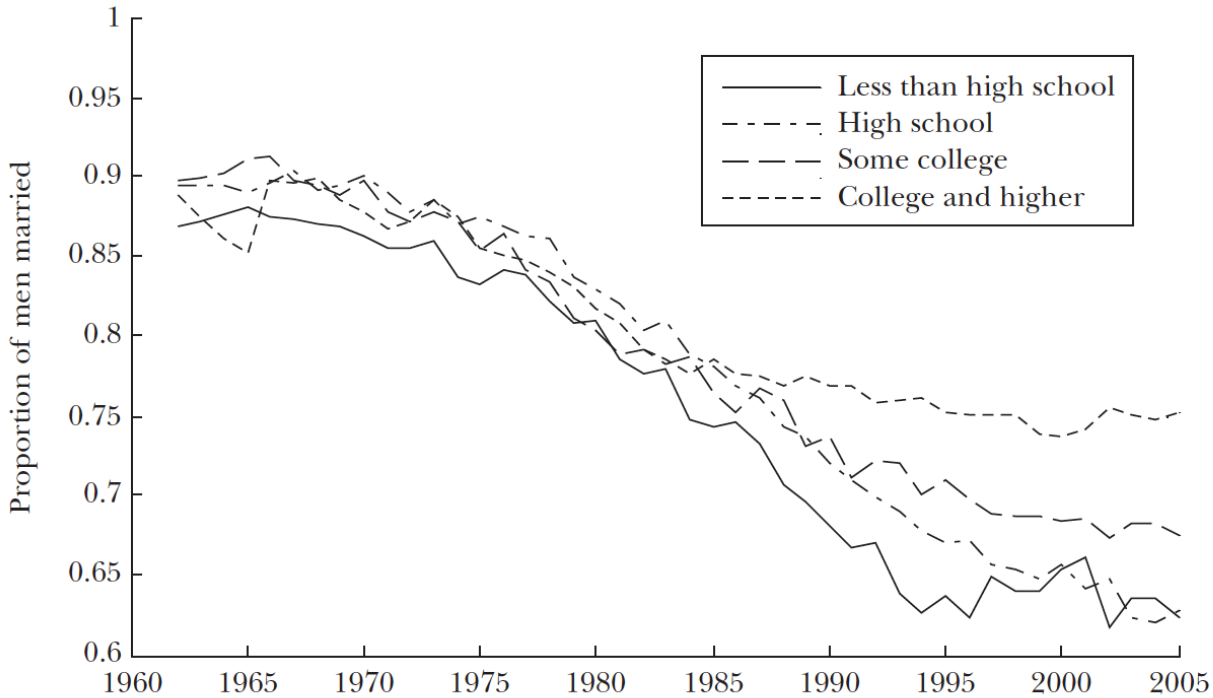
Heterogeneity

Diverging Family Lives of More and Less-Educated

A: Proportion of Men Married at Ages 30–50



Source: March 1962–2005 Supplements to the Current Population Survey.
Note: Sample includes men 30–50 years old, not inmates or in armed forces.

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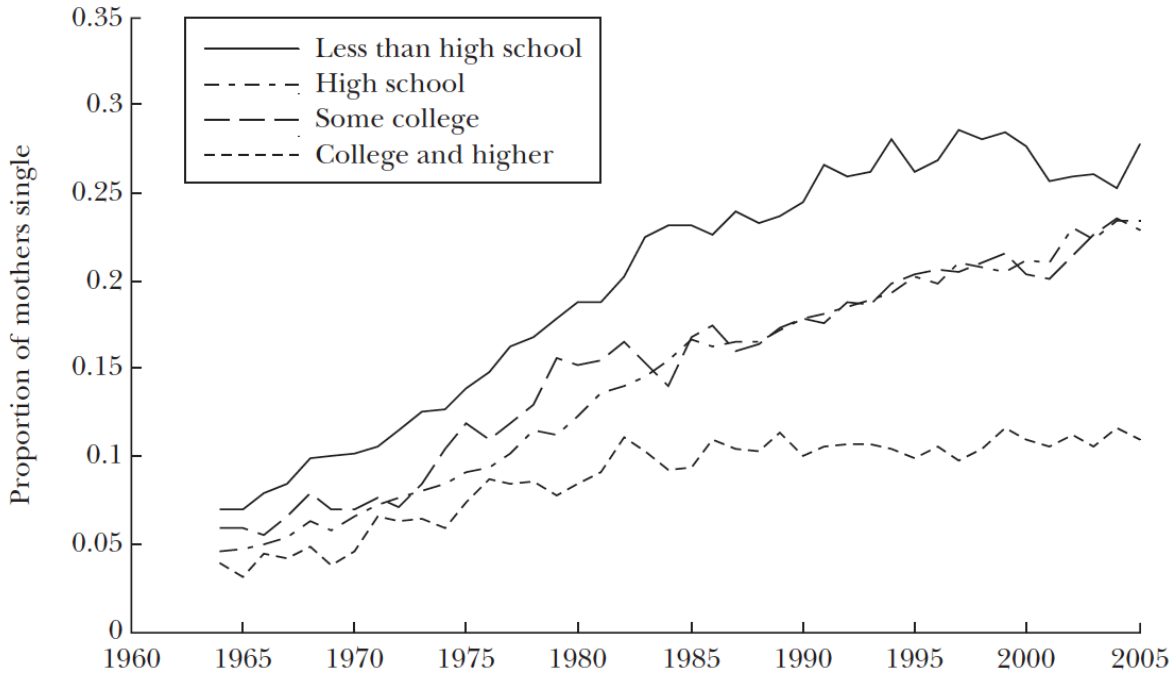
Children

