

The Hinge of the Golden Door: Labour Market Impacts of Immigrant Exclusion

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Low-Skilled Immigration Restrictions and the Local Labour Market

- Key debate: effect of immigration on native labour market outcomes
- Belief of positive benefits for low-skilled native workers one of the main political justifications for low-skilled immigration restrictions
- COVID regulations in Australia disproportionately restricted low-income countries → significant low-skilled labour shortages
- Relatively limited empirical evidence on the long-run effects of immigration restrictions on native labour market outcomes
- I analyse the landmark case study of the Chinese Exclusion Act of 1882 in the United States, first immigration restriction in US history

The hinge on which the “golden door” began to swing almost shut.

- Roger Daniels (1990)

Brief Overview

- Chinese Exclusion Act: immigration ban of Chinese labourers
- **Research Question:** What effect did the Chinese Exclusion Act have on long-term native occupational mobility?
- Linked full-count Census data in conditional DID framework, utilising variation in pre-treatment Chinese settlement patterns
- I find negative long-term effects on native occupational mobility, particularly low-skilled and unemployed workers
- Contrary to standard model: low-skilled labour shortage → increase low-skilled native employment and wages
- **“Honeypot” Effect:**
 - Short-run: labour shortage increases wages in low-skilled occupations
 - Natives in affected labour markets increasingly attracted to low-skilled occupations, disincentivises upskilling
 - Long-run: these workers fall behind in occupational upgrading, increased in-migration cancel out wage gains

Historical Background

- Chinese immigration began with the California Gold Rush in 1848, over 300,000 Chinese migrated to the US prior to 1882
- Chinese only 0.8% of total immigrant population in 1880, but heavily concentrated in the West
- The Chinese Exclusion Act was passed in 1882 in response to widespread recession and belief that Chinese responsible for depressed wages and unemployment
- Completely unrestricted to complete ban, only a tiny number of non-labourer migrants (merchants, diplomats) excluded
- Chinese only ethnicity unable to freely migrate to the US for nearly half a century, the Act remained in place until 1943

