Rags to Rags: The Effects of the New Poor Law across Three Generations

Jon Denton-Schneider (Clark)
Jennifer Mayo (Missouri)

June 24, 2024

Motivation: Cuts to Welfare Spending

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Figures compiled after decade of austerity and obtained by Frank Field show most striking cuts are in disability benefits

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Short-run consequences: ↑ poverty, crime; ↓ health, schooling

(e.g., Blundell et al., 2016; Bray, Braakmann and Wildman, 2022; Pilkauskas et al., 2022)

Motivation: Income Support Programs

First Food Stamp Families Remember 1961

BEARTOWN, W. Va., Oct. 19 (AP)

First at Checkout Counter

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Developing world: Short- to medium-run effects (e.g., Banerjee et al., 2023)

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Contribution: Effects of withdrawing cash transfers in own, father's, or grandfather's childhood on socioeconomic status, health

Roadmap

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   - From transferring 2% of GDP to 15% of the population ...
   - ... To transferring 1% of GDP to 10% of the population

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Broadly: Intergenerational mobility

(e.g., Abramitzky, Boustan and Eriksson, 2012, 2014, 2019; Bailey et al., 2020; Long and Ferrie, 2013, 2018)

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Changes in Mid- to Late 18th Century

Southeast England: Economic environment shifts (Boyer, 1990, p. 31)

- Sustained rise in grain prices $\rightarrow$ specialization in wheat production, which had very seasonal labor demand ▸ Graph
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Southeast England: Implicit labor contract emerged (Boyer, 1990, p. 32)

- Agricultural wage labor when there was demand, poor relief offering subsistence when there wasn't
- Landowners used taxes on everyone in the parish to maintain their low-wage labor pool

Massive Increases in Poor Relief, 1750s-1830s

England and Wales: Poor relief as a share of GDP went from 1% in 1749 to 2% in 1830 (Lindert, 1998, p. 114)

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Backlash: The rise of political economy

> The poor laws of England tend to depress the general condition of the poor in these two ways. Their first obvious tendency is to increase population without increasing the food for its support. A poor man may marry with little or no prospect of being able to support a family in independence. They may be said therefore in some measure to create the poor which they maintain, and as the provisions of the country must, in consequence of the increased population, be distributed to every man in smaller proportions, it is evident that the labour of those who are not supported by parish assistance will purchase a smaller quantity of provisions than before and consequently more of them must be driven to ask for support.

(Malthus, 1826)

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> The clear and direct tendency of the poor laws, is in direct opposition to these obvious principles: it is not, as the legislature benevolently intended, to amend the condition of the poor, but to deteriorate the condition of both poor and rich; instead of making the poor rich, they are calculated to make the rich poor; and whilst the present laws are in force, it is quite in the natural order of things that the fund for the maintenance of the poor should progressively increase, till it has absorbed all the neat revenue of the country, or at least so much of it as the state shall leave to us, after satisfying its own never failing demands for the public expenditure.[9]

(Ricardo, 1817)

1834: New Poor Law

Administration centralized: 15,000 parishes combined into 600 Poor Law Unions administered by "guardians"

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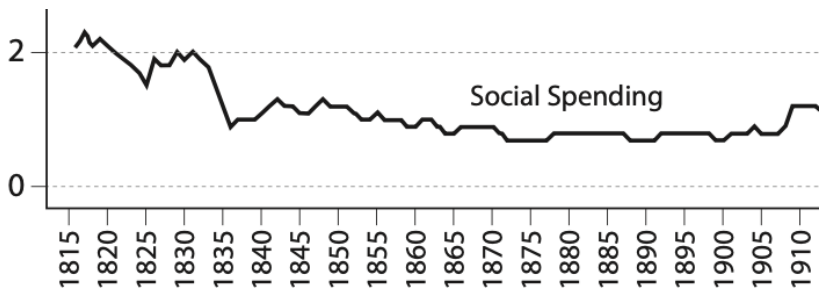

As Share of GDP

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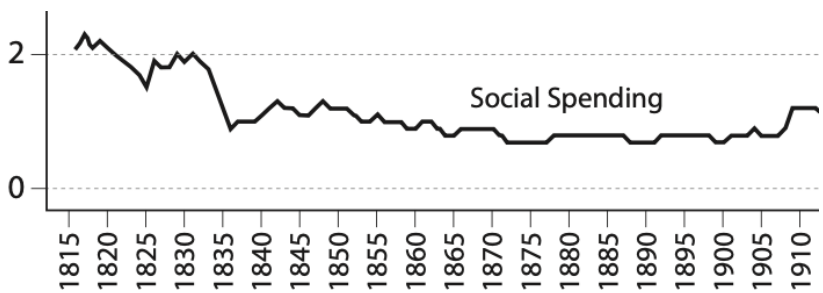

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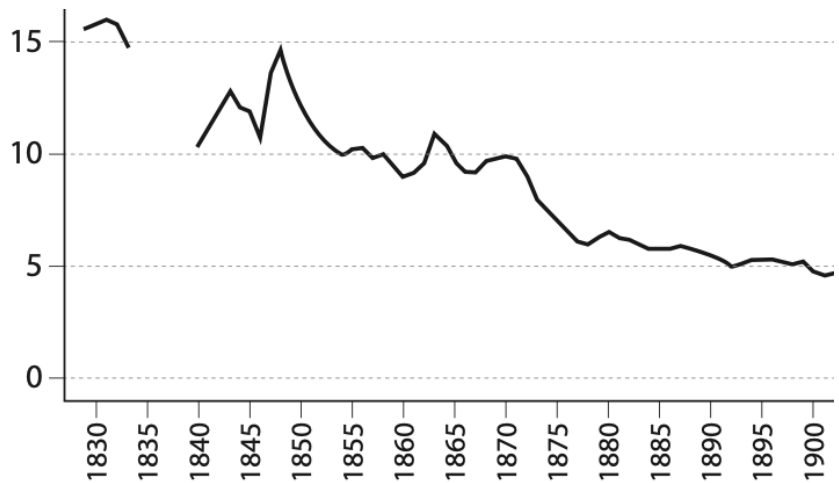

Share of Pop. Receiving Relief

(Boyer, 2019, p. 17)

Aftermath

Oliver Twist (1838) published partly as criticism of New Poor Law

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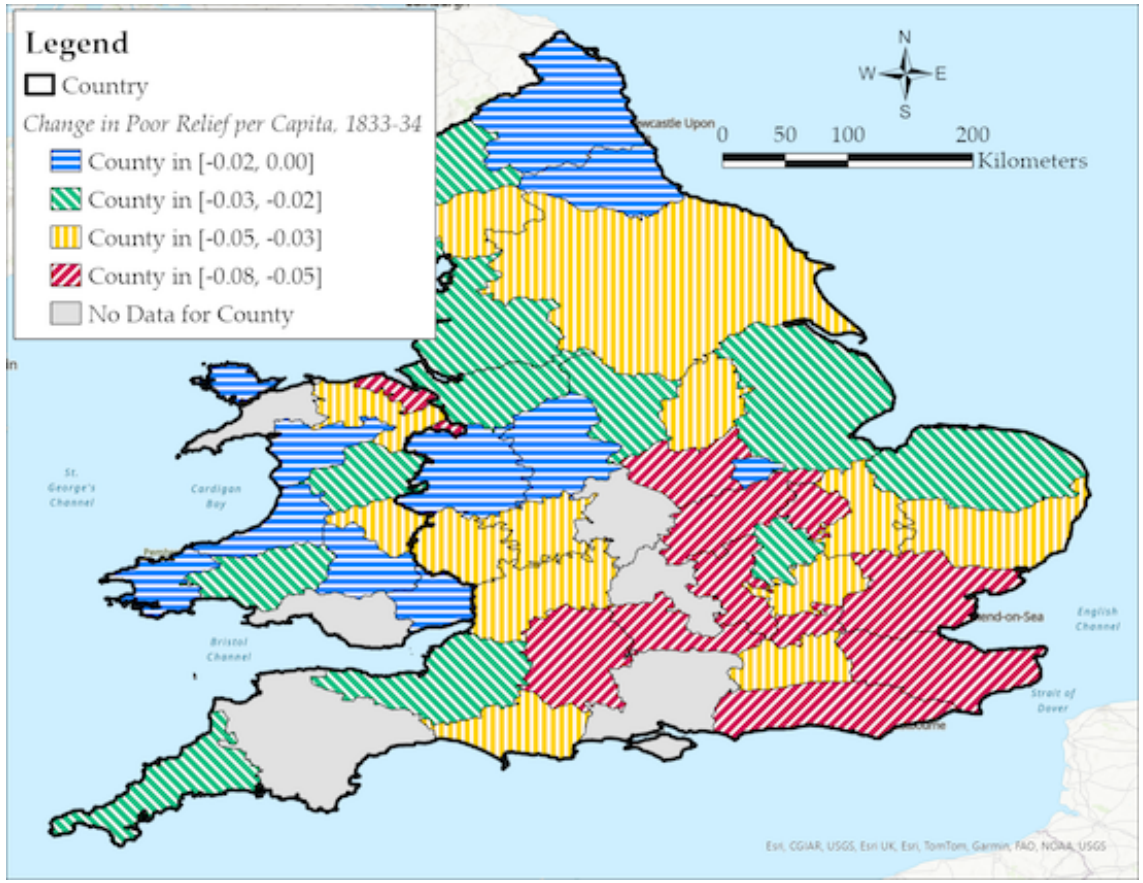
Defining Treatment and Control Counties