C: Proportion of Mothers Who Are Single at Ages 30 to 50



Source: March 1964–2005 Supplements to the Current Population Survey.
Note: Sample includes women 30–50 years old with children under 18 in the household.

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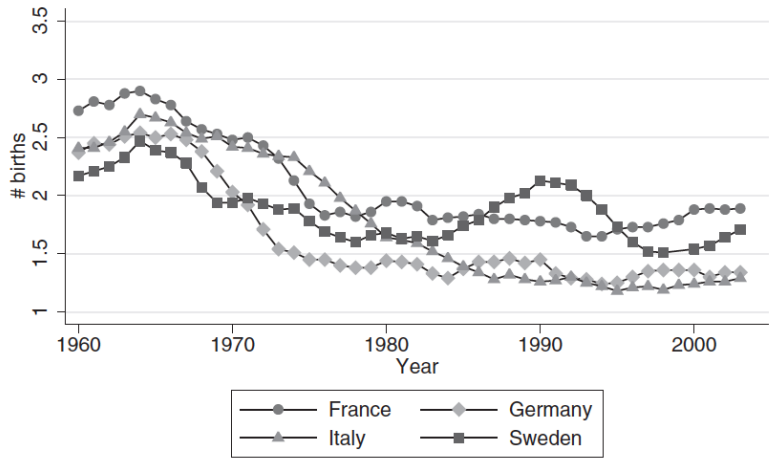
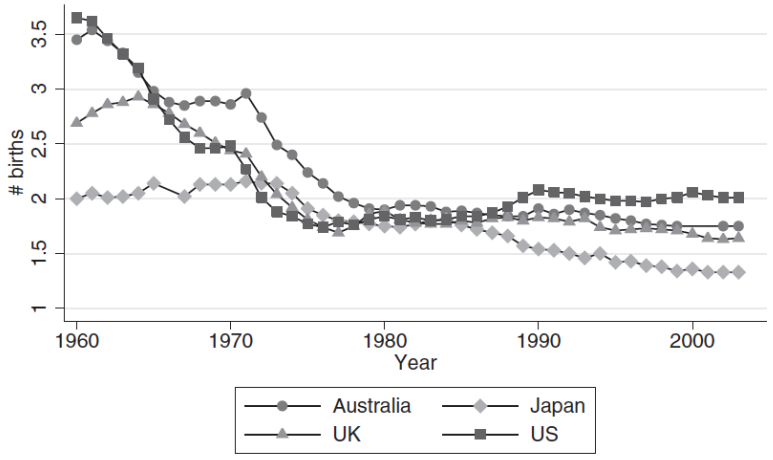
Fertility Rate

Fertility Rates (number of births per woman)

(*a*) Continental Europe



(*b*) Anglo-Saxon countries and Japan



Source: World Bank (2005).

