The Rise of the Working Married Woman: Evidence from U.S. Teachers in the 1930s

Amy Kim and Carolyn Tsao

September 28, 2023

Introduction

- ↑ in women's LFP driven by married women ▸ Women in LF
  - Married women grew from 5.6% of LF in 1900 to 25.8% in 2000

- Key barrier: **"marriage bars"** prevented employment of married women
  - Firm-level **'hire'** and **'retain'** bars
  - Enforced by over half of surveyed firms in 1931 Goldin 1988
  - In 1950's, demand for labor rose ⇒ marriage bars were 'lifted'.

- Limited work on marriage bars. Goldin 1988, 2021
  - We are the first to estimate **causal** effects of lifting marriage bars on LF outcomes.

- **Our focus:** Marriage bars in teaching

Introduction

- ↑ in women's LFP driven by married women ▶ Women in LF
  - Married women grew from 5.6% of LF in 1900 to 25.8% in 2000

- Key barrier: **"marriage bars"** prevented employment of married women
  - Firm-level **'hire'** and **'retain'** bars
  - Enforced by over half of surveyed firms in 1931 Goldin 1988
  - In 1950's, demand for labor rose ⇒ marriage bars were 'lifted'.

- Limited work on marriage bars. Goldin 1988, 2021
  - We are the first to estimate **causal** effects of lifting marriage bars on LF outcomes.

- **Our focus:** Marriage bars in teaching

Introduction

- ↑ in women's LFP driven by married women (▸ Women in LF)
  - Married women grew from 5.6% of LF in 1900 to 25.8% in 2000

- Key barrier: **"marriage bars"** prevented employment of married women
  - Firm-level **'hire'** and **'retain'** bars
  - Enforced by over half of surveyed firms in 1931 Goldin 1988
  - In 1950's, demand for labor rose ⇒ marriage bars were 'lifted'.

- Limited work on marriage bars. Goldin 1988, 2021
  - We are the first to estimate **causal** effects of lifting marriage bars on LF outcomes.

- **Our focus:** Marriage bars in teaching

Introduction

- ↑ in women's LFP driven by married women [▸ Women in LF]
  - Married women grew from 5.6% of LF in 1900 to 25.8% in 2000

- Key barrier: **"marriage bars"** prevented employment of married women
  - Firm-level **'hire'** and **'retain'** bars
  - Enforced by over half of surveyed firms in 1931 Goldin 1988
  - In 1950's, demand for labor rose ⇒ marriage bars were 'lifted'.

- Limited work on marriage bars. Goldin 1988, 2021
  - We are the first to estimate **causal** effects of lifting marriage bars on LF outcomes.

- **Our focus:** Marriage bars in teaching

Research question

What were the effects of lifting marriage bars on...

1. Workforce composition?
    * LFP of married women, unmarried women, men
    * **Today's Talk:** Lifting marriage bars ↑ share of married women in teaching; ↓ share of unmarried women

2. Household outcomes?
    * Fertility, household labor supply
    * **Today's Talk:** Preliminary work suggests no effects on # children; husband's occupation

3. Firm outcomes?
    * Productivity, wages
    * **Next Steps:** Digitizing salary data and school-level outcomes

Research question

What were the effects of lifting marriage bars on...

1. Workforce composition?
    - LFP of married women, unmarried women, men
    - **Today's Talk:** Lifting marriage bars ↑ share of married women in teaching; ↓ share of unmarried women

2. Household outcomes?
    - Fertility, household labor supply
    - **Today's Talk:** Preliminary work suggests no effects on # children; husband's occupation

3. Firm outcomes?
    - Productivity, wages
    - **Next Steps:** Digitizing salary data and school-level outcomes

Research question

What were the effects of lifting marriage bars on…

1. Workforce composition?
   - LFP of married women, unmarried women, men
   - **Today's Talk:** Lifting marriage bars ↑ share of married women in teaching; ↓ share of unmarried women

2. Household outcomes?
   - Fertility, household labor supply
   - **Today's Talk:** Preliminary work suggests no effects on # children; husband's occupation

3. Firm outcomes?
   - Productivity, wages
   - **Next Steps:** Digitizing salary data and school-level outcomes

Outline

Outline

Our context: Marriage bars in teaching

- Teaching: key job for married, educated women ▸ Married Women in Teaching
    - In 1940: 31% of married women in labor force with any college were teachers.
    - In 2000: 12% of married women in labor force with any college were teachers.

