# Institutional Discrimination and Assimilation: Evidence from the Chinese Exclusion Act of 1882\*

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#### Abstract

The Chinese Exclusion Act of 1882 banned Chinese immigration and institutionalized discrimination against Chinese in U.S. society. This study examines the impact of institutional discrimination on the assimilation of Chinese by exploiting the passage of the Act and the state-level variation in the intensity of discrimination, measured by the voting outcomes of the Act and the number of anti-Chinese incidents. Our difference-in-differences estimates show that discrimination substantially slowed the occupational assimilation of Chinese in the Exclusion Era (1882–1943) and that Chinese in the U.S. reacted to discrimination by investing in human capital, improving English skills, and increasingly adopting Americanized names. The triple difference estimates show that these effects are significantly stronger in states with higher support rates of the Act or greater numbers of anti-Chinese incidents. These findings are not driven by the selection in migration and fertility.

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## 1 Introduction

Given the rapidly growing immigrant population in many developed countries in recent decades, whether immigrants can successfully assimilate into the host society has become a vital question of high policy relevance. A robust body of empirical research has identified various individual or group characteristics of immigrants that affect their assimilation, including age at arrival (Schaafsma and Sweetman, 2001; Böhlmark, 2008; Bleakley and Chin, 2010; Borjas, 2015; Alexander and Ward, 2018), home country characteristics (Blau and Kahn, 2007; Blau et al., 2011), ethnic and religious identities (Cutler et al., 2008; Bisin et al., 2016), language skills (Dustmann and Fabbri, 2003; Bleakley and Chin, 2004; Cohen-Goldner and Eckstein, 2008; Chiswick and Miller, 2015; Bacolod and Rangel, 2017), and pre-migration human capital (Ferrer and Riddell, 2008; Green and Worswick, 2012; Hirsch et al., 2014).

However, only a relatively thin literature examines how external factors, such as institutional shifts or changes in public attitudes triggered by exogenous incidents, shape the incentives of immigrants to assimilate and affect their integration into society (Gould and Klor, 2016; Gathmann and Keller, 2017; Fouka, 2019a; Fouka, 2019b; Abdelgadir and Fouka, 2020). Such assessments are a vital step toward understanding how some countries in specific periods can successfully integrate immigrants of various origins and ethnicities. To what extent can this success be attributed to the intrinsic characteristics of immigrants or the features of the host country, such as open immigration policies and tolerant attitudes toward immigrants?<sup>1</sup> This strand of research

<sup>&</sup>lt;sup>1</sup>For instance, the metaphor of "melting pot" depicts the United States as a society where immigrants of different cultural and ethnic backgrounds assimilate relatively easily. Some studies argue that the higher tolerance for cultural diversity in U.S. society created a friendly environment for immigrants to assimilate rather than the better quality of immigrants to the United States (Antecol et al., 2003; Citrin and Sides, 2008).

deserves heightened attention given the current global backlash against immigration, which has manifested as exclusive and discriminatory political rhetorics, campaigns, and policies.<sup>2</sup>

In this study, we draw upon the case of the Chinese Exclusion Act of 1882 to examine the impact of discrimination institutionalized by legislation on the assimilation of immigrants. The Chinese Exclusion Act effectively prohibited the entry of Chinese immigrants and legalized discrimination against Chinese in the United States for more than half a century. It is the only immigration legislation enacted in the United States to date that targeted a specific ethnic group, thus providing a unique context within which to address our research question.

Using the micro-samples of the U.S. censuses, we apply the difference-in-differences (DID) strategy to identify the impact of discrimination on the assimilation rate of Chinese immigrants in terms of occupational mobility following the passage of the Act. The DID estimates show that institutional discrimination reduced the occupational upward mobility of Chinese immigrants by more than 50% in the Exclusion Era (1882–1943). To address the concern about parallel trends and consolidate our results, we use the triple difference (DDD) strategy to exploit the variation in the intensity of discrimination at the state level, as measured by the voting outcomes of the Act in the legislative process and the number of anti-Chinese incidents that occurred after 1882. The DDD estimates show that this negative effect is significantly stronger in states that exhibited more severe discrimination against Chinese immigrants. We rule out the alternative explanation that these findings are driven by the selection in migration due to immigration restrictions.