Labour Force Participation

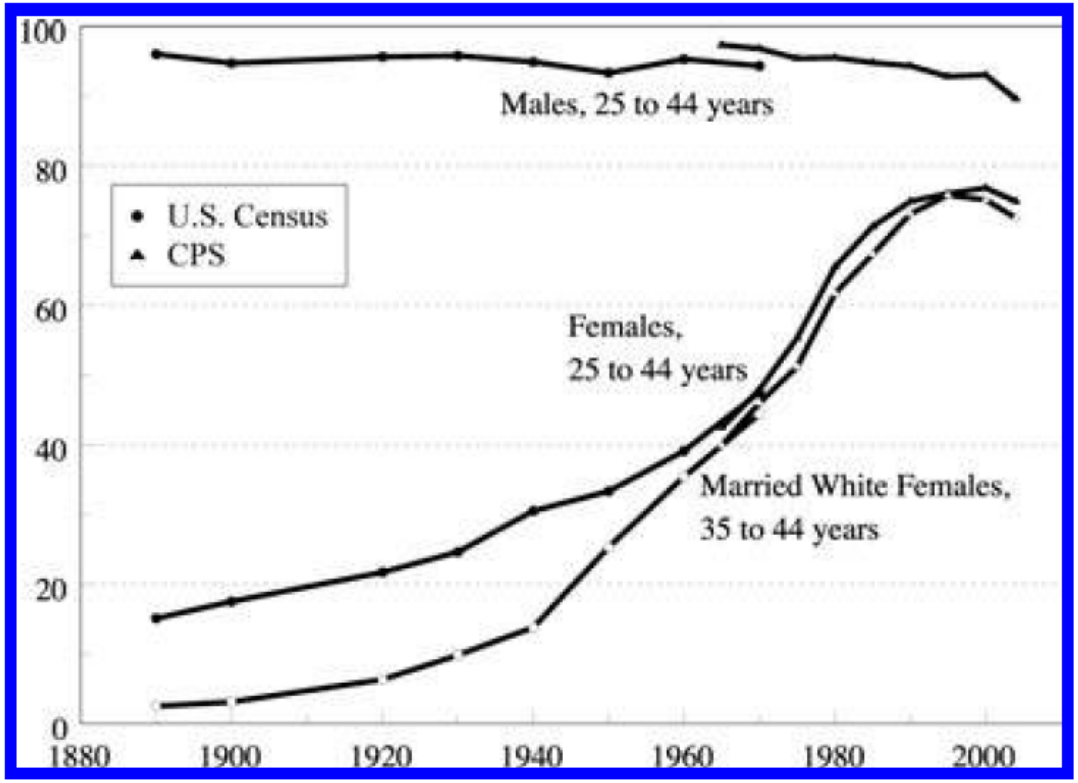


FIGURE 1. LABOR FORCE PARTICIPATION RATES FOR FEMALES AND MALES BY AGE AND MARITAL STATUS: 1890 TO 2004

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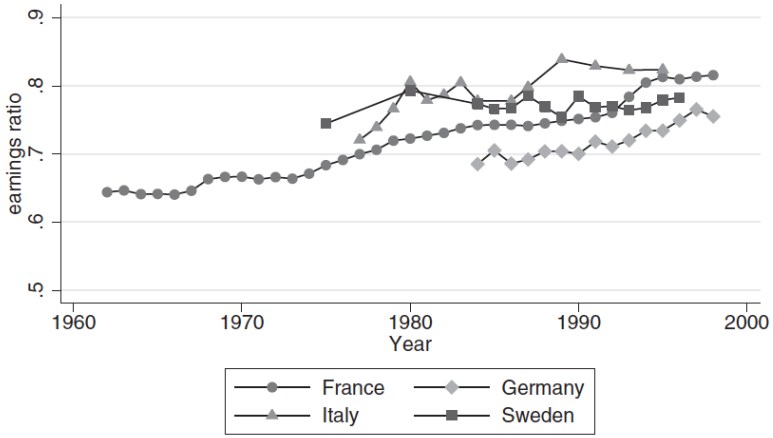
Wage Gap

Gender Earnings Ratio
(female/male gross earnings)

(*a*) Continental Europe



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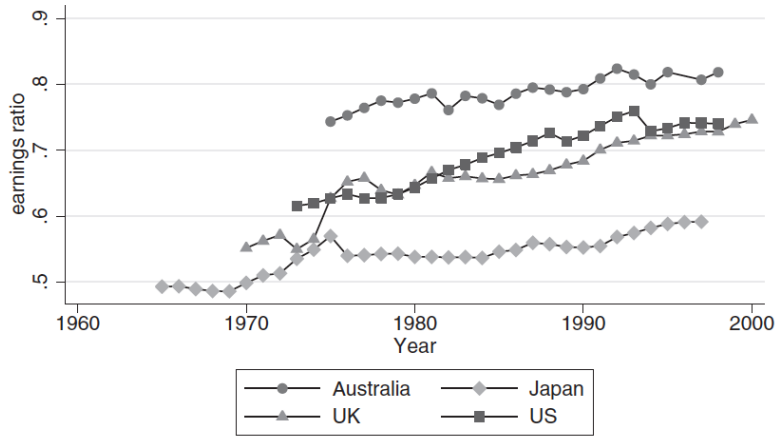

Note: Gross earnings for full-time workers only.
Source: OECD, Labour Force Statistics (2004).

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Evolutionary & Revolutionary Phases

I Goldin posits four distinct phases to women's increased involvement in the US economy.

II Distinguished between according to horizon, identity, and mode of decision making

III Each phase resulted in different magnitudes for two key labour supply parameters: the own-wage (compensated) elasticity and the income elasticity of the Slutsky equation.