Chinese Immigration to the United States

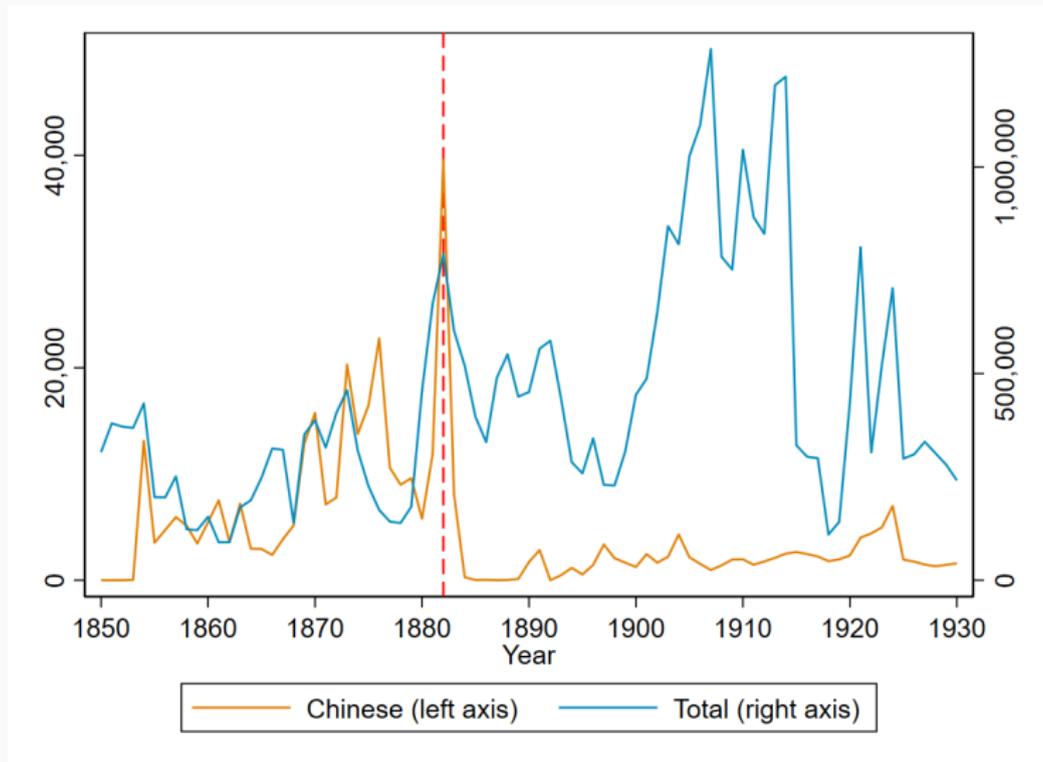


Figure 1: Annual Chinese Immigration Inflow to the United States, 1850-1930

Advantages of the Chinese Exclusion Act

- Provides unique case study of effect of low-skilled immigration restriction with several key advantages:
 - Sharper, cleaner, more targeted restriction
 - Minimal illegal immigration
 - Historical and empirical evidence that Chinese immigrants during this period more comparable and substitutable with low-skilled natives

Long-Run Effects of Immigration Restrictions

- Increased interest, predominantly two main case studies:
 - **The 1920s US immigration quotas** (Ager & Hansen 2017, Lew & Cater 2018, Tabellini 2020, Price et al. 2020, Moser & San 2020, Buggle et al. 2020, Abramitzky et al. 2022)
 - **Mexican-US border restrictions** (Clemens et al. 2018, Lee et al. 2022)
- General consensus of weakly negative native labour market effects and wider societal impacts

The “Honeypot” Effect

- I provide suggestive evidence for this novel effect, potentially reconciles empirical findings with theoretical model predictions
- Closely related to several strands of immigration literature:
 - **Native upskilling incentives** (Hunt 2012, Cattaneo et al. 2015, Fogel & Peri 2016, Mandelman & Zlate 2022)
 - **Migration response** (Borjas 2006, Dustmann et al. 2017, Abramitzky et al. 2019, Price et al. 2020)

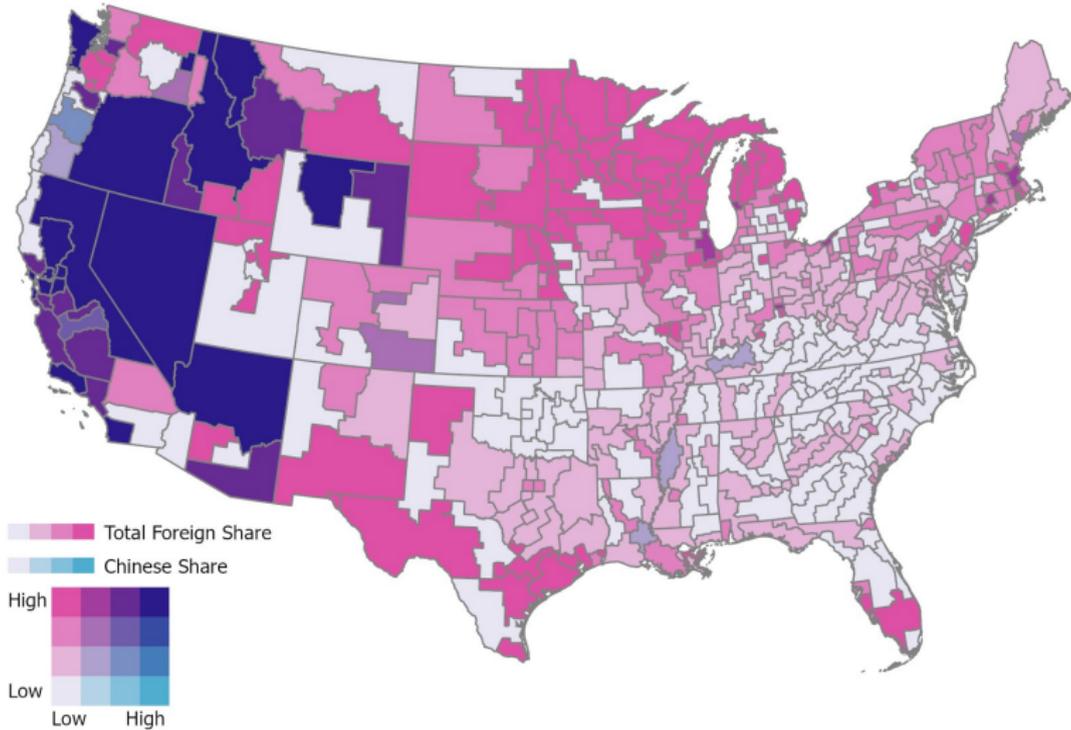
Effects of the Chinese Exclusion Act

- Landmark legislation that set legal foundations and border protection infrastructure that defines US immigration policy today
- First quantitative analysis of the economic impacts on natives
- Previous studies have explored effects on Chinese migrants: Chen (2015) [human capital], Chen & Xie (2020) [assimilation]