We then use the same DID and DDD strategies to examine the impact of discrimi-

<sup>&</sup>lt;sup>2</sup>Such cases include Brexit in the UK and the resurgence of far-right political leaders who oppose open immigration among EU countries due to economic recession and the rise of nationalism. ("French election: Le Pen pledges to suspend immigration", BBC News, April 2017). The most dramatic example is the Trump administration that temporarily banned immigration from seven Muslim-majority countries, envisioned a wall on the U.S.-Mexico border, and recently ordered a bar on the entry of certain Chinese students and researchers. ("Trump's executive order: Who does travel ban affect?", BBC News, February 2018; "Trump visits California to see wall prototypes near Mexico border", NBC News, March 2018; "It's the new Chinese Exclusion Act': How a Trump order could hurt California universities", LA Times, June 2020.)

nation on the human capital investment, English skills, and name Americanization of Chinese immigrants. Investing in human capital and destination language skills can improve the labor market outcomes of immigrants and facilitate their economic assimilation (Dustmann, 1993; Chiswick and Miller, 2015). In addition, the acquisition of destination language skills can be viewed as the investment in country-specific human capital, which signals a stronger intention of permanent migration (Dustmann, 1993). Adopting American-sounding names is not only an indicator of cultural assimilation (Abramitzky et al., 2016) but also produces a substantial economic value (Oreopoulos, 2011; Biavaschi et al., 2017). Therefore, we consider these behaviors as strategic investments of Chinese parents in their children's assimilation in response to discrimination. In particular, name Americanization has the advantage of measuring assimilation efforts that are fully under the control of immigrants, whereas economic and educational indicators are equilibrium outcomes constrained by a discriminatory environment (Fouka, 2019b). The DID estimates show that, in comparison with Chinese born before 1882, Chinese born after 1882 attended school more, were more likely to be literate and speak English, and used more American-sounding first names. The DDD estimates show that these responses were more pronounced in states with higher intensities of discrimination. To rule out alternative explanations, we show that these results are not driven by either the selection in migration or that more assimilated Chinese were more likely to stay and to have children after 1882. These findings suggest that the Chinese made great efforts to assimilate confronted by discrimination in this period.

This study mainly contributes by examining the impact of institutional discrimination on the assimilation of immigrants. Prior studies exploit the exogenous change in public attitudes toward immigrants to identify the impact of discrimination on their assimilation. Gould and Klor (2016) find that discrimination against Muslims after the 9/11 attack discouraged their assimilation in the United States and strengthened their ethnic identity. Fouka (2019b) conversely shows that Germans Americanized their names and filed more petitions for naturalization as efforts to assimilate in the face of anti-German sentiments in the United States during World War I. While these studies focus on informal discrimination, we examine the causal effect of discrimination institutionalized by legislation on assimilation.<sup>3</sup> We also contribute to the literature on immigration policies of various forms that target the integration of immigrants into society. Gathmann and Keller (2017) find that access to citizenship in Germany encouraged the labor force participation of female immigrants. In contrast, Fouka (2019a) and Abdelgadir and Fouka (2020) show that forced assimilation policies adversely reduced the integration of immigrants in the cases of German language prohibition in the United States and the French headscarf ban. We examine the opposite and extreme case where the Chinese Exclusion Act was intended to disintegrate and exclude Chinese from mainstream society completely using extensive measures.<sup>4</sup> By identifying the effects of discrimination on the measures of assimilation efforts and outcomes separately, we disentangle pure responses of immigrants from external constraints imposed by discrimination. Our findings suggest that institutional discrimination led to greater efforts of the discriminated group to assimilate despite that discrimination posed a great obstacle to their assimilation.