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Recap: Income & Substitution Effects

I Uncompensated substitution effect (Marshallian wage elasticity)- how hours change in response to wages

$$\epsilon_u = \frac{w}{H}\frac{\partial H}{\partial w} = \frac{\partial ln(H)}{\partial ln(w)}$$

II Compensated substitution effect - how hours change in response to wages keeping utility constant

III Income effect - how hours change in response to income changes

$$\epsilon_y = \frac{Y}{H}\frac{\partial H}{\partial Y} = \frac{\partial ln(H)}{\partial ln(Y)}$$

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Recap: Income & Substitution Effects

I All linked by the Slutsky equation

$$\epsilon_u = \epsilon_c + \frac{wH}{Y}\epsilon_y$$

II See Blundell and MacCurdy (1999) for derivation

III Assume leisure is a normal good - $\epsilon_y < 0$

IV Rationality dictates that $\epsilon_c \geq 0$

V 'Fight' as to which dominates

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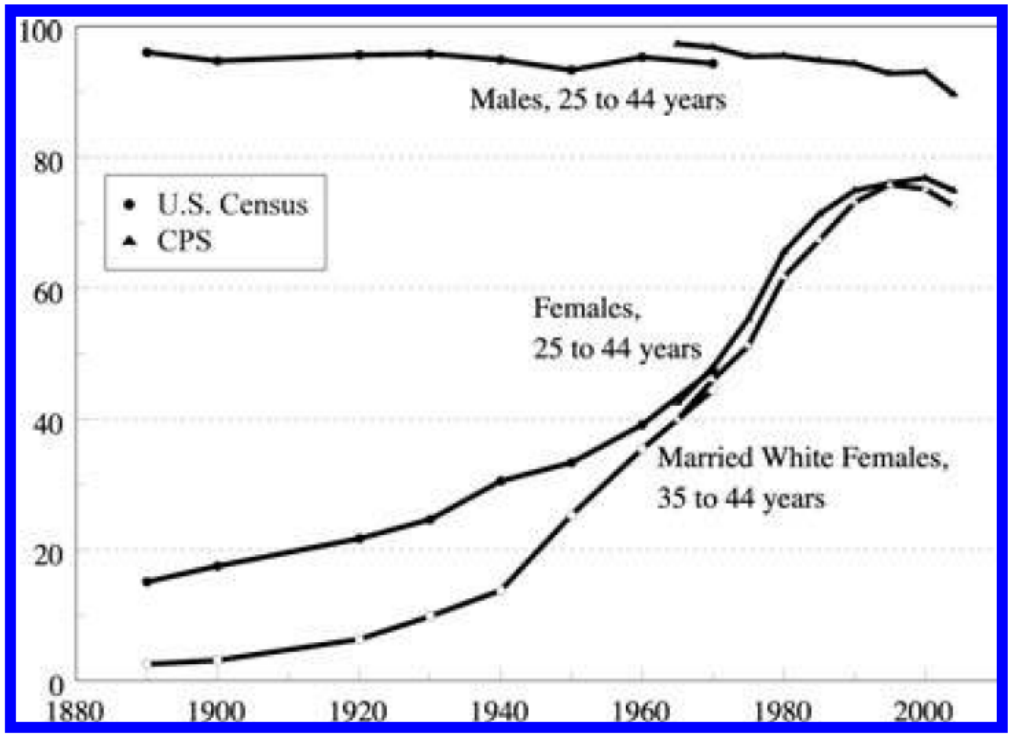
Evolutionary & Revolutionary Phases

- Phase 1: Late Nineteenth Century to the 1920s - The Independent Female Worker



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Evolutionary & Revolutionary Phases

- Phase 1: Late Nineteenth Century to the 1920s - The Independent Female Worker

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Evolutionary & Revolutionary Phases

I Phase 1: Late Nineteenth Century to the 1920s - The Independent Female Worker

i Social stigma; jobs often dirty and dangerous

ii Av. female worker less educated than the population average - 'lower class women have always worked'

iii Large negative income effect dominating - husband and own wage increases pushing out of the labour force.