- Marriage bars were **highly prevalent** in teaching.
    - 87% of school districts in 1942. Goldin 1988

- **Identifying variation**: NC and KY lift marriage bars earlier than neighbors
  ▸ Treatment Map

Data
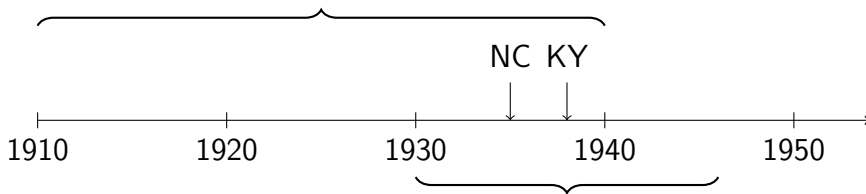
Outline

Strategy: Differences-in-differences design

Compare treated counties to control counties: (▶ Treatment Map)

$$y_{ct} = \alpha_t + \beta_{s(c)} + \sum_{k \in \{1910, 1920, 1940\}} \gamma_k \times \text{Treat}_{s(c)} \times \text{Year}_{k=t} + \varepsilon_{ct}, \qquad (1)$$

where for each county c and year t,

- $\text{Treat}_{s(c)} = \mathbb{1}[s(c) \in \{\text{KY, NC}\}]$
- Outcome y_{ct}: Share teachers married women, unmarried women, men.

Identifying assumption: Parallel trends in y_{ct} if marriage bars had not been lifted.

Outline

Result: Treated states see ↑ in share married women teachers
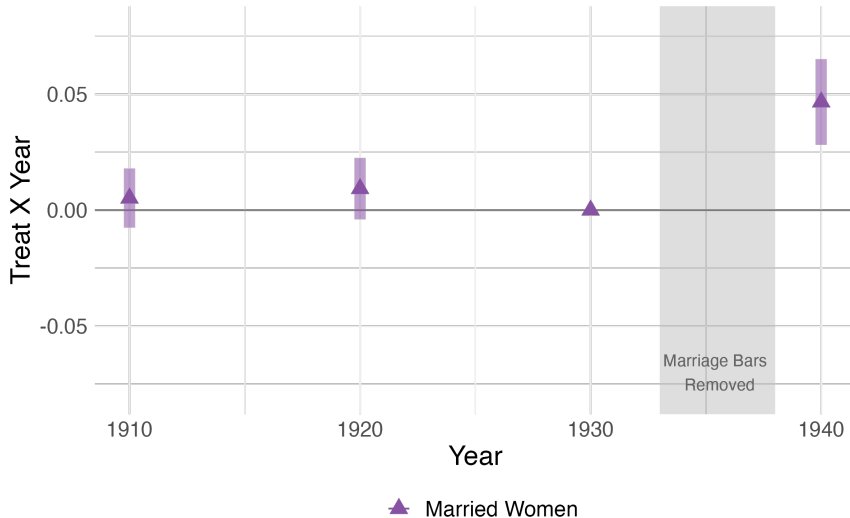
Result: Men are *not* pushed out by marriage bars being lifted
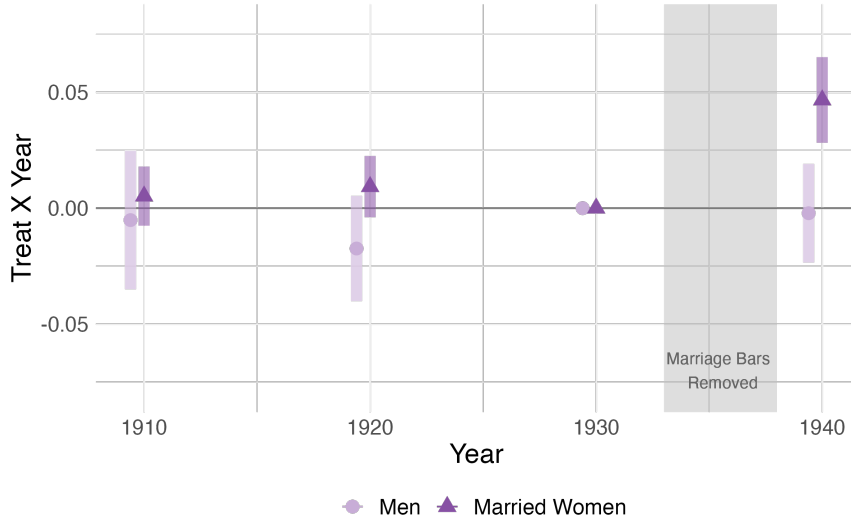
Result: Men are *not* pushed out by marriage bars being lifted