Our study also relates to the literature on the consequences of immigration restrictions. Previous research examines the effects of immigration restrictions on various aspects of the domestic economy, including labor market outcomes of natives, production decisions of firms, and innovation (Xie, 2017; Clemens et al., 2018; Doran and Yoon, 2018; Tabellini, 2019; Abramitzky et al., 2019). In this study, we show that immigration restrictions can also affect the socioeconomic outcomes of immigrants in the host country since immigration restrictions are often accompanied by domestic discrimina-

<sup>&</sup>lt;sup>3</sup>Oskooii (2016) conceptually categorizes the types of discrimination into societal (or interpersonal) discrimination and political (or institutional or systematic) discrimination. The former refers to discriminatory interactions between members of society that treated the discriminated group unfairly in daily activities. The latter refers to discriminatory policies or campaigns carraied out by state, such as Jim Crow laws that legalized racial discrimination against African Americans in the United States and the anti-Semitic policies of Nazi Germany. The Chinese Exclusion Act is a typical case of political discrimination inevitably co-existed in this period.

<sup>&</sup>lt;sup>4</sup>Komisarchik et al. (2019) study the effect of another drastic measure against immigrants by the U.S. government, the internment of Japanese Americans during World War II, on the political engagement of Japanese internees. Arellano-Bover (2019) exploits the internment as an exogenous displacement shock and examines its career impact on the internees.

tion against immigrants, a condition largely overlooked in the literature. Regarding the Chinese Exclusion Act specifically, Chen (2015) explores the impact of the Act on the selection of Chinese immigrants.<sup>5</sup> In this study, we identify how discrimination caused by the Act affected the assimilation of Chinese immigrants *conditional on* their characteristics by ruling out the confounding effect of the selection in migration.<sup>6</sup>

By examining the impact of discrimination on human capital investment, our study broadly relates to the literature on how external shocks affect individual preferences.<sup>7</sup> In a related study, Becker et al. (2020) examine the long-term impact of uprootedness on human capital investment in the case of forced migrants in post-WWII Poland and find that the descendants of those forced migrants are more educated than other Poles today. In our case, we similarly show that discrimination and exclusion caused Chinese immigrants to invest more in their children's human capital, albeit without evidence on its long-term transmission. In particular, this finding is of high relevance in the U.S. context, as scholars attempt to understand the high social mobility of Chinese Americans in modern U.S. society (Daniels, 2011; Lee and Zhou, 2015).<sup>8</sup> Our study implies an institutional explanation rooted in history that discrimination in the Exclusion Era strengthened the preference for human capital investment of Chinese in the U.S. and unintendedly facilitated their social mobility, an implication that warrants closer scrutiny under further evidence.

The remainder of the paper is organized as follows. Section 2 briefly describes the history of Chinese immigrants in the United States and the Chinese Exclusion Act of 1882. Section 3 discusses the data used in this study. Sections 4 and 5 present the

<sup>&</sup>lt;sup>5</sup>Using a descriptive approach, Carter (2013) shows that Chinese in the United States became more geographically dispersed and isolated in the Exclusion Era.

<sup>&</sup>lt;sup>6</sup>Chen (2015) finds that Chinese immigrants who migrated after the Act had lower occupational standings than those who migrated before, which she interprets as the substitution between observable and unobservable skills, as the Act is considered skill-based restrictions. Our study indicates that Chen (2015)'s finding is at least partly due to the greater exposure to discrimination of those who migrated after the Act.

<sup>&</sup>lt;sup>7</sup>A large body of literature examines the effects of institutional, environmental, and economic shocks on individual preferences (Giuliano and Spilimbergo, 2014; Galor and Özak, 2016; Alsan and Wanamaker, 2018; Hanaoka et al., 2018; Jakiela and Ozier, 2019; Zhang, 2019).

<sup>&</sup>lt;sup>8</sup>Previous research has attributed this high social mobility of Chinese to either the Confucian tradition that emphasizes human capital investment (Hirschman and Wong, 1986; Jasso and Rosenzweig, 1990; Brandt et al., 2014; Kristof, 2015) or to the increasing return to education over time due to improved institutional environment (Duleep and Sanders, 2012; Hilger, 2016).

empirical strategies and results. Sections 6 and 7 present the robustness checks and additional results. Section 8 concludes.

## 2 Historical Background

#### 2.1 Chinese Immigrants in the U.S.

Early Chinese immigrants were lured by the discovery of gold in California (the "California Gold Rush") in 1848. With continual large inflows, the Chinese population in the U.S. expanded rapidly from 560 in 1850 to 30,000 in 1860 and more than 110,000 in 1880 according to the U.S. censuses.