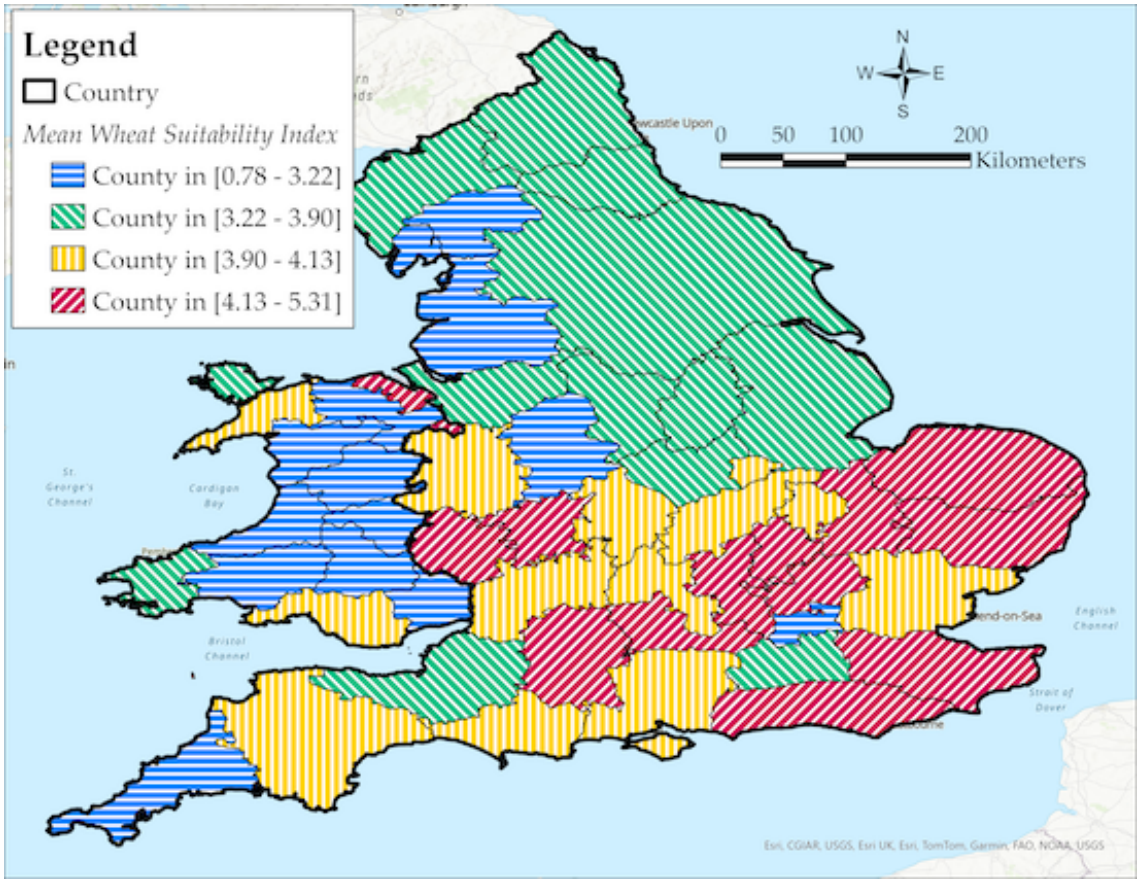


Change in Poor Relief per Capita from 1833 to 1834

(Spending data from Melander and Miotto, 2023)

Treatment counties: Above-median decline (red and yellow)

Determinants of Declines in Poor Relief



Mean Wheat Suitability Index

(Suitability data from FAO and IIASA, 2022)

Visual correlation: Wheat suitability also concentrated in SE

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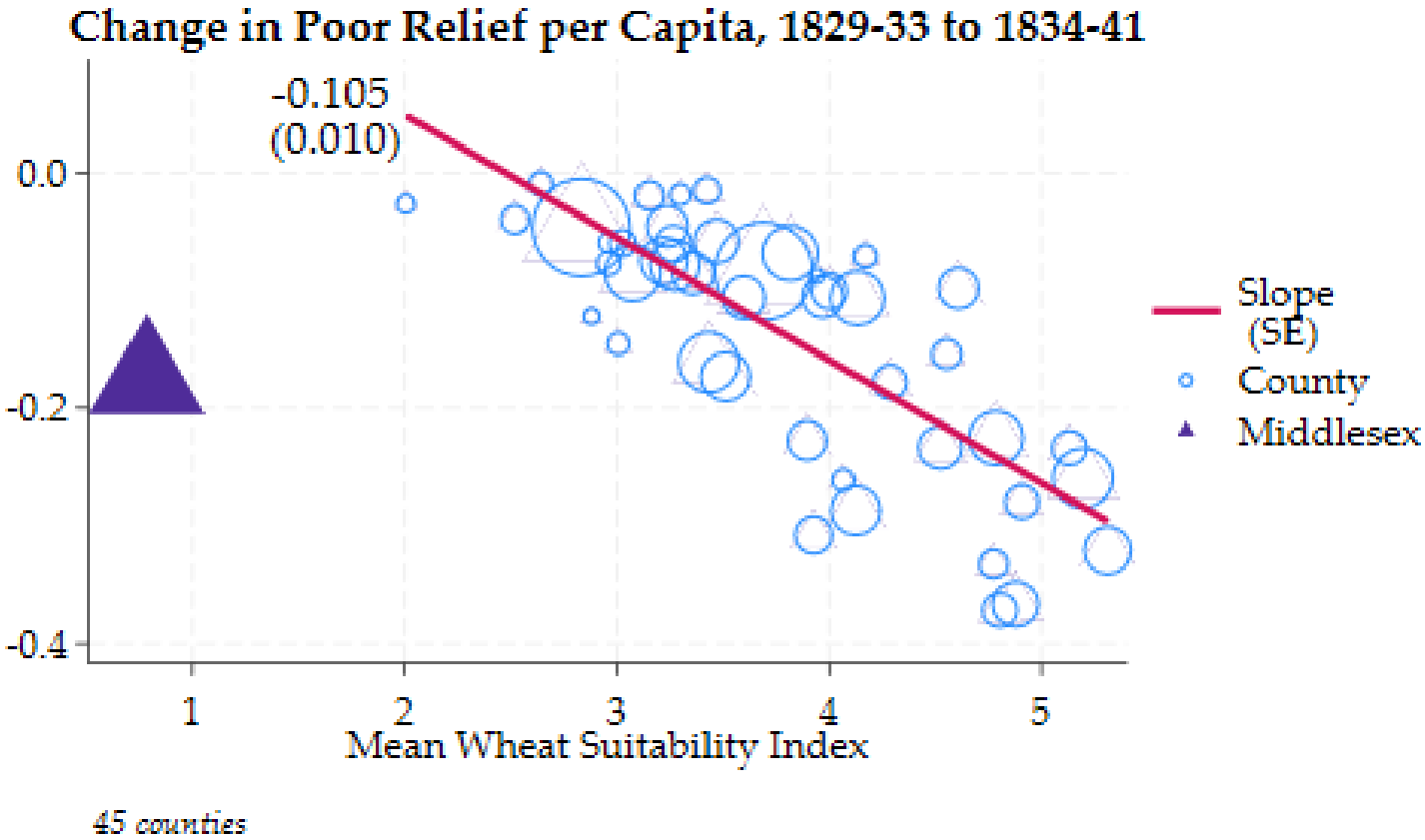

Scatterplot

(Suitability data from FAO and IIASA, 2022)

Unconditional relationship: Strong if exclude outlier (London)

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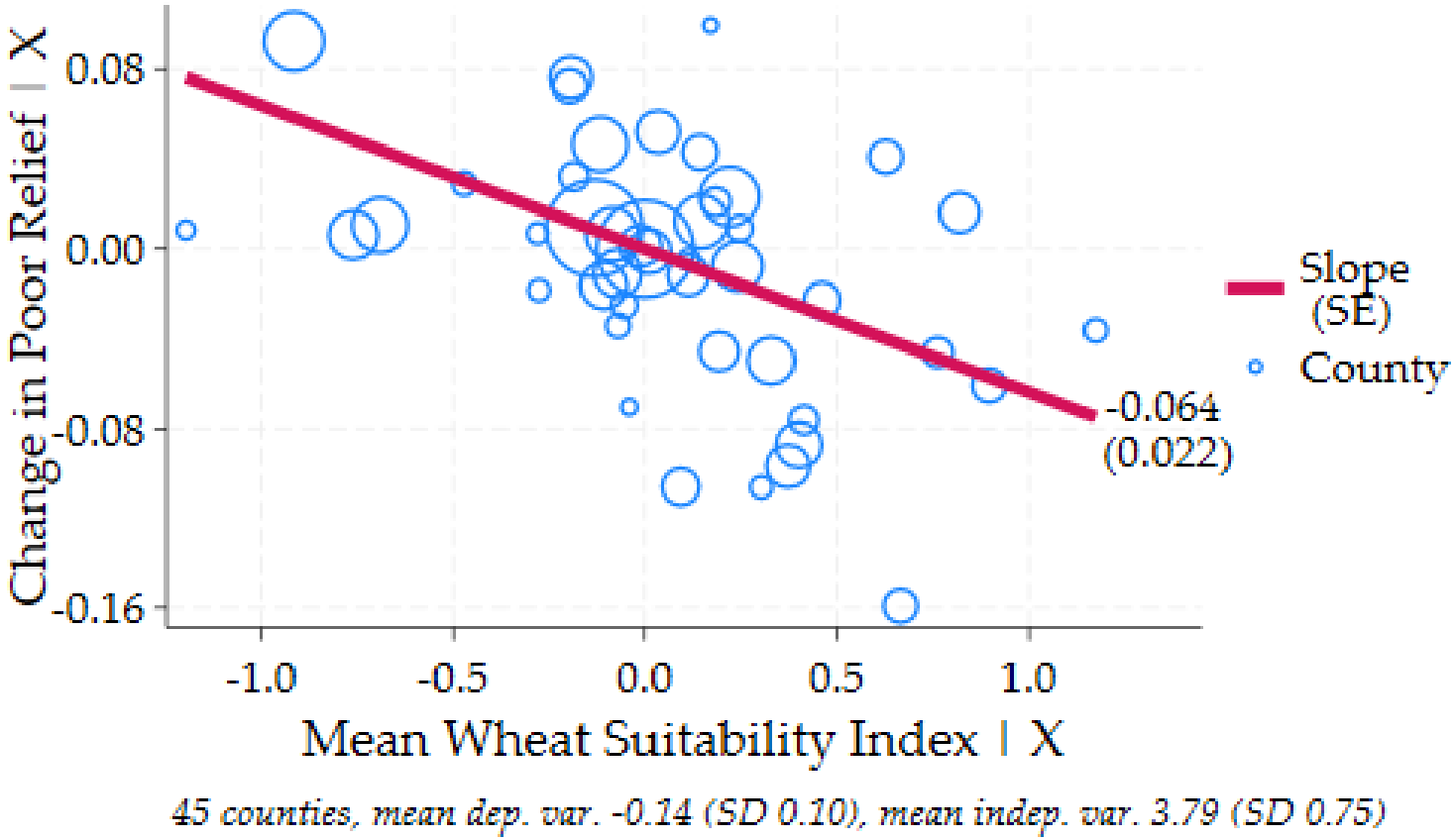

Added-Variable Plot

(Suitability data from FAO and IIASA, 2022)

Conditional relationship: Survives region FE, quadratic in lat./lon.