Decomposing the main effect

- 'New' married women teachers fall into one of two groups:

Marriage Bar Lifts

1930   1940

Newly Hired: Newly Married:
Married Before **(MB)**   Married After **(MA)**
Bar Lifted   Bar Lifted
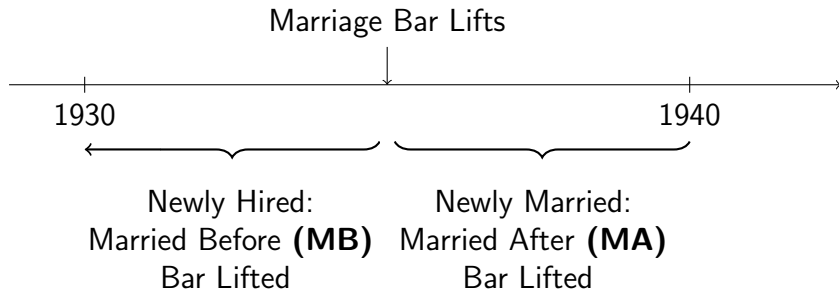
- **Which group** drove ↑ married women teachers in treated vs. control states?

- **Strategy**: 2-period diff-in-diff with outcomes share teachers MB and MA

Result: ↑ in both newly hired and newly married women

Result: ↑ in both newly hired and newly married women
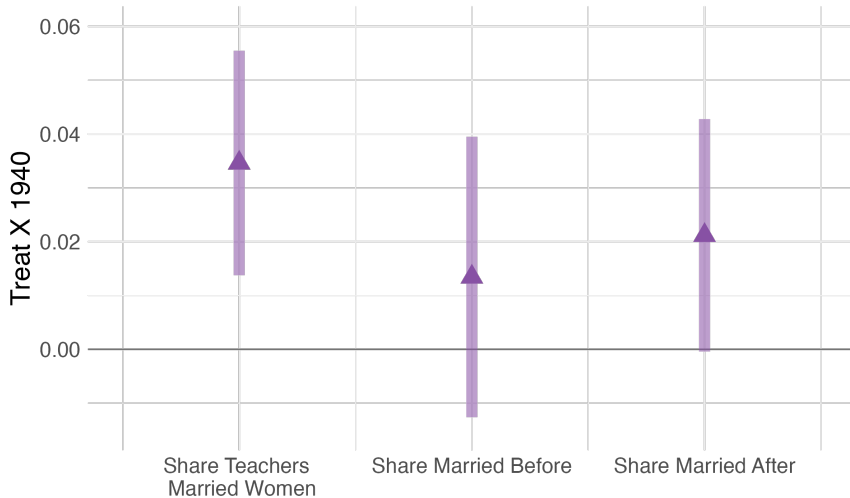
Preview of Ongoing Work: Household Outcomes

- **No effect** of lifting marriage bar on husband's occupational score ▶ Graph

- **No effect** of lifting marriage bar on number of children ▶ Graph

- Future work: mechanisms (composition vs. outcome of entry) w/ linked Census

Outline

Next Steps

This project so far:

- Marriage bars **"had bite"**: Lifting bars caused ↑ share married women teachers.
- Increase driven by **both** new entry and marriage
- No effect on household characteristics/outcomes

Next steps:

