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Compulsory Education Laws and Occupational Persistence in Agriculture

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Compulsory Education Laws and Occupational Persistence in Agriculture

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Background

- US passed compulsory education laws during 1850s to 1910s
- This paper investigates the impact of the US compulsory education laws on occupational persistence in agriculture

Data for Compulsory Education Laws

- US decennial full count census data from 1860 to 1910
- Sample limited to the population aged 15 to 65 in the labor force
- 19.8 million of individual-year observations
- 20% of sample are children from farm households
- Occupational persistence rate in agriculture is 70%

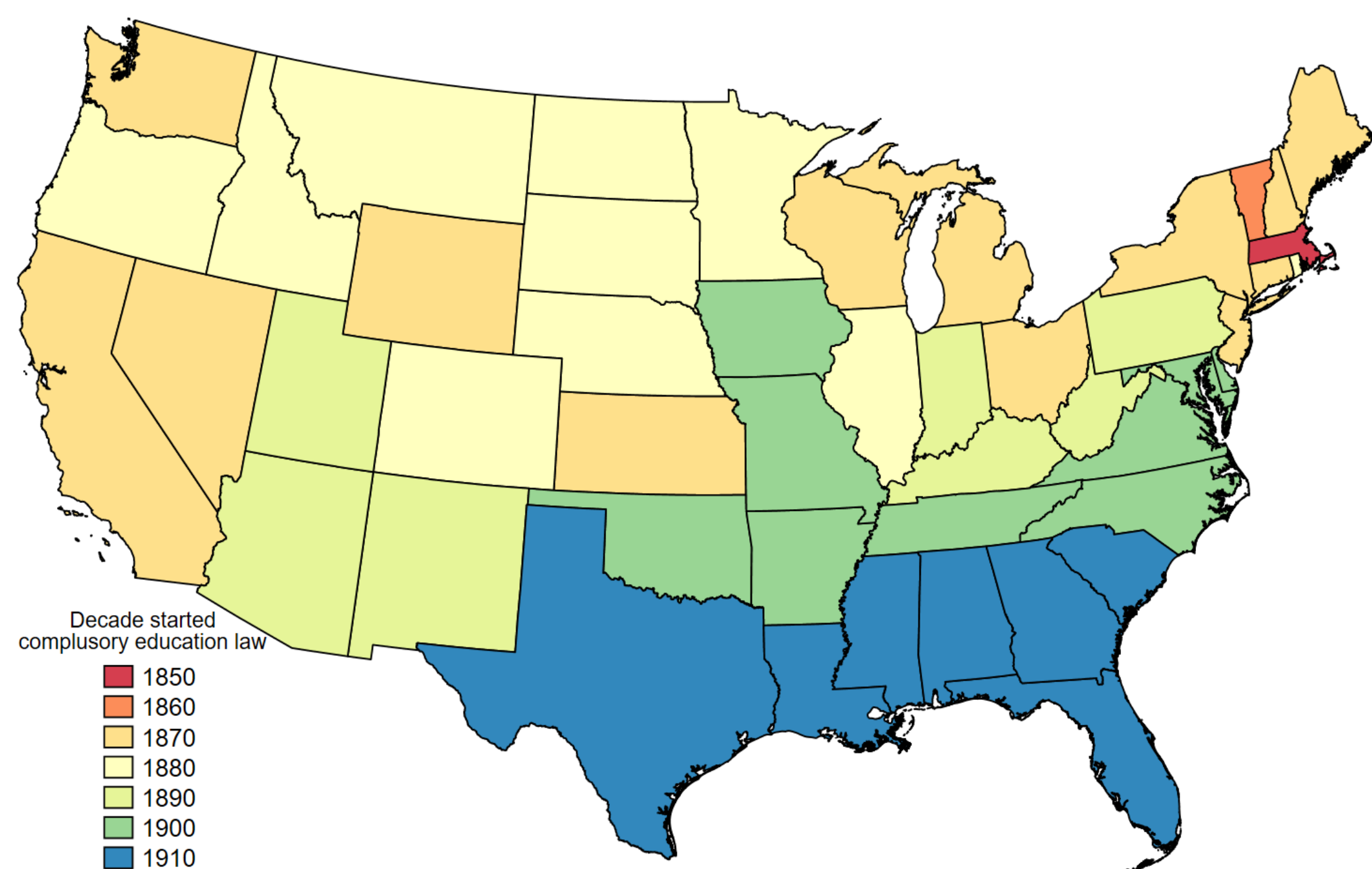


Figure 1. Timeline for Compulsory Education Laws

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Method – Staggered Difference-in-Difference