Empirical Strategy: Short-Run Effects on Counties

$$y_{c,t} = \alpha_c + \gamma_t + \tau \cdot \left(\mathbf{1}[t \geq 1834] \cdot \mathbf{1}\left[|\Delta_{c,\text{1833-34}}| \geq |\Delta_{\text{median,1833-34}}|\right]\right) + \gamma_t \cdot \kappa_{k(c)} + \epsilon_{c,t} \quad (1)$$

Where:

- α_c, γ_t: FE for county c and year t
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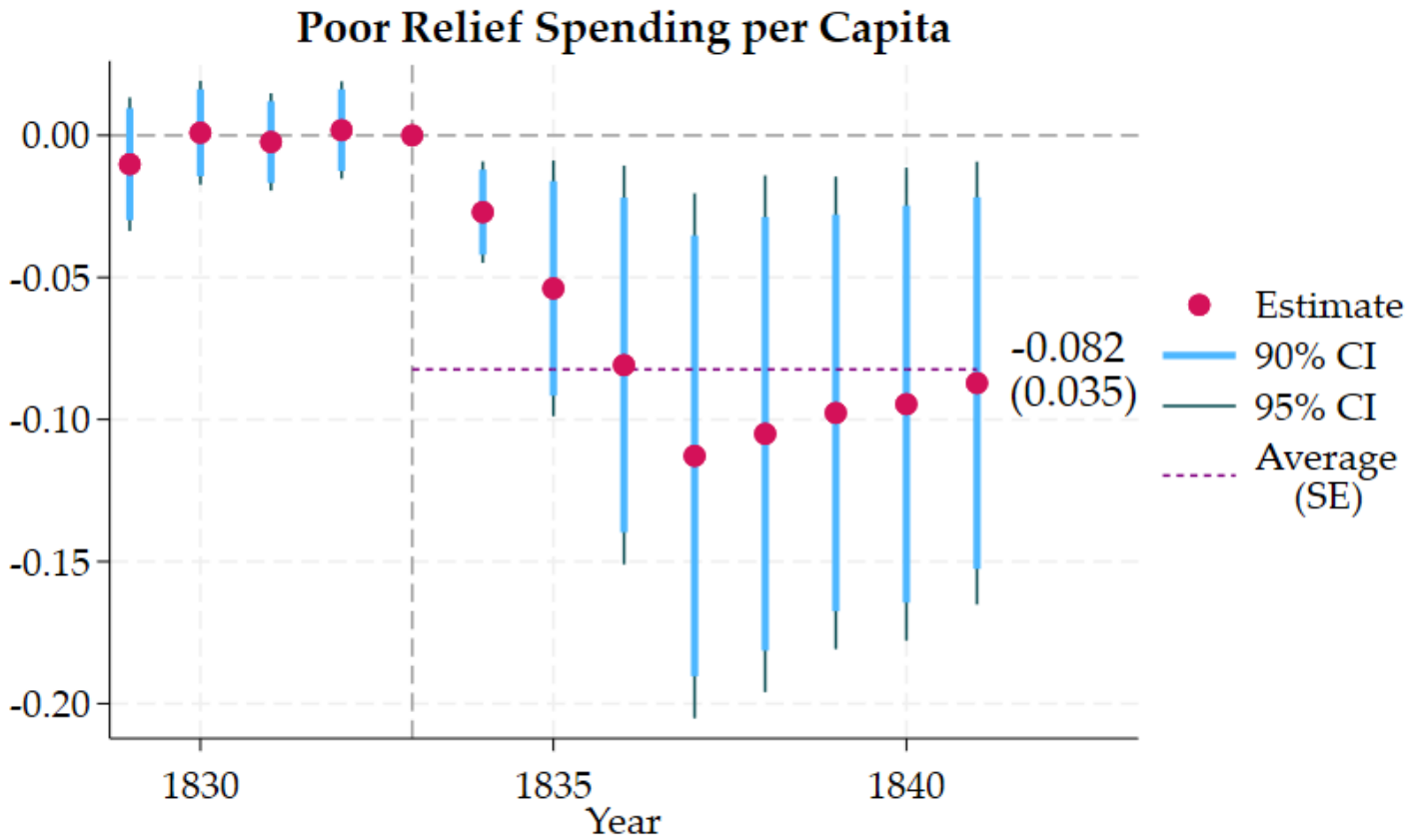
Estimator: Use new diff-in-diff literature (de Chaisemartin and D'Haultfœuille, 2020)

Results: Short-Run Effects on Counties' Poor Relief



Effect of law: Larger sustained declines in treatment counties

Results: Short-Run Effects on Counties' Burials

Data: Burials in a sample of 404 English parishes (Smith et al., 2020)

- Representativeness? When to expect deaths? ▸ Seasonality

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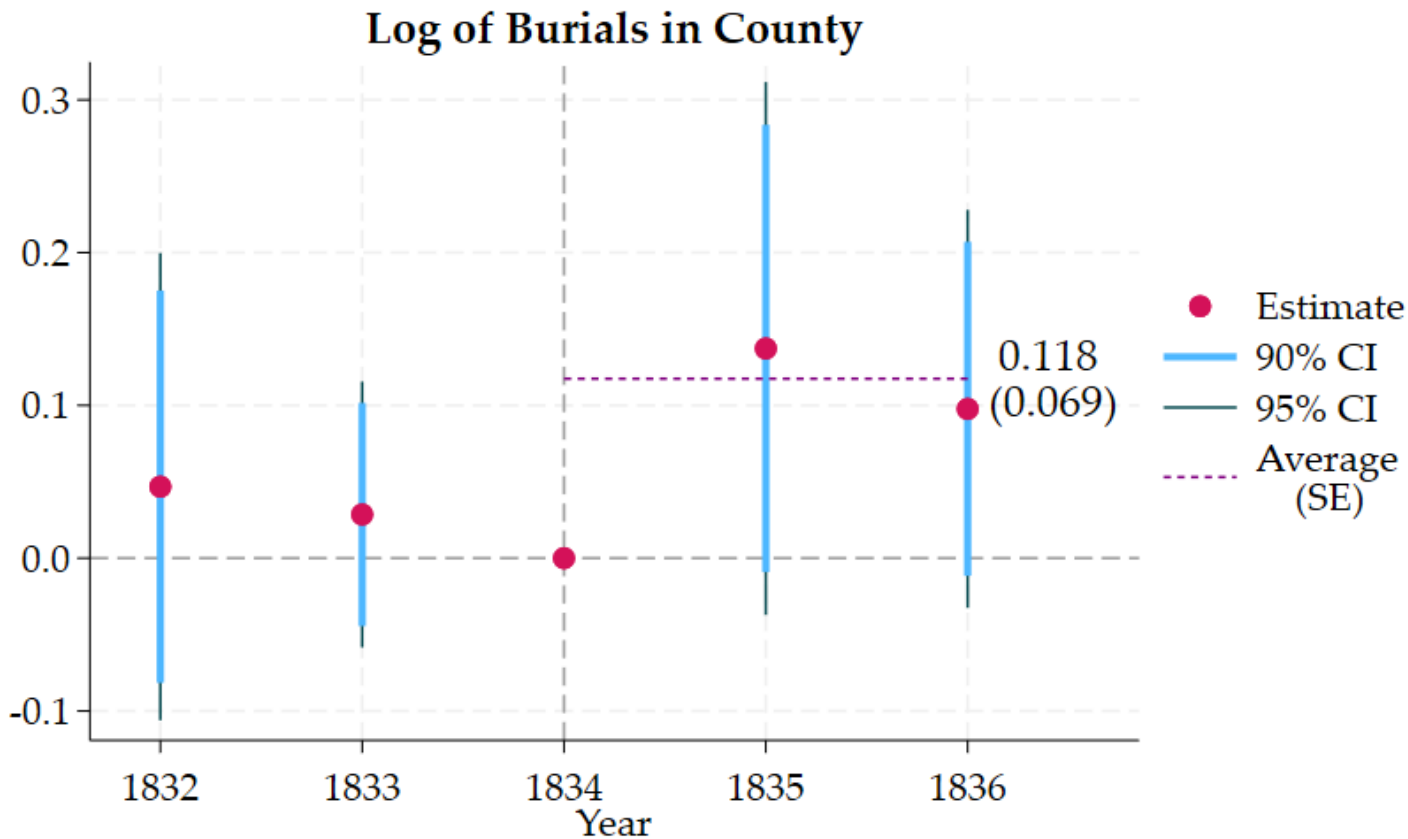

Effect: Possibly a greater increase if omitted year is 1834

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Data: IPUMS full-count 1861 census of England and Wales