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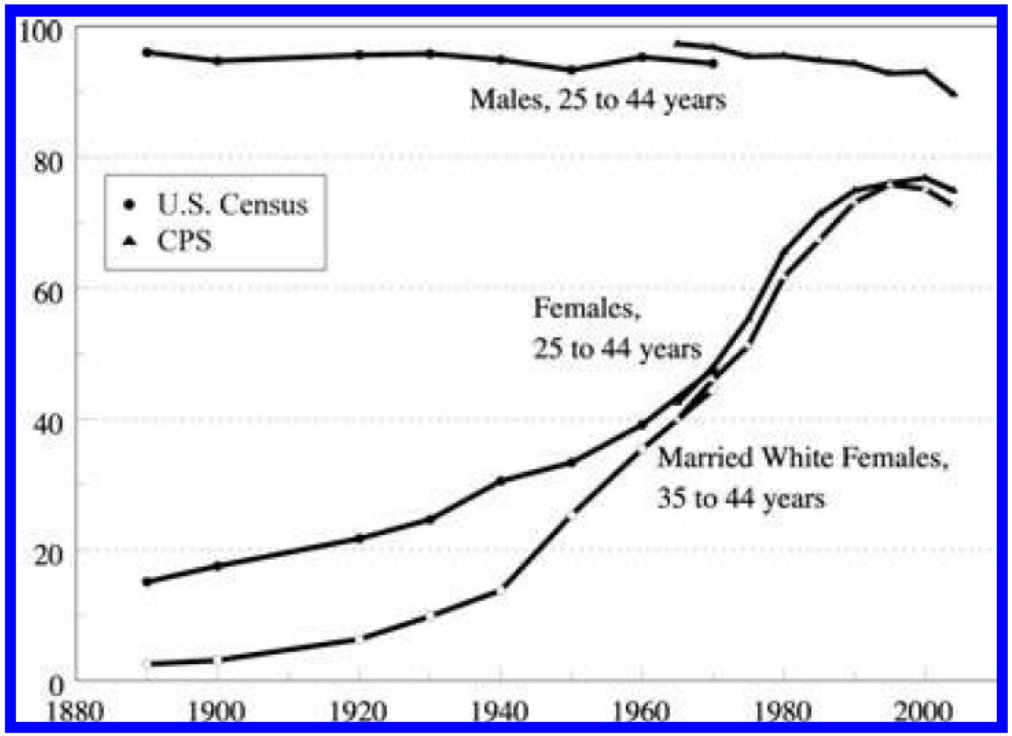
Evolutionary & Revolutionary Phases

- Phase 2: 1930s-1950s - Easing the Constraints on Married Women's Work



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Evolutionary & Revolutionary Phases

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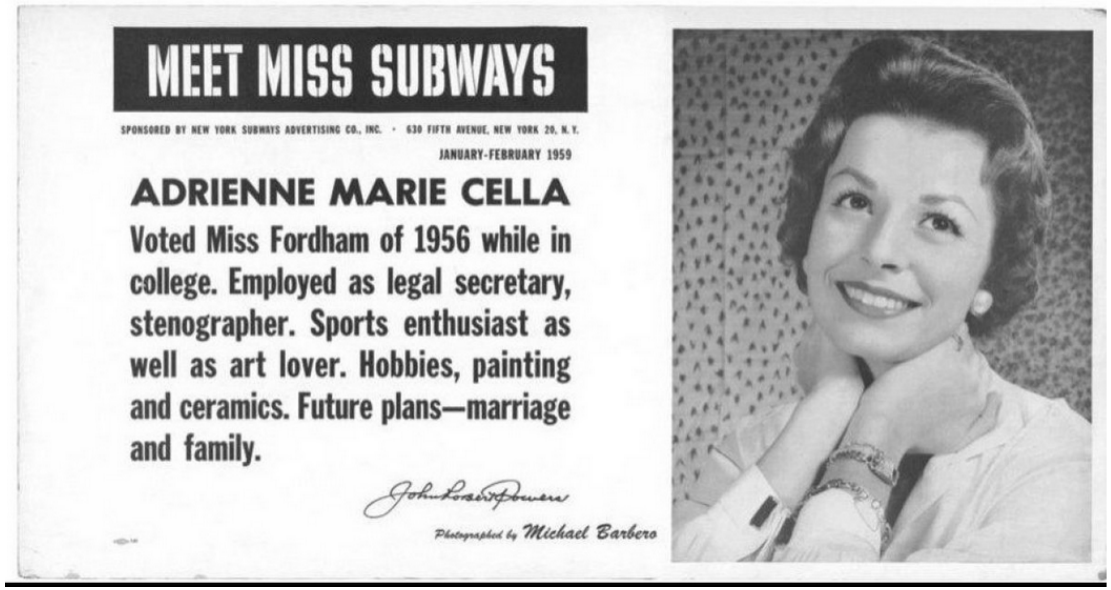

Evolutionary & Revolutionary Phases

- Phase 2: 1930s-1950s - Easing the Constraints on Married Women's Work
  - i Technological change increasing demand for office workers & large increase in high school graduation rates
  - ii Increase in part-time work enabling increase in substitution effect - previous restrictions placed bounds on the magnitude of the elasticity, as before restricted to adjustment on the extensive margin while now flexibility on intensive margin
  - iii Diffusion of new home technologies reducing female reservation wage