Data and Matching

- Full-count samples of 1880 and 1900 US Census (1890 unavailable)
- Linking of individuals between Censuses done by the Census Linking Project, successfully link about 30% of the target population
- Sample limited to working age men participating in the labour market both periods (1880 and 1900): 2,139,624 workers
- State Economic Area (SEA) main geographic unit, defined as economically linked counties equivalent to historic labour market
- Income not recorded until 1940 Census, use occupational income score as main outcome variable

1880 Chinese/Total Foreign Share of Working Age Population



Controls and Coarsened Exact Matching

- Controlling for total foreign born share means comparing individuals in markets with same foreign presence, but different *composition* of foreign workers
- Significant lack of treatment balance, even after controls Balance
- Use coarsened exact matching, as proposed by lacus et al. (2012), on pre-1882 individual- and SEA-level characteristics Method
- Ensures comparisons between workers in 1880 with:
 - i identical occupations in identical industries
 - ii same rural/urban residence and similar agewho reside in labour markets in 1880 with:
 - i Similar industrial composition
 - ii Similar total-foreign born share
- Incredibly fine matching, over 150,000 matching strata

Empirical Strategy

Regression Equation

$$y_{ijt} = \alpha_j + \gamma_t + \beta_1 \text{Chinese}_{j,1880} \times 1882_t + \beta_2 \text{Foreign}_{j,1880} \times 1882_t + \epsilon_{ijt}$$

- y_{ijt} - log occupational income score of individual i in Census decade t who in 1880 resided in SEA j
- $\text{Chinese}_{j,1880}$ - equal to one if SEA j has significant Chinese share in 1880
- $\text{Foreign}_{j,1880}$ - total foreign-born share in SEA j in 1880
- SEA and Census decade fixed effects (α_j, γ_t) , standard errors clustered at SEA level

Results

Main Results

Table 1: Effect of Chinese Exclusion Act on Native Occupational Mobility

	Log Occupational Income Score				
	(1)	(2)	(3)	(4)	(5)
ChineseSEA \times 1882	0.004 (0.019)		-0.012** (0.005)		0.007 (0.008)
ChineseInd \times 1882		-0.028 (0.028)		-0.021*** (0.008)	-0.034*** (0.010)
Foreign \times 1882	-0.722*** (0.037)	-0.113*** (0.005)	-0.305*** (0.014)	-0.049* (0.004)	-0.296*** (0.014)
Constant	2.906	2.906	2.407	2.504	2.414
Two-Way FE	Y	Y	Y	Y	Y
Matched Individuals	N	N	Y	Y	Y
R ²	0.008	0.056	0.103	0.058	0.103
N	3,363,282	3,363,282	216,674	79,648	216,674

Main Results: Select Sub-Groups

Table 2: Effect of Chinese Exclusion Act on Exposed Sub-Groups

	Young Workers (1)	Low-Skilled Workers (2)	Workforce Non-Participants (3)	Drop Farmers (4)
ChineseSEA \times 1882	-0.010 (0.007)	-0.022*** (0.008)	-0.042*** (0.014)	-0.037*** (0.007)
Foreign \times 1882	-0.447*** (0.018)	0.018 (0.025)	0.543*** (0.034)	0.308*** (0.017)
Constant	2.275	2.338	0.000	3.168
Two-Way FE	Y	Y	Y	Y
Matched Individuals	Y	Y	Y	Y
R ²	0.154	0.394	0.953	0.030
N	121,780	51,854	20,313	97,172

Mechanisms: The “Honeypot” Effect

Labour Shortage Effects

- Substantial decrease in Chinese population: average workforce share in treatment SEAs decreases from 14.8% in 1880 to 6.6% in 1900
- High native/Chinese substitutability: the majority of the jobs vacated by Chinese filled by natives [Results](#)
- Low-skilled wage increases: Industry Census data suggests average low-skilled mining wages significantly higher in Chinese exposed labour markets in 1890 [Results](#)