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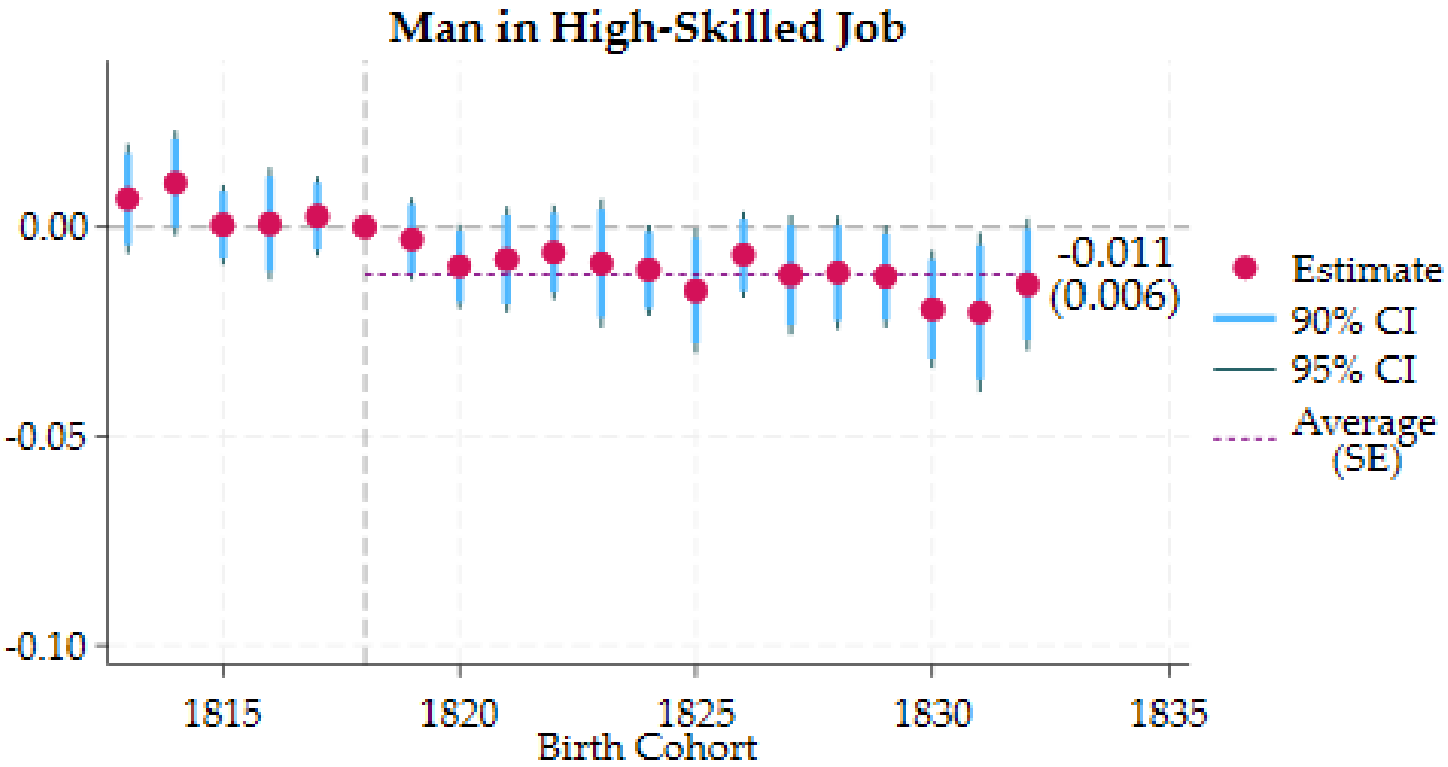

1.40 million obs., 50 clusters, pre-1819 birth cohort mean dependent variable 0.685

Men in high-skilled jobs: ↓ 1.1 p.p. (1.6%)

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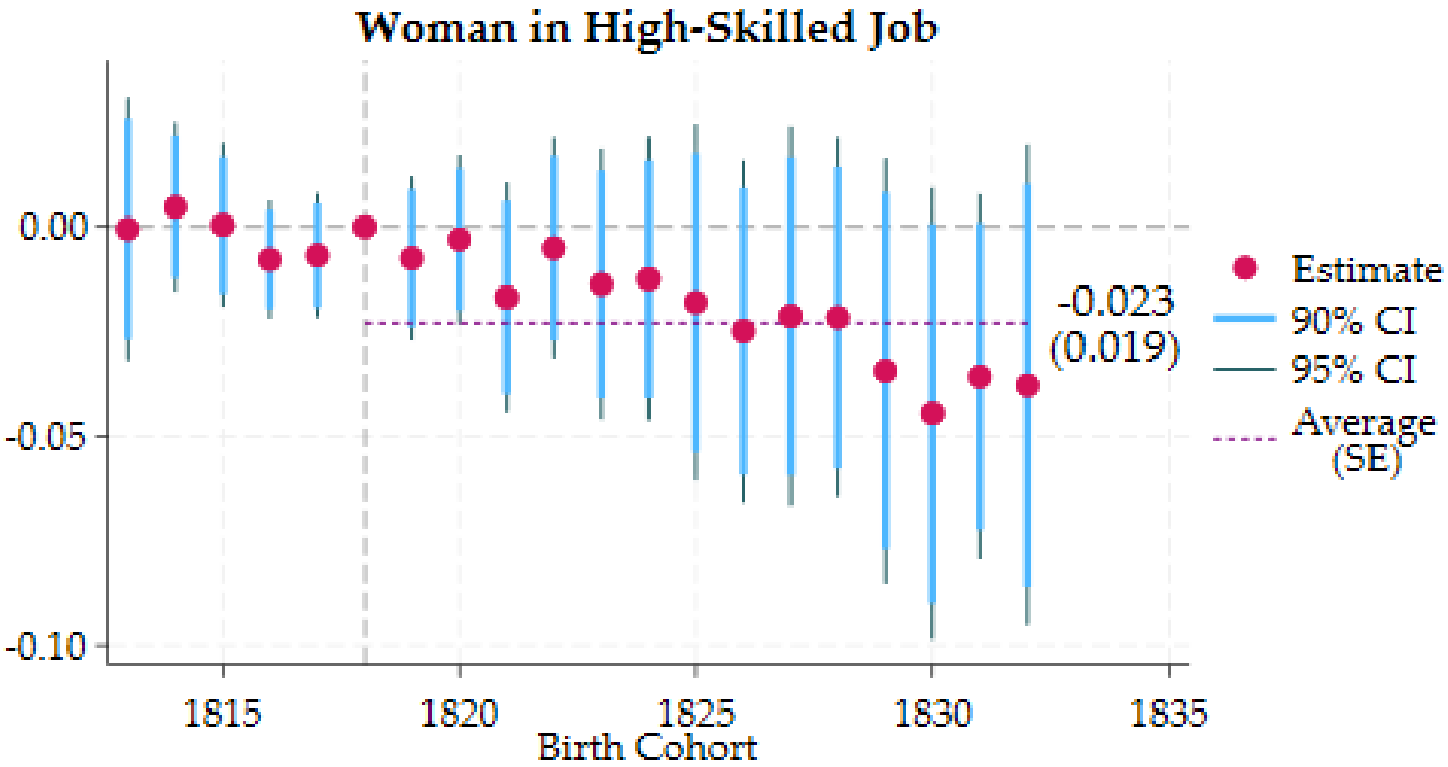

0.52 million obs., 50 clusters, pre-1819 birth cohort mean dependent variable 0.458