- Characterizing the married women employed after marriage bars are lifted.
- Digitizing teacher salary data pre-1940.
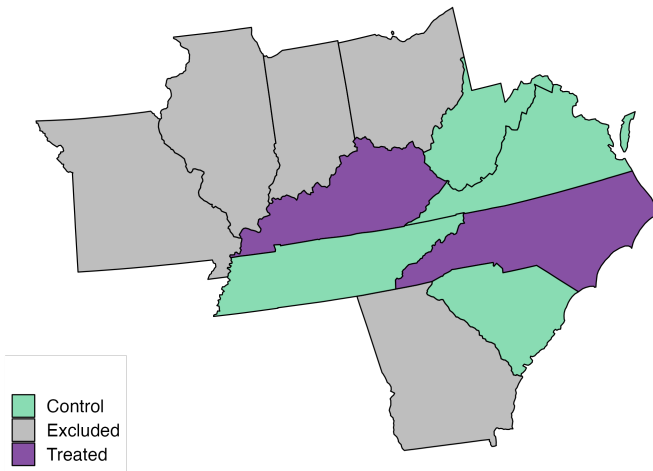- Additional outcomes: educational attainment, school funding
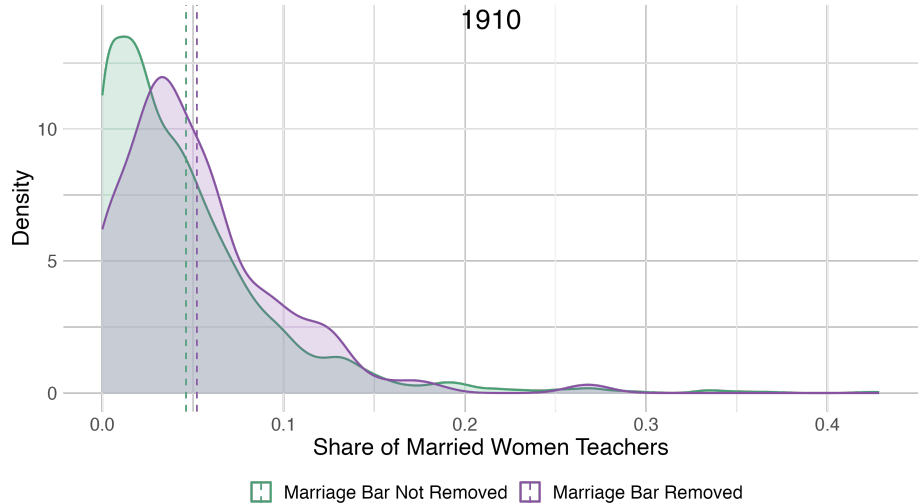
Demographic Composition of Labor Force Over Time