$$Farmer_{ist} = \sum_{k=-40}^{-10} \delta_k D_{sk} + \sum_{k=0}^{30} \gamma_k D_{sk} + X_{it}\beta + \alpha_s + \varepsilon_{ist}$$

Identification Strategy:

The key assumption of DiD depends on parallel trends. That is, assume the average of occupational persistence rates in agriculture for treatment and comparison groups would have common paths over time in the absence of compulsory education laws.

Compulsory Education Decreases Occupational Persistence

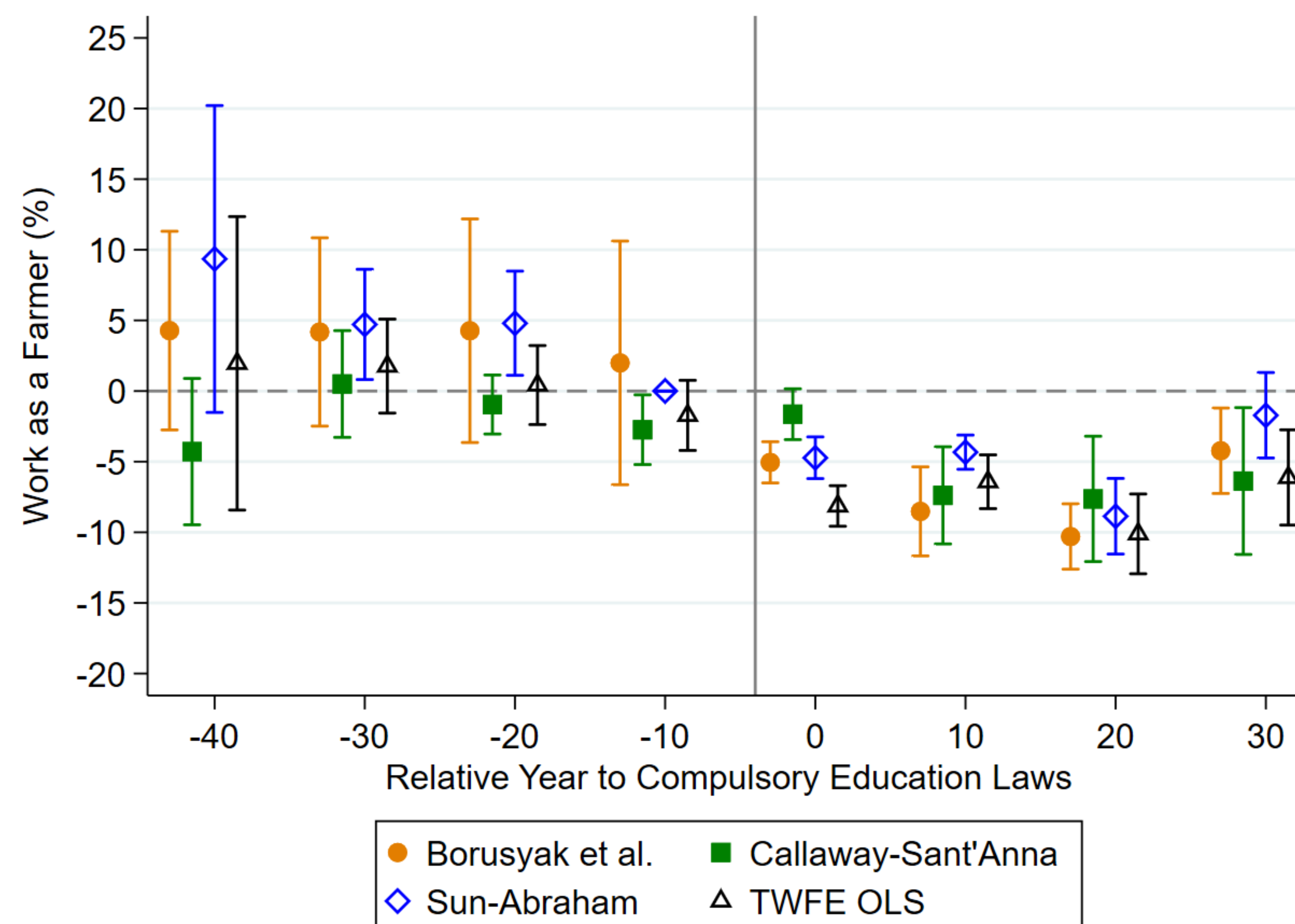
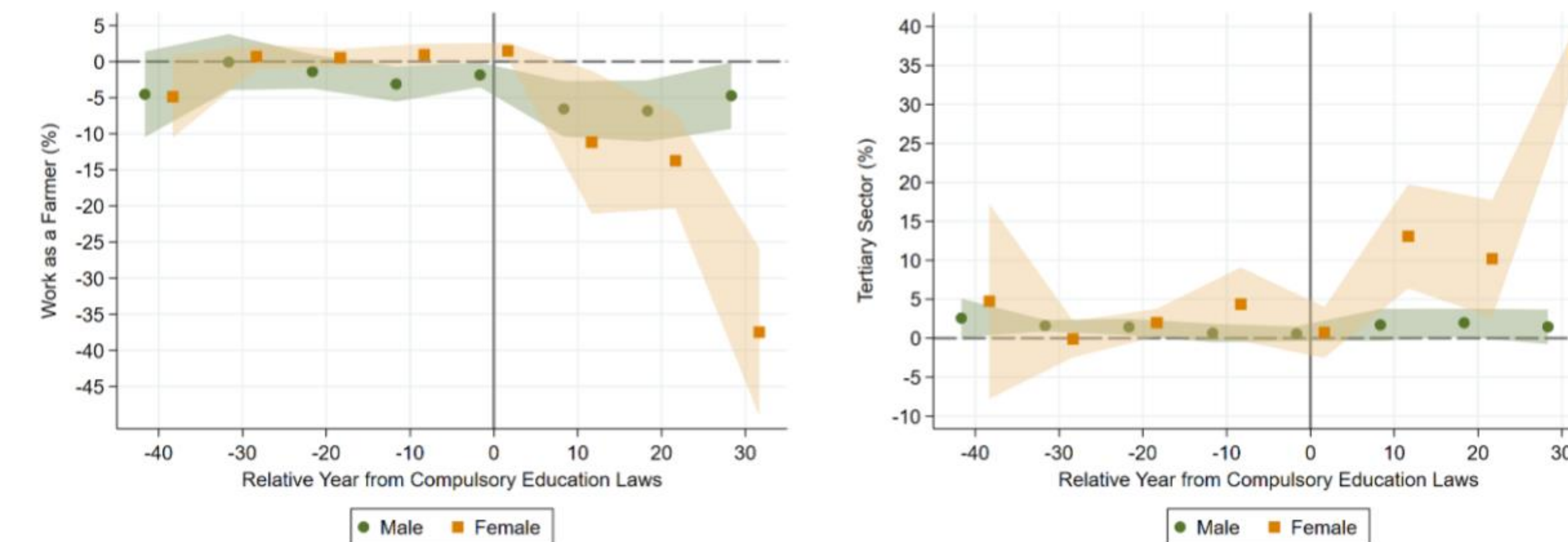


Figure 2. Event Study for the Effects of Compulsory Education Laws on the Probability of Working as a Farmer for Children from Farm Households.

Substantial Impact of Compulsory Education on Daughters



(A) Work as a Farmer

(D) Work in the Tertiary Sector

Figure 3. Effects of Compulsory Education Laws on Employment for Children of Farmers by Gender.