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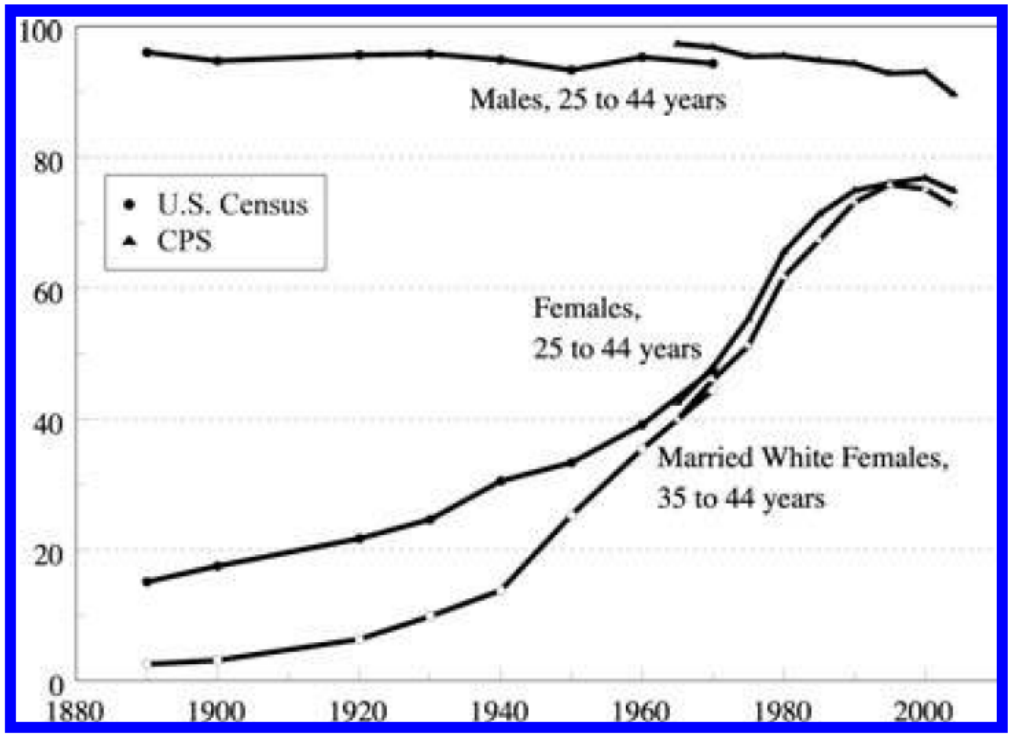
Evolutionary & Revolutionary Phases

- Phase 3: 1950s-1970s - Roots of the Revolution



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Evolutionary & Revolutionary Phases

I Phase 3: 1950s-1970s - Roots of the Revolution

i Income effect continuing downward trend as work for married women became more acceptable (some impact of war time work)

ii Average working woman in 1940s now more educated than the average working woman in the population

iii Demand function for labour increasing over a relatively stable and highly elastic female labour supply function.

iv However, few women expected to be employed for most of their adult lives - few had a career in mind

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Evolutionary & Revolutionary Phases