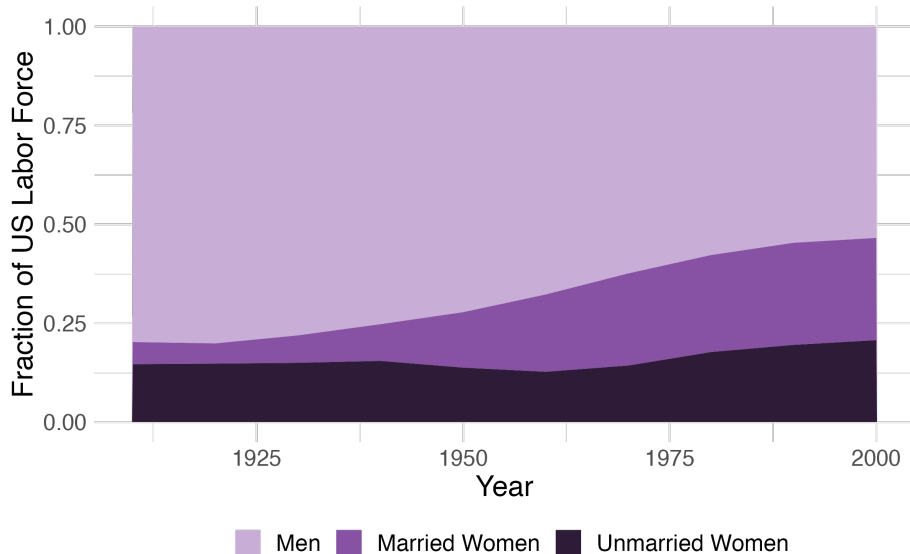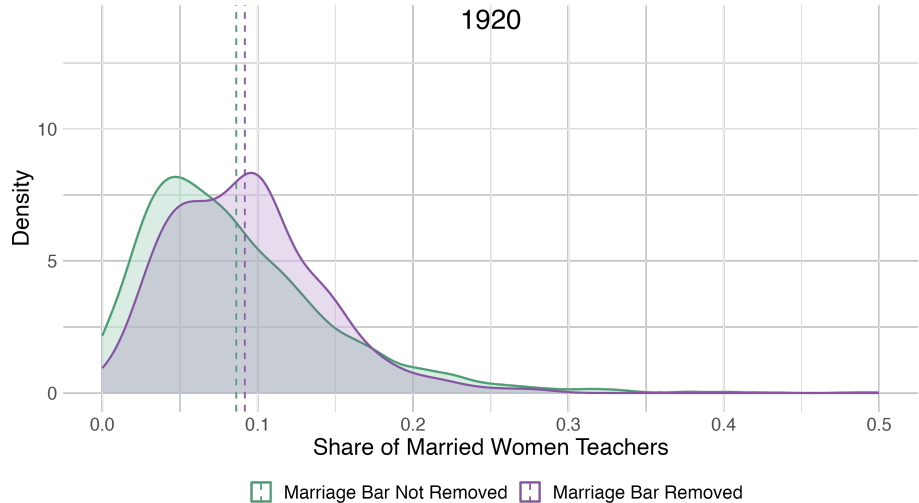
Demographic Composition of Teachers Over Time
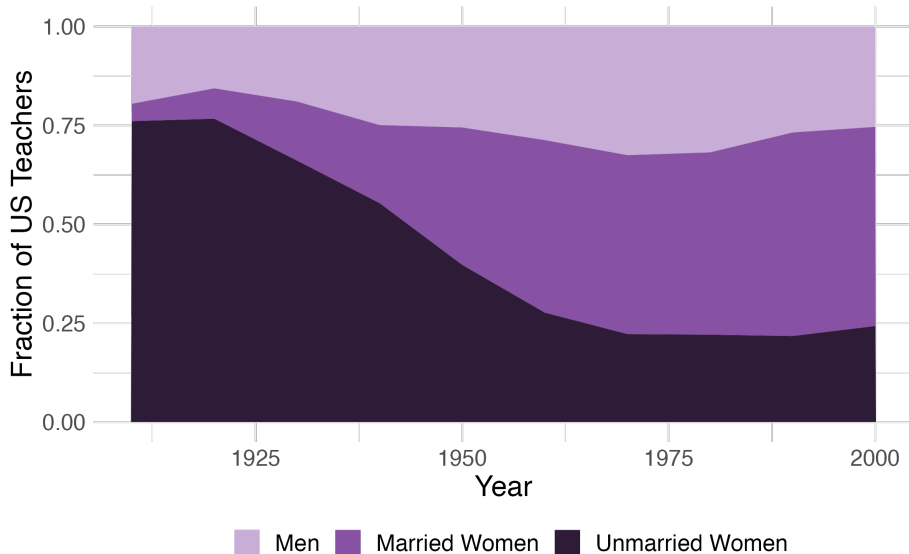
Treated vs. Neighboring Control States
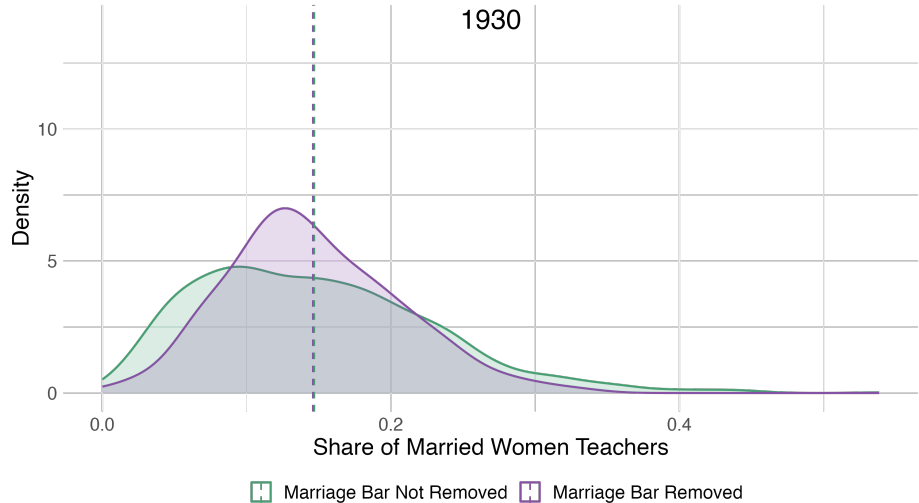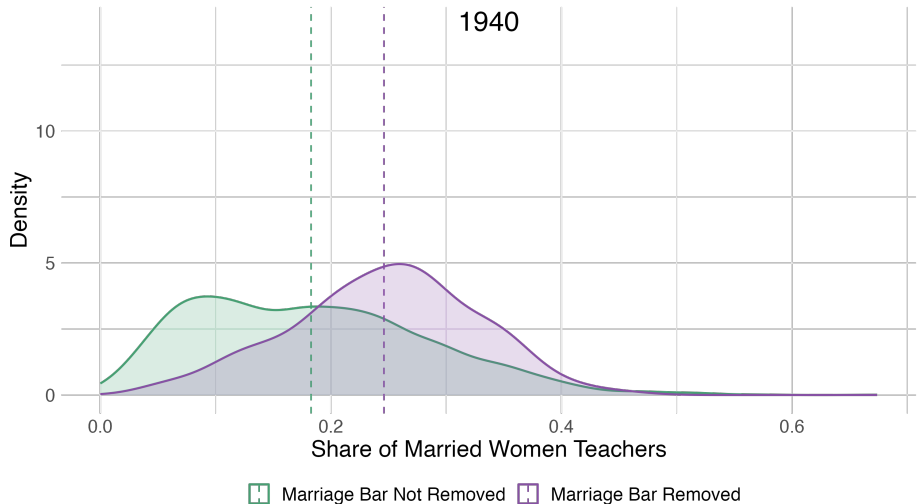