Compulsory Education Leads to Farm Consolidation

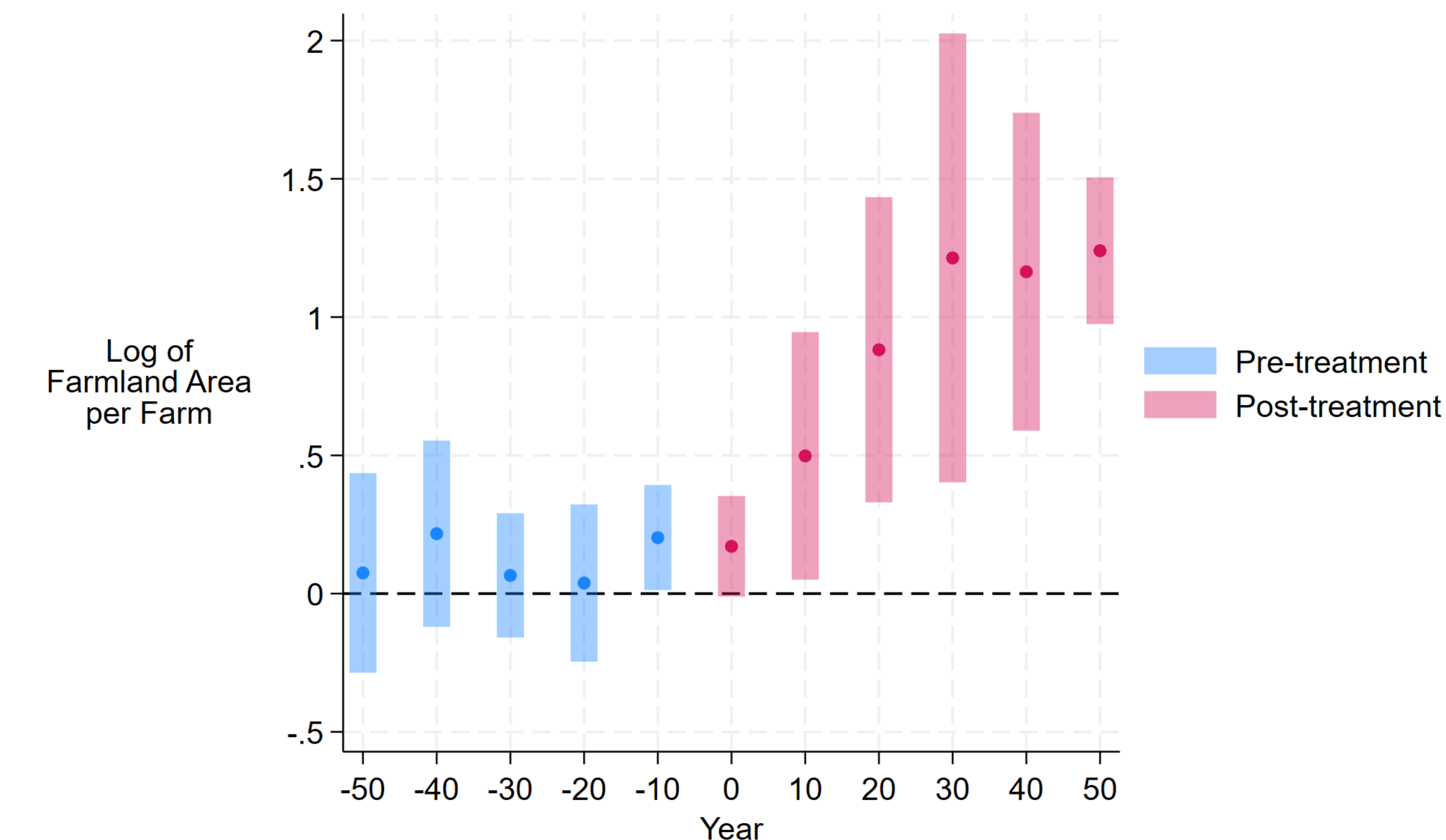


Figure 4. Effects of Compulsory Education Laws on US Farmland.