Women in high-skilled jobs: ↓ 2.3 p.p. (5.0%), but imprecise

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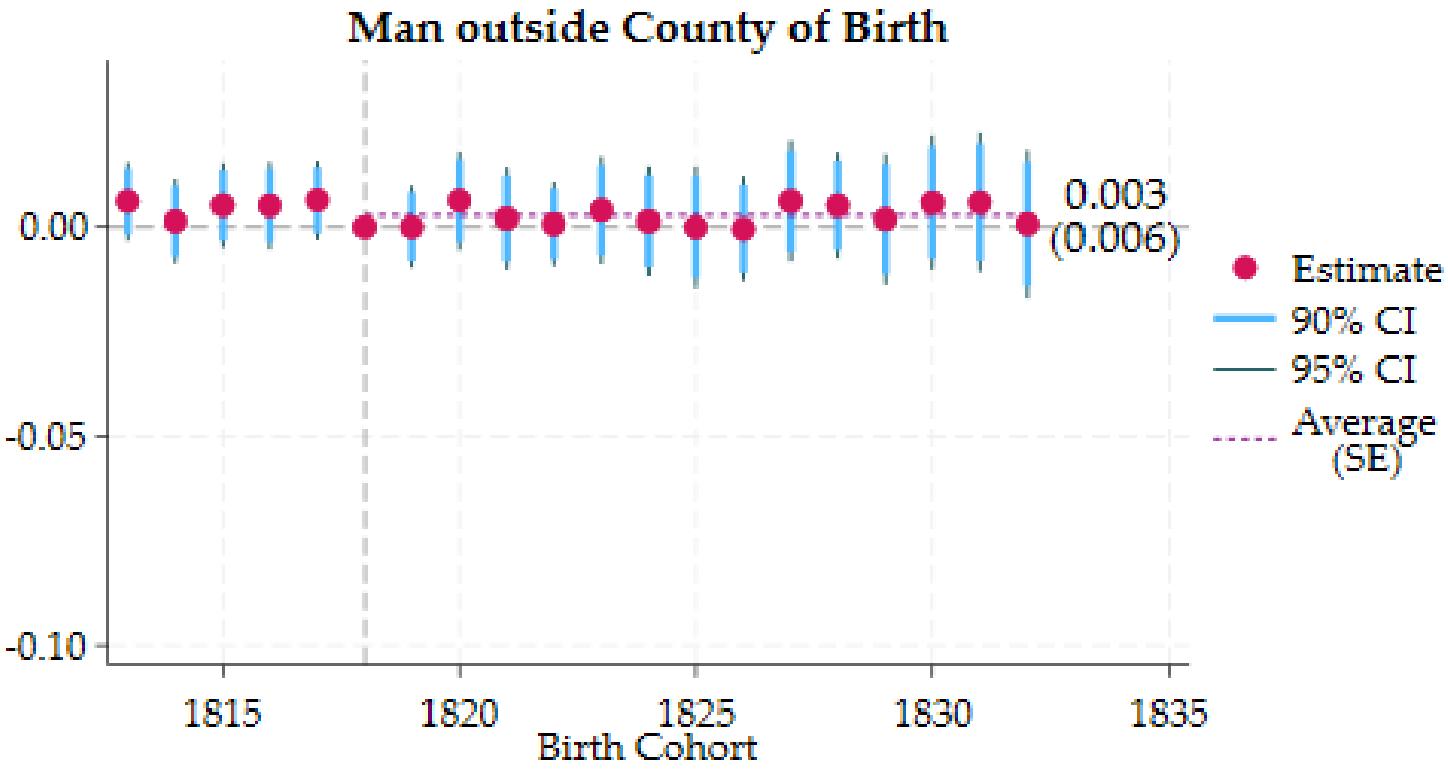
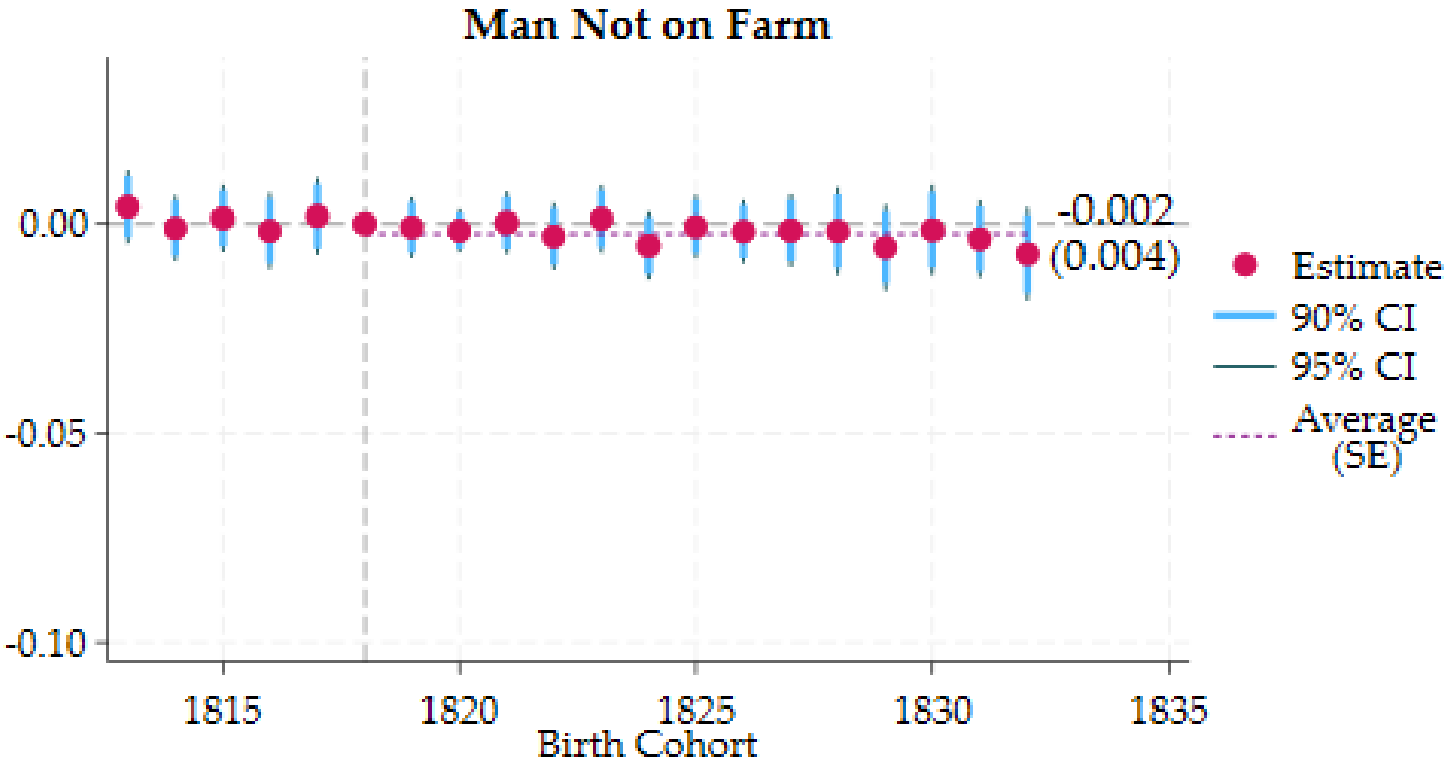


1.46 million obs., 50 clusters, pre-1819 birth cohort mean dependent variable 0.360

Men's migration: No real effect

Results: Long-Run Effects on Children, 1861



1.48 million obs., 50 clusters, pre-1819 birth cohort mean dependent variable 0.897

Men off of farms: No real effect

Empirical Strategy: Effects on Next Gen. as Children, 1861

$$y_{i,\hat{c},\hat{b}} = \alpha_{\hat{c}} + \gamma_{\hat{b}} + \cdot(\mathbf{1}[\hat{b} \geq 1819] \cdot \mathbf{1}\left[|\Delta_{\hat{c},\text{1833-34}}| \geq |\Delta_{\text{median,1833-34}}|\right]) + \mathbf{X}_i\beta + \gamma_{\hat{b}} \cdot \kappa_{k(\hat{c})} + \epsilon_{i,\hat{c},\hat{b}} \quad (3)$$

Where:

- $\alpha_{\hat{c}}$, $\gamma_{\hat{b}}$: FE for father's county of birth $\hat{c}$ and year of birth $\hat{b}$
- $\mathbf{1}[\hat{b} \geq 1834]$: Indicator for father aged 15 or younger in 1834
- $\mathbf{1}\left[|\Delta_{\hat{c},\text{1833-34}}| \geq |\Delta_{\text{median,1833}-34}|\right]$: Indicator for father's county of birth in treatment group
- $\mathbf{X}_i$: Controls for i's age and age squared
- And all other variables, estimation choices analogous to before

Empirical Strategy: Effects on Next Gen. as Children, 1861

$$y_{i,\hat{c},\hat{b}} = \alpha_{\hat{c}} + \gamma_{\hat{b}} + \cdot(\mathbf{1}[\hat{b} \geq 1819] \cdot \mathbf{1}\left[|\Delta_{\hat{c},\text{1833-34}}| \geq |\Delta_{\text{median,1833-34}}|\right]) + \mathbf{X}_i\beta + \gamma_{\hat{b}} \cdot \kappa_{k(\hat{c})} + \epsilon_{i,\hat{c},\hat{b}} \quad (3)$$

Where:

- $\alpha_{\hat{c}}$, $\gamma_{\hat{b}}$: FE for father's county of birth $\hat{c}$ and year of birth $\hat{b}$
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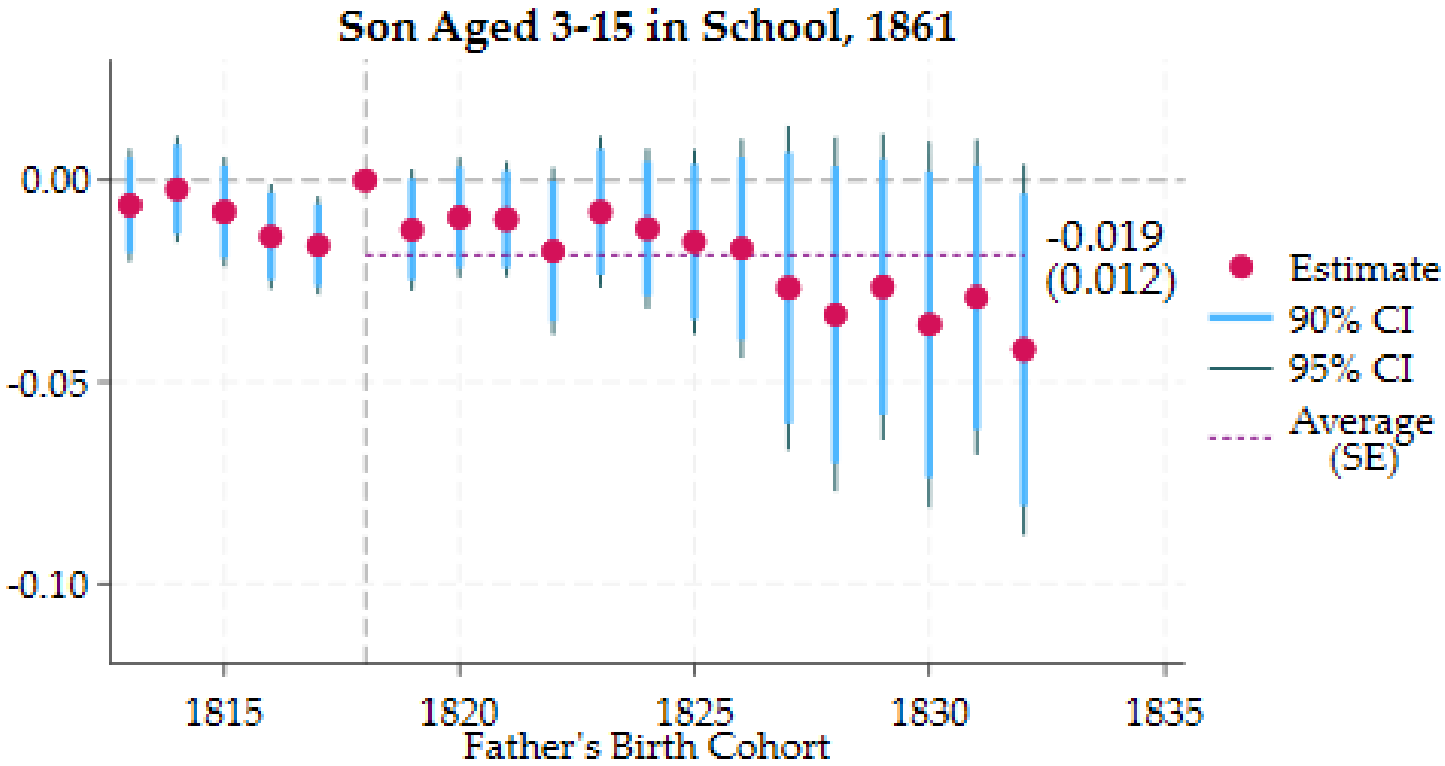
- $\mathbf{X}_i$: Controls for i's age and age squared
- And all other variables, estimation choices analogous to before