Control
Excluded
Treated

Descriptive Evidence: ↑ Share Married Women Teachers

Descriptive Evidence: ↑ Share Married Women Teachers

Descriptive Evidence: ↑ Share Married Women Teachers

Descriptive Evidence: ↑ Share Married Women Teachers

Marriage Bar DiD Results for Secretaries return
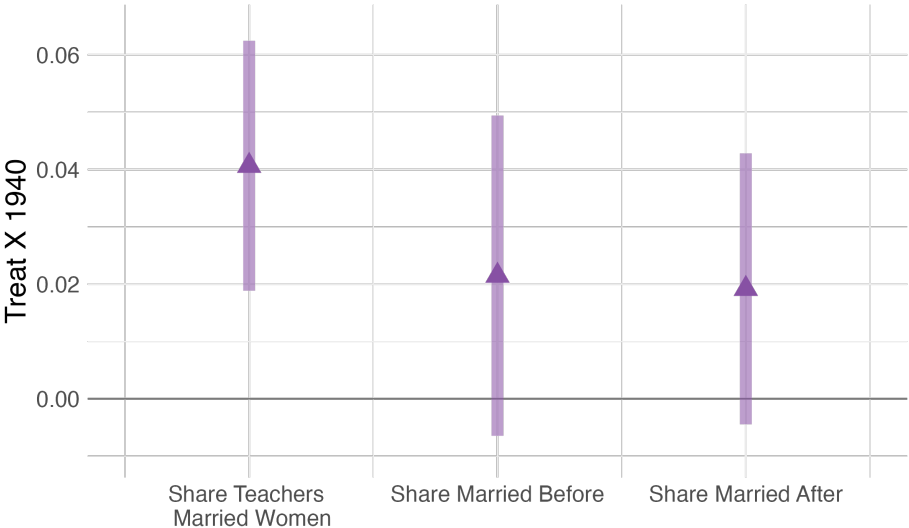
Marriage Bar DiD Results with All States as Control
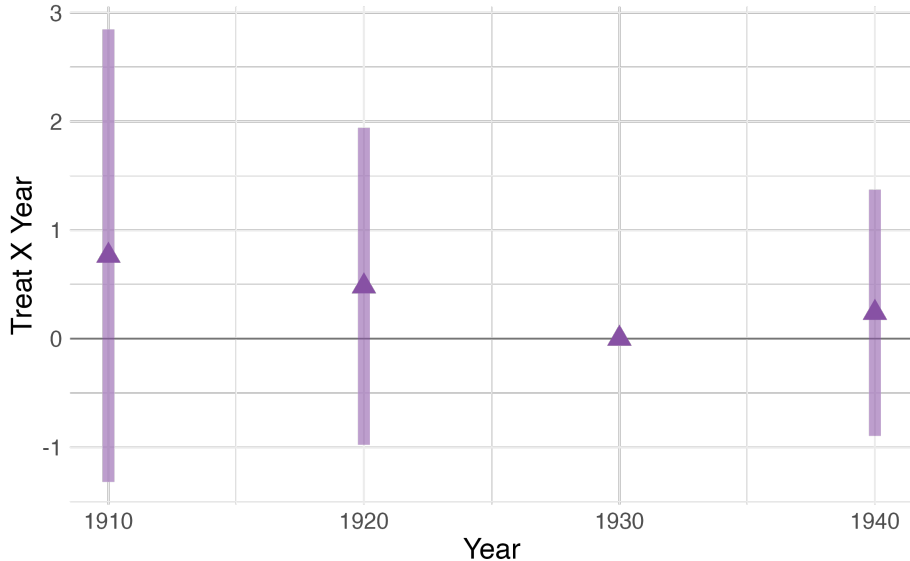
Marriage Bar DiD Results with Matched Sample

Share Married Women Decomposition with Matched Sample

Married Women Teachers' Spouses' Occupational Score

Number of Children of Married Women Teachers