Human Capital Acquisition

- Impacted workers significantly less likely to become literate and ended up in occupations with lower median education levels [Results](#)

Migration Response

- Shortage of Chinese labour was largely substituted in the long-run with immigrants from unrestricted regions [Results](#)

Early Childhood Exposure Analysis

- Two key limitations with the analysis:
 - One post-period 18 years after Act, cannot directly observe dynamics
 - Occupational income score does not capture within-occupation income increases, so do not know overall net welfare effects
- Provide insight into both using the fact that income shocks in early childhood (0-8 years) have long-lasting effects on adult earnings
- Compare the adult earnings of children of the same cohort between those whose fathers were exposed and similar unexposed fathers, can infer father's economic standing during early childhood [Diagram](#)
- Children aged 0-8 in 1882 with exposed fathers had significantly higher adult earnings, but no difference for children born more than a decade after implementation [Results](#) [Figure](#)

Conclusion

Conclusion

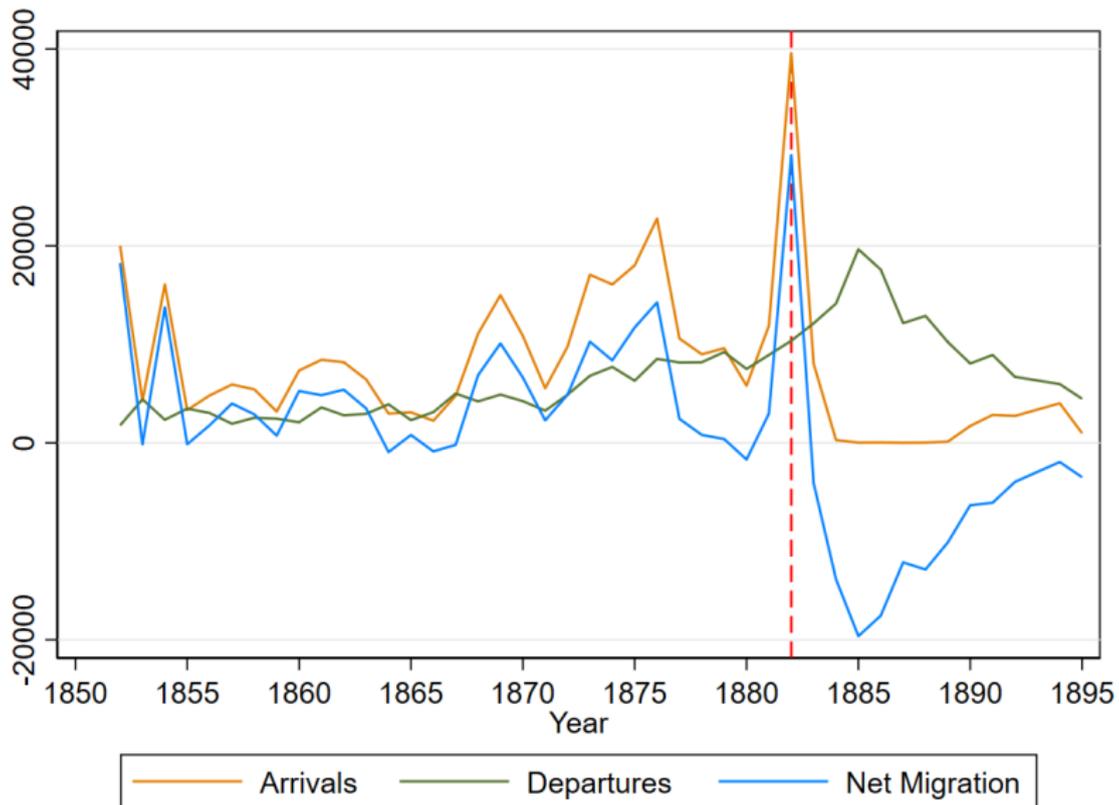
- The Chinese Exclusion Act of 1882 was a pivotal moment in US immigration history, unique opportunity to examine the labour market effects of immigration restriction
- Find negative effects on native long-term occupational mobility, particularly for most vulnerable
- Evidence of a “honeypot” effect where short-run wage gains are actually the driver of long-run occupational downgrading
- Helps bring more nuance to our understanding of the effect of immigration restrictions

Thank you!