Data: IPUMS full-count 1861 census of England and Wales

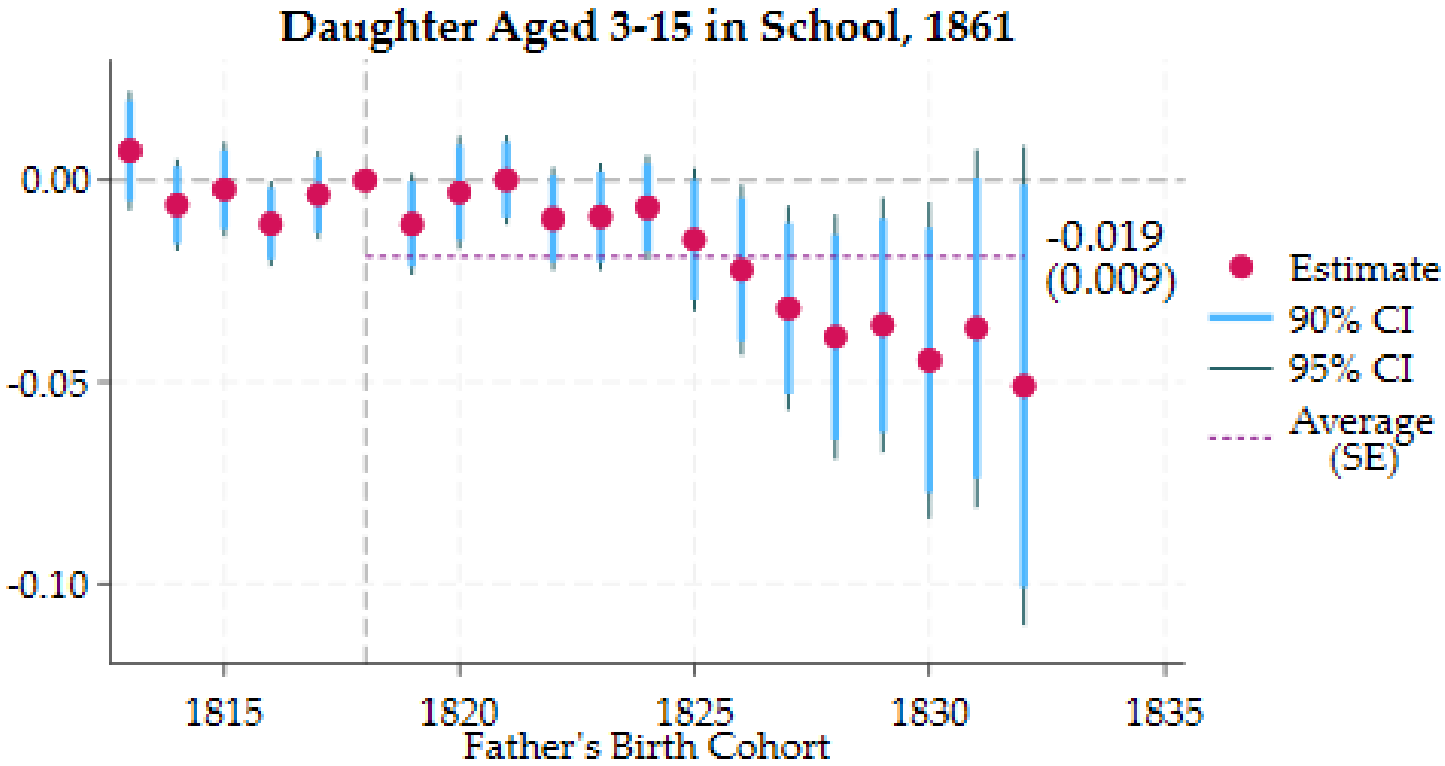
Results: Effects on Next Gen. as Children, 1861



1.14 million obs., 50 clusters, pre-1819 father's birth cohort mean dep. var. 0.517

Boys in school: ↓ 1.9 p.p. (3.6%)

Results: Effects on Next Gen. as Children, 1861



1.13 million obs., 50 clusters, pre-1819 father's birth cohort mean dep. var. 0.557

Girls in school: ↓ 1.9 p.p. (3.4%)

Empirical Strategy: Effects on Next Gen. as Adults, 1901

Data: IPUMS full-count 1901 census of England and Wales

Empirical Strategy: Effects on Next Gen. as Adults, 1901

Data: IPUMS full-count 1901 census of England and Wales

Linking: Use ABE algorithm to match sons in 1861 results to their adult observations in 1901 (Abramitzky, Boustan and Eriksson, 2012, 2014, 2019; Bailey et al., 2020; Bailey, Cole and Massey, 2020)

Variables used for linkage: Surname (string), parish of birth (string), year of birth

Empirical Strategy: Effects on Next Gen. as Adults, 1901

Data: IPUMS full-count 1901 census of England and Wales

Linking: Use ABE algorithm to match sons in 1861 results to their adult observations in 1901 (Abramitzky, Boustan and Eriksson, 2012, 2014, 2019; Bailey et al., 2020; Bailey, Cole and Massey, 2020)

Variables used for linkage: Surname (string), parish of birth (string), year of birth

Match rates: 2% (we think due to parish spelling / changes)

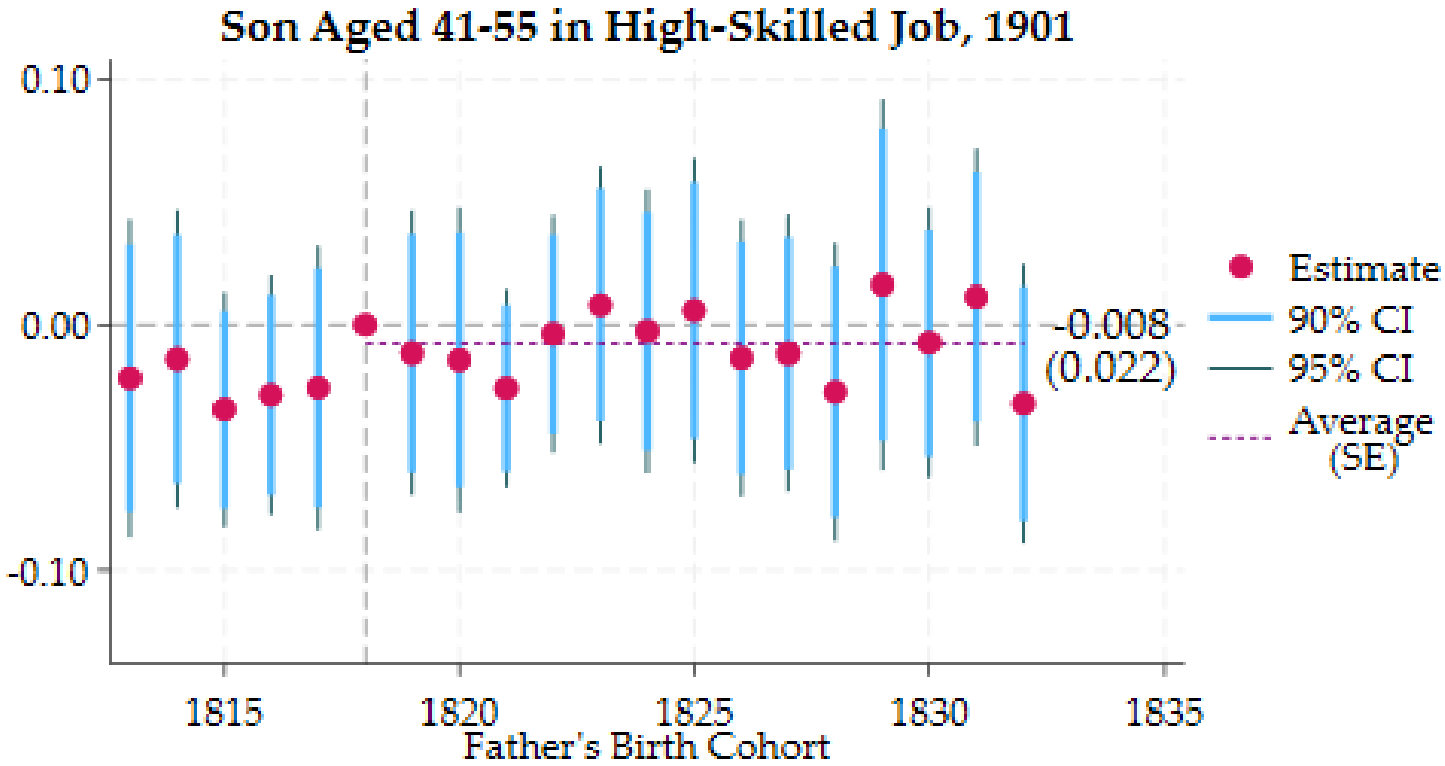
- Moving forward: Use first name in restricted data, create crosswalk between 1861 and 1901 parishes to increase (correct) matches
- Results shown today use inverse propensity score weighting to improve linked sample's representativeness (Bailey, Cole and Massey, 2020)

Representativeness of Linked Sample

	Unweighted (1)	IP weighted (2)
Living in England in 1901	0.0090	-0.0570
	(0.0007)	(0.1193)
Born in England	0.0156	-0.1015
	(0.0007)	(0.0165)
Age	-0.0002	0.0007
	(0.0001)	(0.0004)
Single	-0.0096	0.0078
	(0.0005)	(0.0143)
Any children	0.0074	-0.0026
	(0.0003)	(0.0026)
Employed	-0.0065	0.0107
	(0.0015)	(0.0096)
Employed in a low-skill job	-0.0019	0.0158
	(0.0003)	(0.0052)
Living on a farm in 1901	0.0111	-0.0289
	(0.0006)	(0.0042)
Observations	2,088,489	2,088,473
R^2	0.0017	0.0139
F-statistic	657.2	12.6

Notes: Dependent variable is whether an observation from the potential pool of matches is linked across the 1861 and 1901 samples. Column (2) uses inverse propensity score weights (Bailey, Cole and Massey, 2020).