- Phase 4: Late 70s to Present - The Quiet Revolution

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Employment Expectations

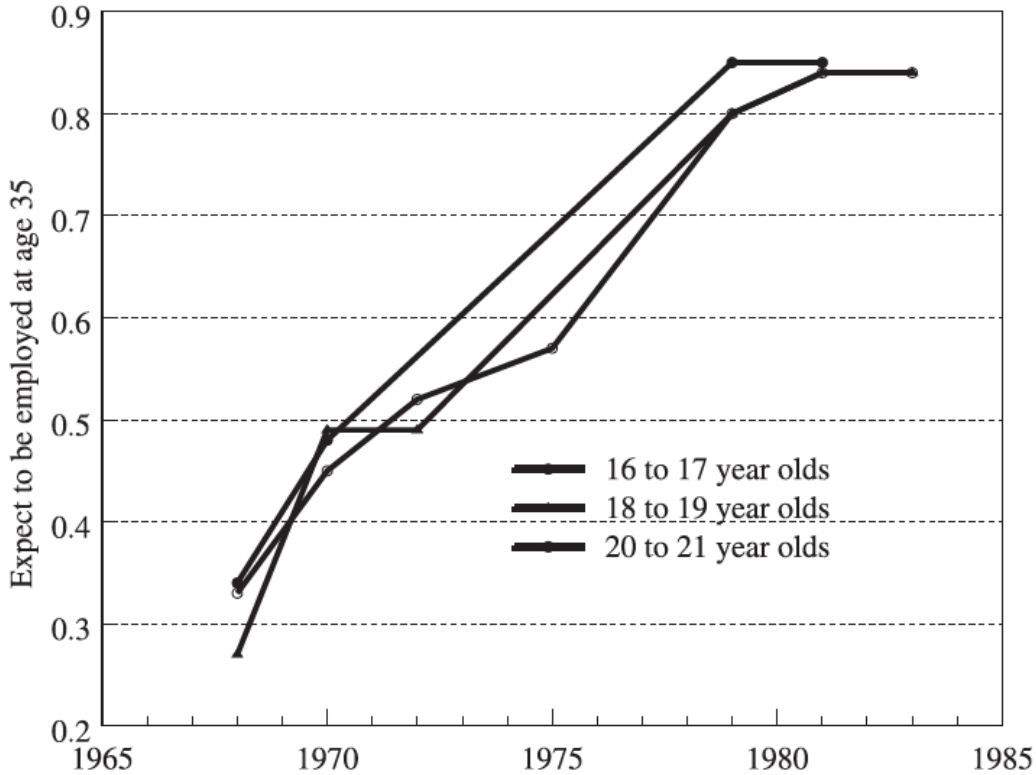

FIGURE 2. EMPLOYMENT EXPECTATIONS OF FEMALE YOUTH BY AGE: 1967 TO 1984

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College Attendance

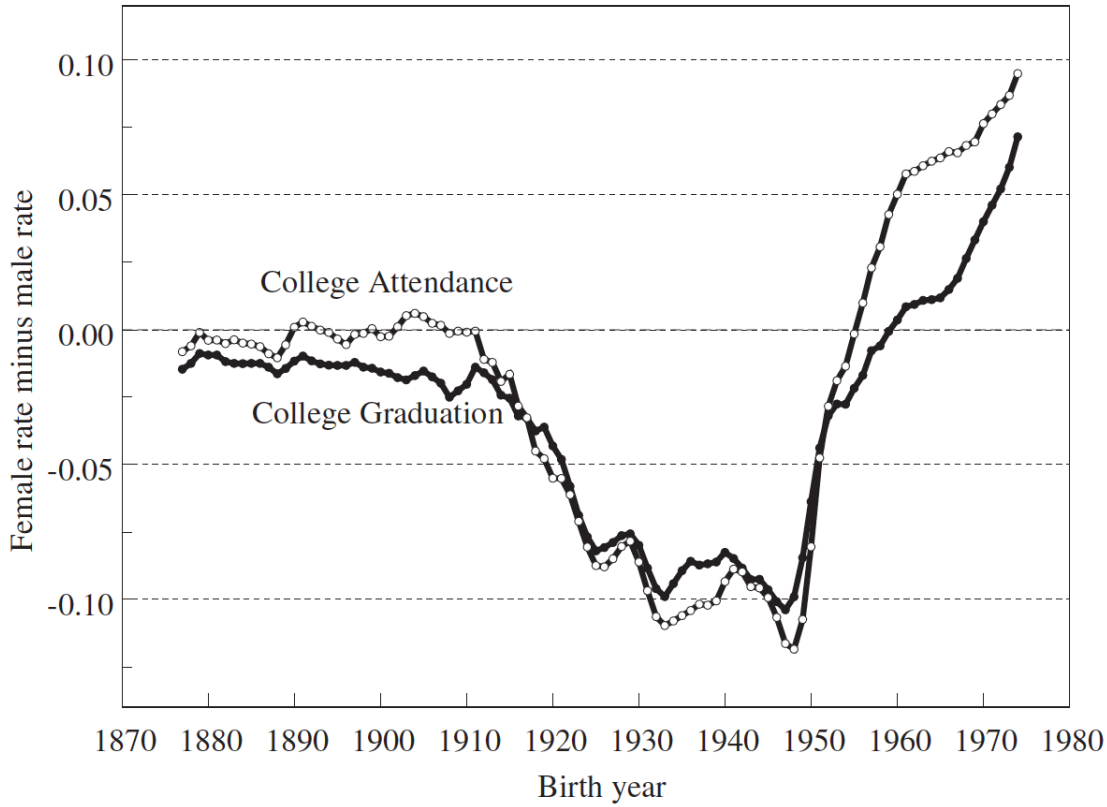

FIGURE 3. FEMALE MINUS MALE COLLEGE ATTENDANCE AND GRADUATION RATES: BIRTH COHORTS, 1877 TO 1974

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College Attendance

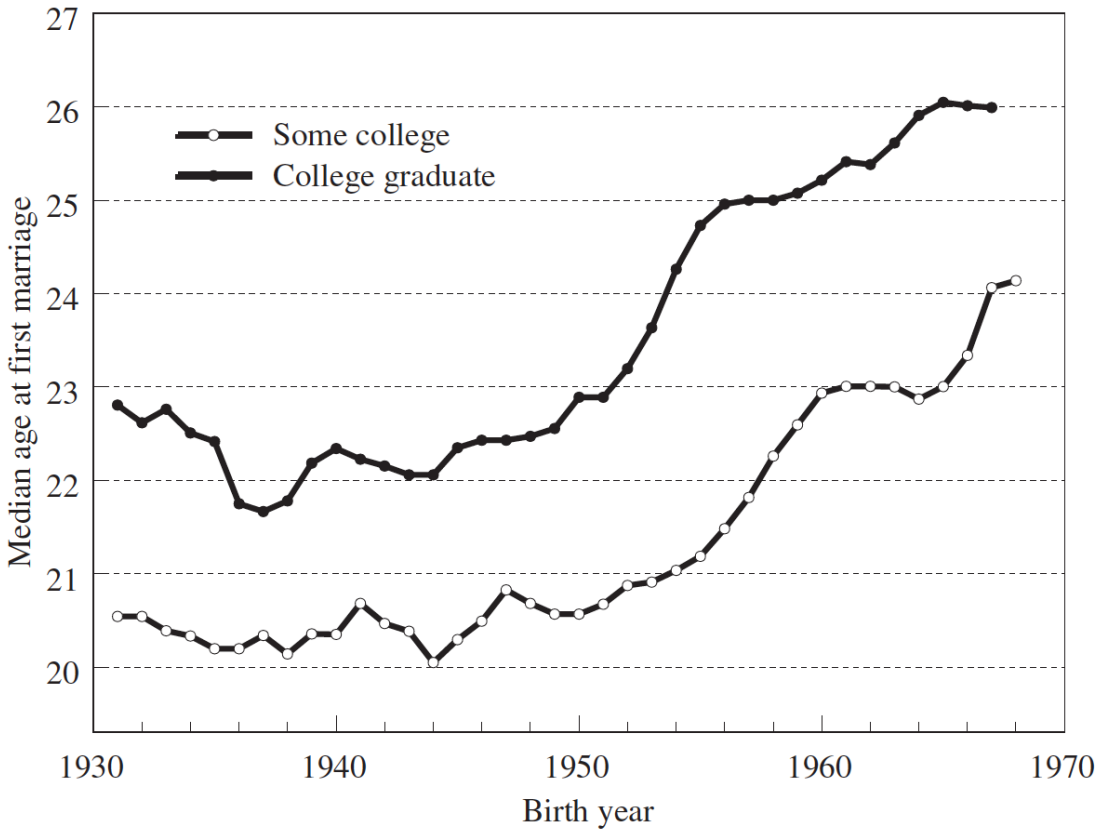

FIGURE 4. MEDIAN AGE AT FIRST MARRIAGE FOR BIRTH COHORTS OF FEMALE COLLEGE GRADUATES AND ATTENDEES: 1931 TO 1968 BIRTH YEARS

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Questions & Reflections

I Levelling off in growth of female participation rates — why? Are women opting out?

II Why does the gender pay gap still exist? Why does it differ across occupations?

III What caused the rise in divorce? Why is there so much heterogeneity in family structure?

IV What role has legal and social security reform played? What role might it play in the future?

V **Moving from descriptive to analytic and predictive**

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The Economic Gains to Marriage

I Marriage = partnership for the purpose of the joint production and joint consumption (inc. children)

II Gains from marriage include:
   i Sharing public goods
   ii Division of labour to exploit comparative advantage and increasing returns to scale
   iii Risk pooling
   iv Extending credit
   v Children

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Relationship to the Market

I None of the gains actually require the traditional family institution

II The role of the family depends on market conditions (& vice versa) — If all goods and work activities are marketable, no need to form marriages to enjoy increasing returns or pool risks

III Some argue that the family simply fills gaps in the market system

IV Other stress the intrinsic advantages in monitoring and enforcement that the family achieves

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Public goods

I Some consumption goods are non-rivalrous - expenditures on children, heating, housing

II A couple can always replicate the private consumption of the two partners as singles, purchase the maximal amount of the public good that each bought as singles, and still have money left over

III Use the concept of equivalent income to quantify how large these gains are — the amount of income needed by two singles to achieve the same outcome as if they lived together.

i Outcome - buying the same bundle / achieving the same utility level

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Specialisation

I Specialisation on the basis of comparative advantage

II Comparative advantage could be developed via differential investment or learning by doing

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Risk sharing

I Can trade consumption in different states of nature — both can be made better off by transferring resources to the person in a state where their marginal utility is relatively high provided that incomes are not perfectly correlated

II Efficient risk sharing — consumption of each family member only varies with family income

III Rosenzweig and Stark (1989) —- marriages in rural India arranged between partners who are significantly distant, reducing the correlation in rainfall and generating gains from insurance

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Next Week

I To understand many of the changes and the decisions made by existing unions, need to better understand the nature of the family decision process

II Cooperative v. Noncooperative static models

III Assign presentation topics

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