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Chinese Immigration to the United States



Summary Statistics

Table 7: Summary Statistics - Linked Sample in 1880

	Mean	Std. Dev.	Min	Max
<u><i>Individuals</i></u>				
Log Occupational Score	2.906	0.436	1.386	4.394
Log Socioeconomic Index	2.883	0.633	1.792	4.585
Log Prestige Score	3.507	0.389	0	4.413
Log Earnings Score	2.997	0.961	0	4.615
Log Educational Score	1.857	0.717	0	4.615
Literacy	0.934	0.248	0	1
Age	30.193	8.804	18	50
Urban	0.198	0.398	0	1
Agricultural Worker	0.494	0.500	0	1
Manufacturing Worker	0.108	0.310	0	1
Mining Worker	0.010	0.097	0	1
<u><i>SEAs</i></u>				
Population (000s)	27.540	42.541	0.089	617.413
Area (000s sq.km)	16.624	26.801	0.159	286.352
Chinese Share	0.012	0.046	0	0.360
Non-Chinese Foreign Share	0.208	0.175	0.001	0.810
Total Foreign Share	0.220	0.188	0.001	0.810

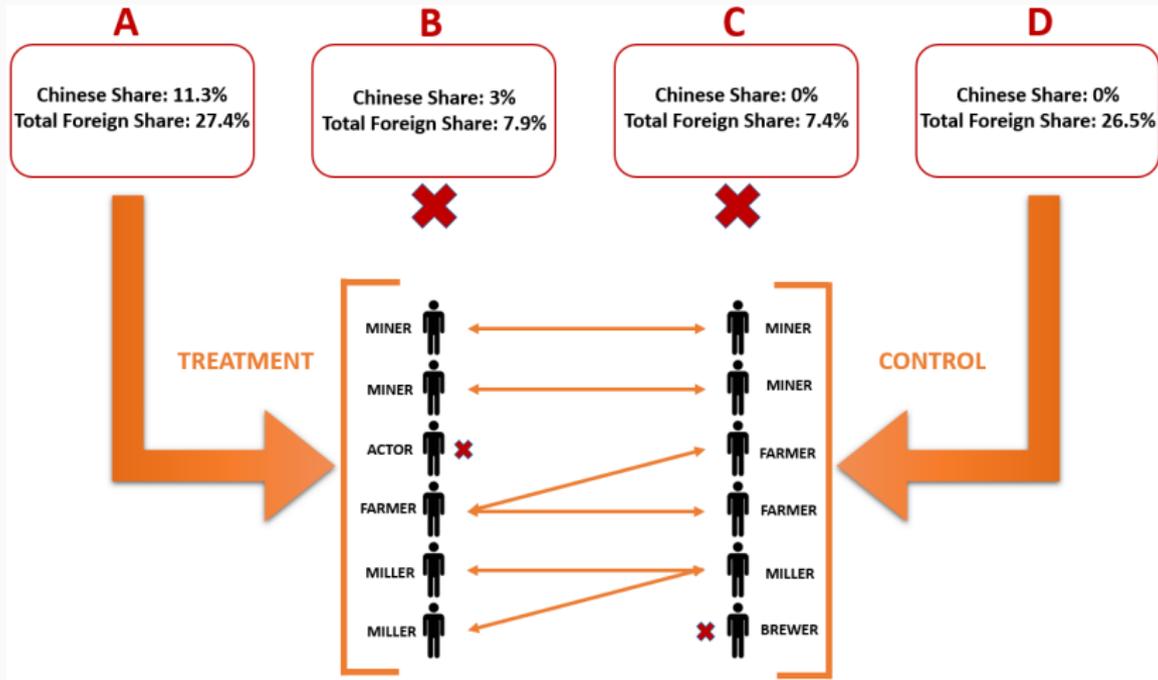
Balance Test

Table 8: Treatment Balance (1880 Census Linked Sample)