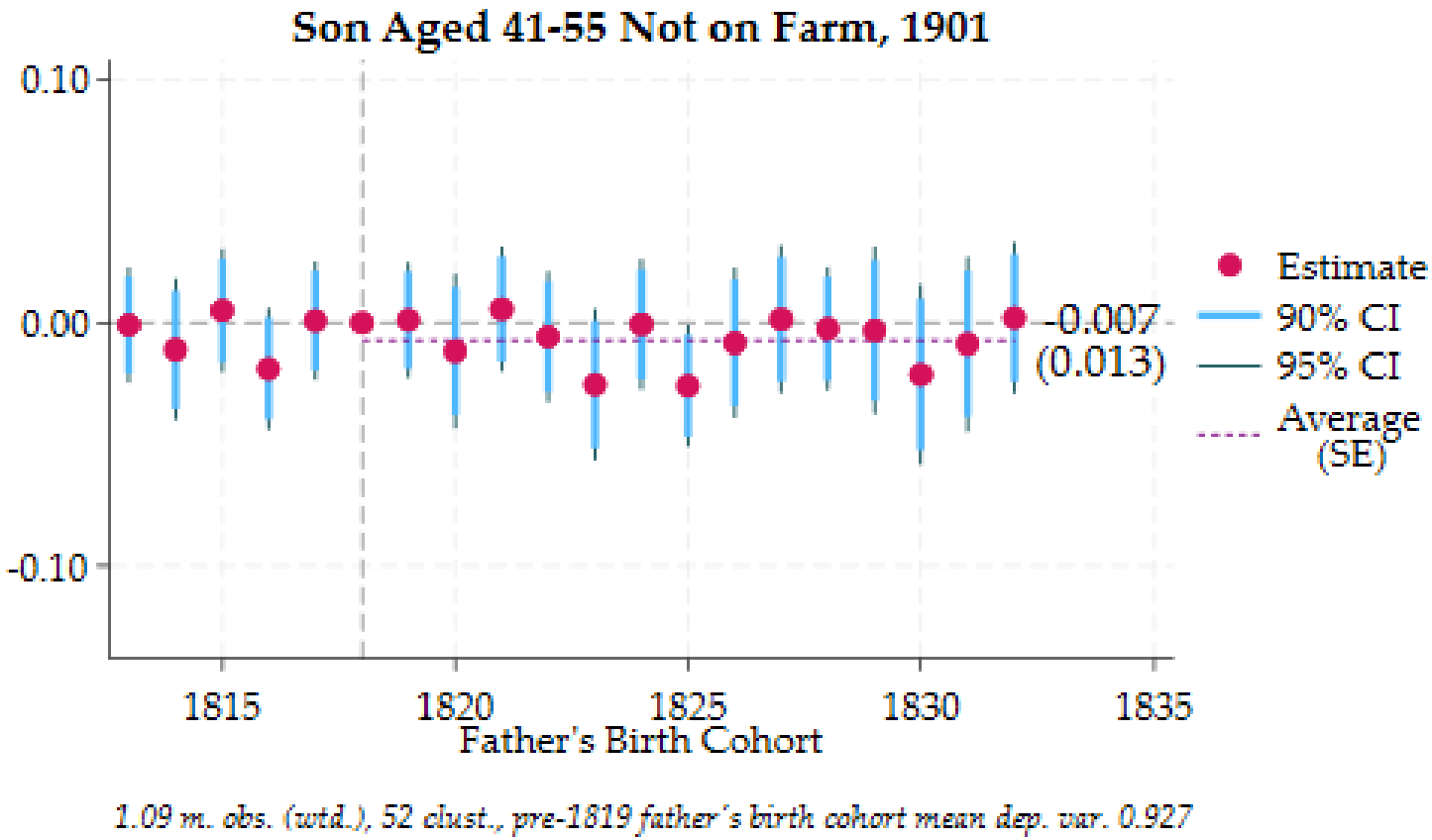
Results: Effects on Next Gen. as Adults, 1901



1.09 m. obs. (wtd.), 52 clust., pre-1819 father's birth cohort mean dep. var. 0.571

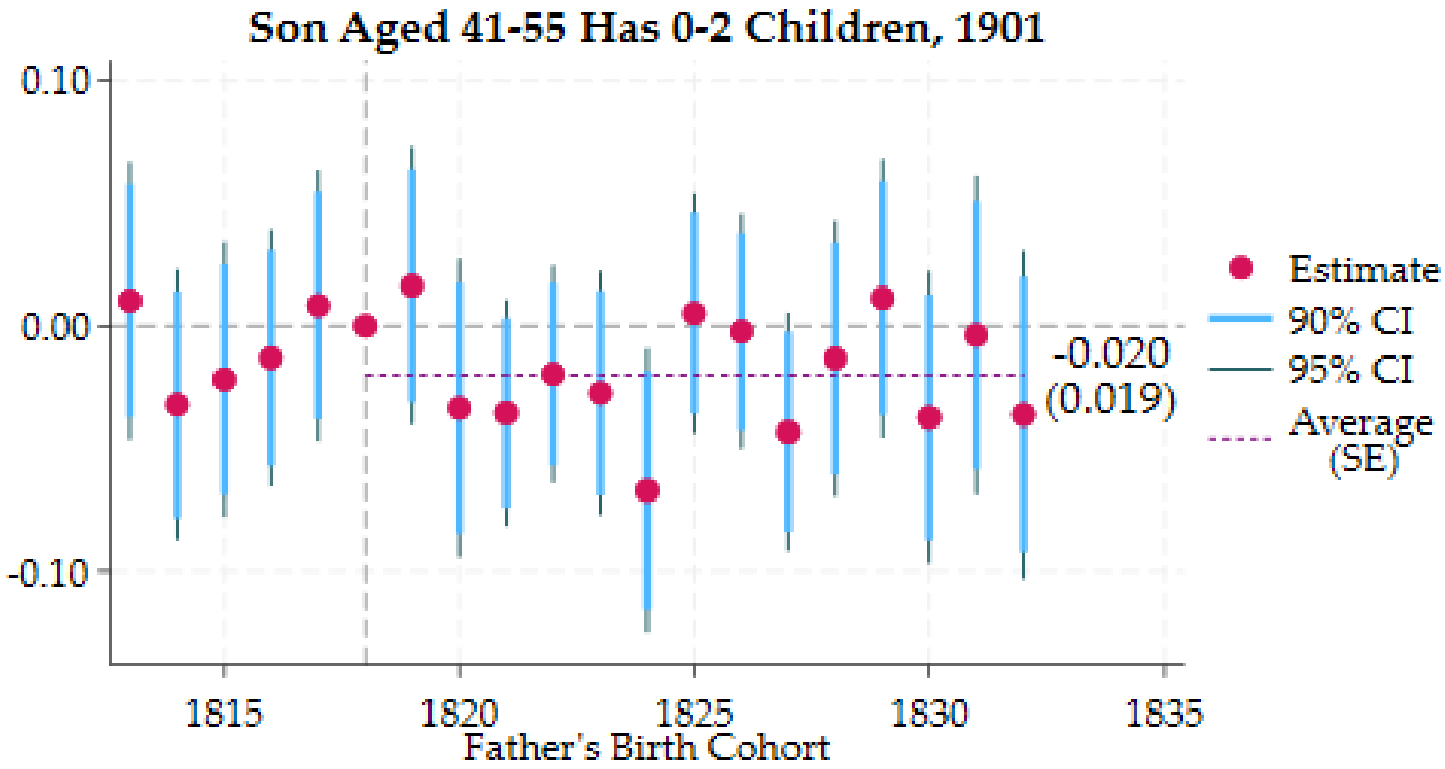
Men in high-skilled job: ↓ 0.8 p.p. (1.4%), but imprecise

Results: Effects on Next Gen. as Adults, 1901



Men off of farms: No real effect to speak of

Results: Effects on Next Gen. as Adults, 1901



Below-median no. of children: ↓ 2.0 p.p. (3.4%), but imprecise

- Possible indicator of QQ tradeoff (human capital matters more now)

Empirical Strategy: Effects on 3rd Gen. as Children, 1901

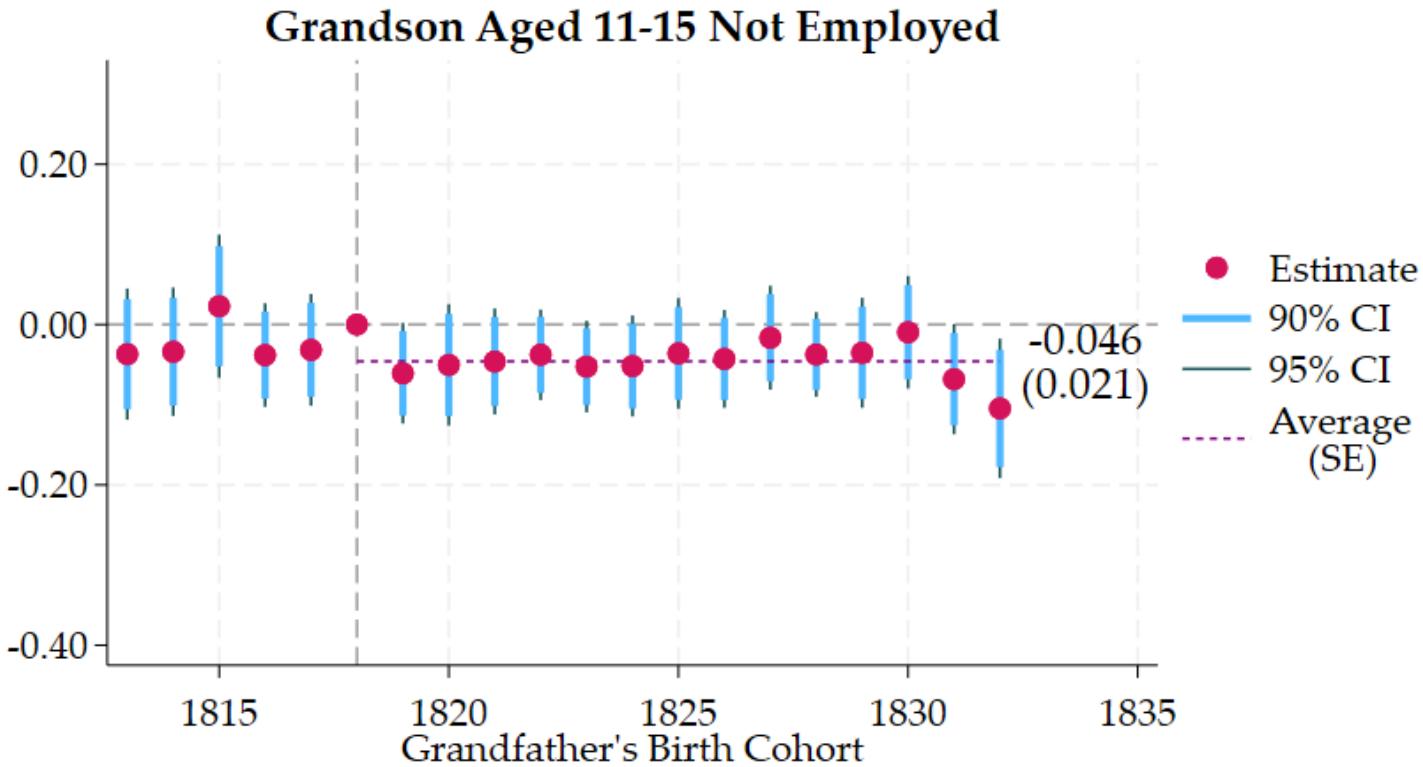
$$y_{i,c,b} = \alpha_{\hat{c}} + \gamma_{\hat{b}} + \cdot(\mathbf{1}[\hat{b} \geq 1819] \cdot \mathbf{1}\left[|\Delta_{\hat{c},\text{1833-34}}| \geq |\Delta_{\text{median,1833-34}}|\right]) + \mathbf{X}_i\beta + \gamma_{\hat{b}} \cdot \kappa_{k(\hat{c})} + \epsilon_{i,\hat{c},\hat{b}} \quad (4)$$