	Treatment	Control	Difference
<i>Individuals</i>			
Log Occupation Score	2.774 (0.004)	2.718 (0.001)	0.056***
Age	30.632 (0.045)	29.933 (0.006)	0.699***
Urban	0.237 (0.002)	0.213 (0.000)	0.024***
Agricultural Worker	0.376 (0.002)	0.496 (0.000)	-0.120***
Manufacturing Worker	0.082 (0.001)	0.108 (0.000)	-0.026***
Mining Worker	0.060 (0.001)	0.008 (0.000)	-0.052***
N	44,571	2,095,053	
<i>SEAs</i>			
Chinese Share	0.148 (0.013)	0.000 (0.000)	0.148***
Non-Chinese Foreign Share	0.311 (0.015)	0.198 (0.009)	0.112***
Total Foreign Share	0.458 (0.019)	0.198 (0.009)	0.260***
N	36	393	

Return

Coarsened Exact Matching Methodology



Mechanisms: Native/Immigrant Substitutability

Table 4: Native/Immigrant Occupation Substitutability

	Native Employed (1)	Non-Chinese Foreign Employed (2)	Total Employed (3)
Chinese \times 1882	1.945*** (0.645)	1.083 (0.746)	0.792 (0.741)
Foreign \times 1882	0.258 (0.449)	2.531*** (0.520)	-6.665*** (0.516)
Constant	1.000	1.000	1.000
Two-Way FE	Y	Y	Y
Matched Units	Y	Y	Y
R ²	0.020	0.003	0.024
N	65,358	65,358	65,358

Mechanisms: Low-Skilled Wages

Table 3: 1890 Mining Wages by County

	Hourly Wage (1)	Wage Index (2)
Chinese SEA	1.104*** (0.202)	0.538*** (1.000)
Foreign Share	0.061 (0.224)	0.050 (0.101)
Total Production	0.045*** (0.008)	0.022*** (0.004)
Gold/Silver	0.221 (0.367)	-0.146 (0.193)
Coal	0.090 (0.300)	0.365** (0.168)
Constant	1.837	0.585
Mean of Dep. Var.	2.159	1.000
R ²	0.570	0.275
N	251	251

Mechanisms: Human Capital

Table 3: Educational Effects of the Chinese Exclusion Act

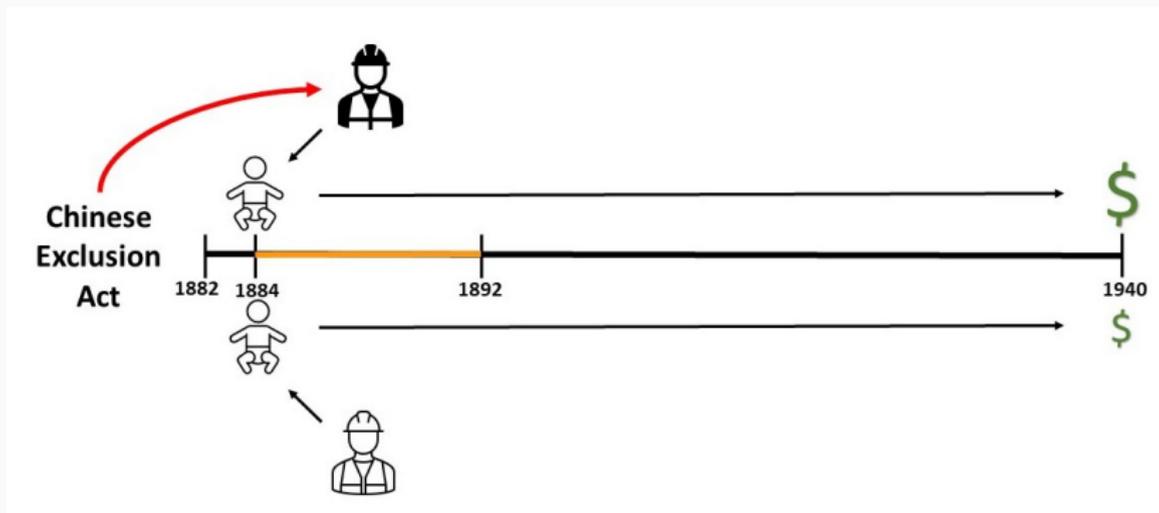
	Literacy		Log Occupational Education Score	
	(1)	(2)	(3)	(4)
Chinese×1882	-0.265*** (0.028)	-0.178*** (0.042)	0.013 (0.009)	-0.106*** (0.021)
Foreign×1882	0.280*** (0.059)	-0.008 (0.152)	-0.347*** (0.023)	0.032 (0.054)
Constant	1.229	1.288	1.249	1.569
Two-Way FE	Y	Y	Y	Y
SEA Exposure	Y	N	Y	N
Industry Exposure	N	Y	N	Y
Matched Individuals	Y	Y	Y	Y
R ²	0.015	0.017	0.055	0.040
N	286,950	97,890	216,674	79,648