Where:

- $\alpha_{\hat{c}}$, $\gamma_{\hat{b}}$: FE for grandfather's county of birth $\hat{c}$ and year of birth $\hat{b}$
- $\mathbf{1}[\hat{b} \geq 1834]$: Indicator for grandfather aged 15 or younger in 1834
- $\mathbf{1}\left[|\Delta_{\hat{c},1833-34}| \geq |\Delta_{\text{median,1833-34}}|\right]$: Indicator for grandfather's county of birth in treatment group
- $\mathbf{X}_i$: Controls for i's age and age squared
- And all other variables, estimation choices analogous to before

Data: Linked obs. in IPUMS 1901 census of England and Wales

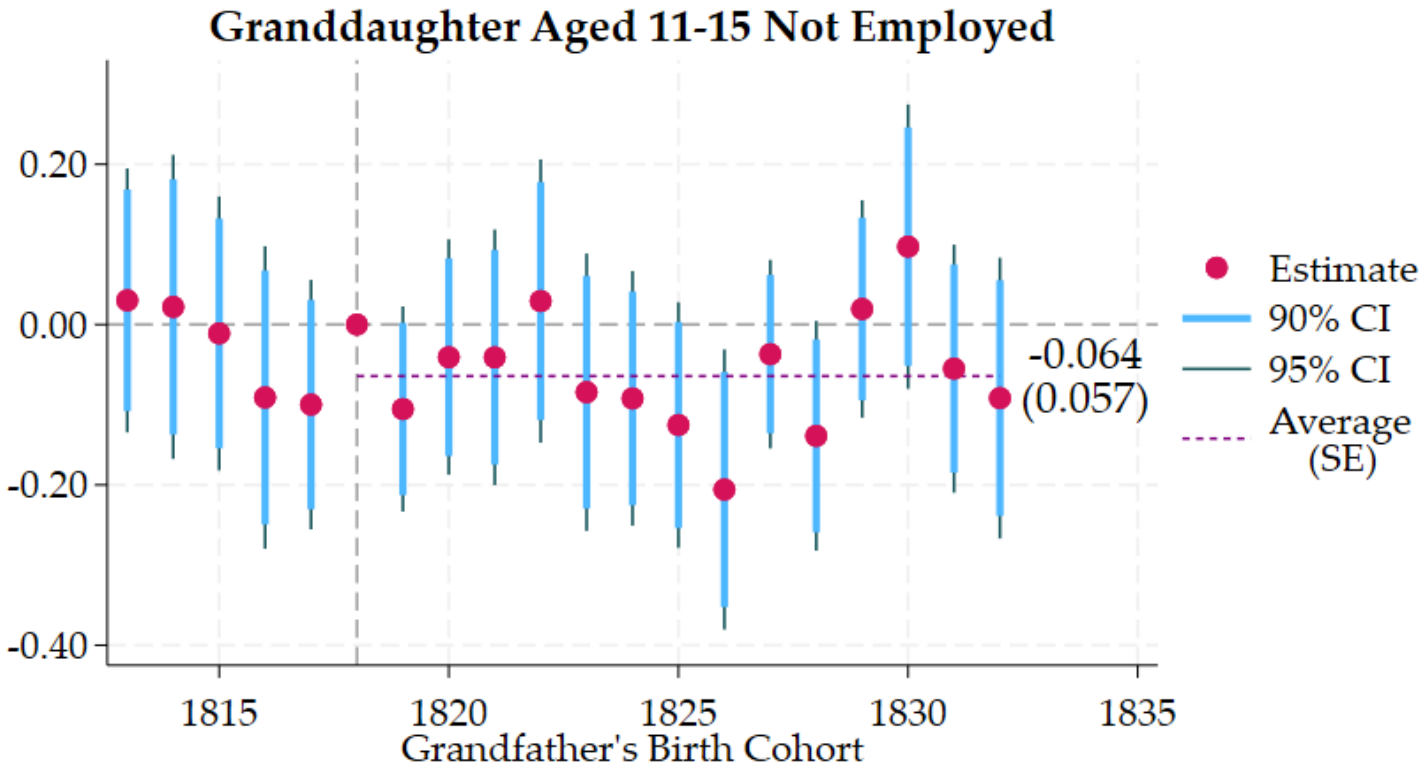
Results: Effects on 3rd Gen. as Children, 1901



0.20 m. obs., 52 clust., pre-1819 father's birth cohort mean dep. var. 0.115

Boys not employed (i.e., in school): ↓ 4.6 p.p. (5.2%)

Results: Effects on 3rd Gen. as Children, 1901



0.09 m. obs., 52 clust., pre-1819 father's birth cohort mean dep. var. 0.248

Girls not employed: ↓ 6.4 p.p. (8.5%), but imprecise

Summary

1. **1834: Largest Welfare-Spending Cut in British History**
   - From transferring 2% of GDP to 15% of the population . . .
   - . . . To transferring 1% of GDP to 10% of the population

2. **Diff-in-Diff:** {**Pre, Post**} × {**High-, Low-Decline Counties**}
   - Adults exposed in childhood (1861): ↓ 2-5% high-skilled job
   - Next generation as children (1861): ↓ 3-4% in school
   - Next generation as adults (1901): More children (imprecise)
   - Third generation as children (1901): ↓ 5-9% in school

Summary

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In progress: Digitizing parish-level data on poor relief, demographic outcomes (baptisms, marriages, deaths), getting access to first names

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In progress: Digitizing parish-level data on poor relief, demographic outcomes (baptisms, marriages, deaths), getting access to first names

Takeaway: Important to account for multi-generational effects in cost-benefit analyses of social programs

Thank you!

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Roadmap

❸ **Appendix Slides**

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Appendix: Seasonal Wheat Labor Demand

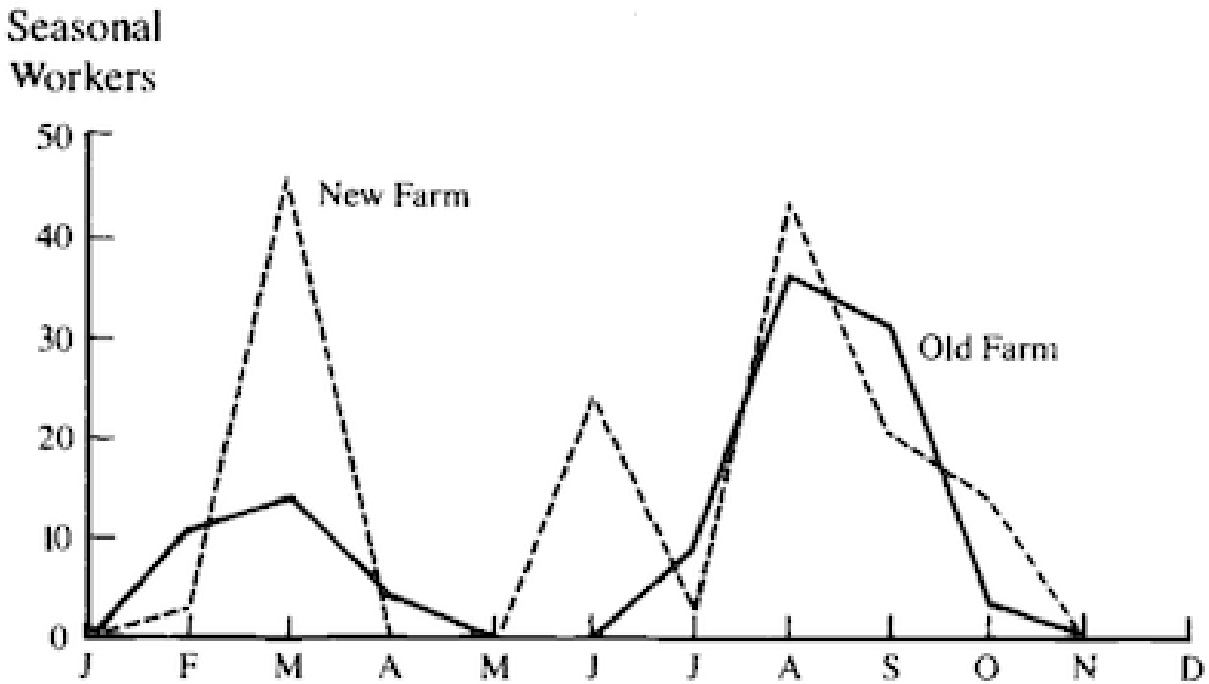

Figure 3.3. Monthly labor requirements of two 500-acre farms. (*Source:* Timmer [1969: 394].)

(Boyer, 1990, p. 113)

◂ History ◂ Results