Mechanisms: Population Flows

Table 6: Migration Response to the Chinese Exclusion Act

	Chinese Share (1)	Non-Chinese Foreign Share (2)	Native Share (3)	Total Population (4)
Chinese \times 1882	-0.082*** (0.007)	0.069*** (0.019)	0.013 (0.018)	-0.571 (3.474)
Foreign \times 1882	-0.060* (0.033)	-0.082 (0.085)	-0.142* (0.078)	7.468 (15.292)
Constant	-0.035	0.035	1.000	1.000
1880 Mean in Exposed SEAs	0.148	0.311	0.542	1.000
Two-Way FE	Y	Y	Y	Y
Matched SEAs	Y	Y	Y	Y
R ²	0.776	0.773	0.763	0.030
N	205	205	205	205

Early Childhood Exposure Framework



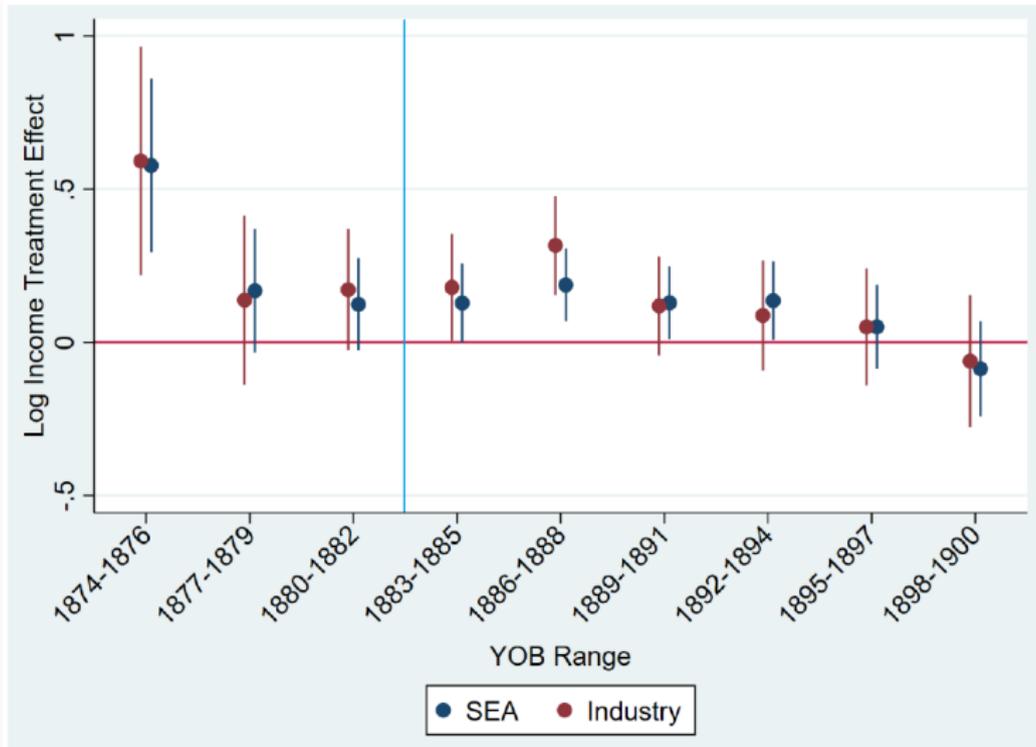
[Return](#)

Early Childhood Exposure Results

Table 7: Early Childhood Exposure Effects of the Chinese Exclusion Act

	1875-1882 Birth Year		1892-1900 Birth Year	
	(1)	(2)	(3)	(4)
Exposed Father	0.332*** (0.096)	0.247** (0.121)	0.044 (0.058)	0.013 (0.076)
Constant	7.545	7.570	7.688	7.694
SEA Exposure	Y	N	Y	N
Industry Exposure	N	Y	N	Y
Matched Fathers	Y	Y	Y	Y
R ²	0.002	0.001	0.000	0.000
N	6,403	2,313	13,245	4,526

Early Childhood Exposure Results



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