Chinese immigrants enjoyed a warm reception when they initially arrived since California was experiencing a labor shortage at that time (McClain, 1994). However, as the surface gold mines were gradually depleted, competition for employment increased, and the discontent of white laborers against Chinese laborers escalated. White laborers pressed for exclusive regulations against Chinese and forcibly drove them out of the mines.<sup>9</sup> Due to the tension with white laborers, many Chinese immigrants resorted to service jobs and other arduous labor work in restaurants, laundries, and railroad construction.<sup>10</sup> However, the economic recession in the 1870s refueled public anti-Chinese sentiments. Labor union leaders and politicians in Western states politicized anti-Chinese animosity by accusing Chinese laborers of depressing wages and advocated federal legislation to ban immigration from China.<sup>11</sup>

<sup>&</sup>lt;sup>9</sup>Culturally, the exotic appearances and customs of Chinese immigrants fueled xenophobia and nativism in a society dominated by white supremacy. The Chinese were considered an inferior race, and Chinatowns were depicted as filthy, depraved, and dangerous places with opium dens and brothels.

<sup>&</sup>lt;sup>10</sup>The most notable project was the construction of the First Transcontinental Railroad between 1863 and 1869, which employed approximately 14,000 Chinese workers.

<sup>&</sup>lt;sup>11</sup>Dennis Kerney, a labor leader of the Workingmen's Party of California, instigated campaigns against Chinese immigrants nationwide in the 1870s with his racially charged slogan "The Chinese must go" (Lew-Williams, 2018).

#### 2.2 The Chinese Exclusion Act (1882–1943)

On May 6, 1882, President Chester A. Arthur signed the Chinese Exclusion Act after the bill passed both houses of Congress.<sup>12</sup> The Act banned the immigration of Chinese laborers for 10 years and prohibited Chinese from naturalizing as U.S. citizens.<sup>13</sup> All Chinese immigrants traveling out of the country were required to carry an employment certificate to re-enter the United States. The Scott Act of 1888 further prohibited the reentry of Chinese immigrants who temporarily traveled abroad. In 1892, the Geary Act renewed the Chinese Exclusion Act for another 10 years.<sup>14</sup> Congress extended the Act in 1902 without a termination date and made the exclusion permanent in 1904. The Act remained in effect until the passage of the Magnuson Act of 1943 that once again permitted the immigration and naturalization of Chinese immigrants. The Chinese Exclusion Act greatly reduced Chinese immigration from an average annual inflow of 9,543 between 1854 and 1881 to 1,689 between 1882 and 1943 – an 83% reduction (Figure 1). The Chinese population in the United States ceased to grow after the passage of the Act, and substantial inflows of Chinese immigrants did not occur again until 1965.<sup>15</sup>

During the Exclusion Era of 1882–1943, Chinese immigrants lived in an American society that confronted them with severe institutional discrimination that affected every aspect of their daily lives. Various laws and regulations greatly restricted their civil rights, property rights, and economic activities. They were not permitted to testify in court. They were largely excluded public educational facilities (Kuo, 1998).<sup>16</sup> Several states passed Alien Land Laws and miscegenation laws that prohibited them from purchasing land and marrying Caucasians. In the labor market, employers were often forbidden to hire Chinese workers, and the Chinese could not qualify for licenses to prac-

<sup>&</sup>lt;sup>12</sup>The formal title of the Act is "An Act to Execute Certain Treaty Stipulations Relating to Chinese".

<sup>&</sup>lt;sup>13</sup>The Act also banned the entry of the relatives of Chinese immigrants and only allowed a small number of Chinese non-laborers to enter (diplomats, merchants, and students).

<sup>&</sup>lt;sup>14</sup>In addition, the Geary Act of 1892 required all Chinese to carry registration certificates of legal residence at all times with violations resulting in immediate deportation.

<sup>&</sup>lt;sup>15</sup>The immigration from China to the United States did not rise immediately after 1943 because the Quota Act of 1924 assigned an annual quota of merely 105 to China following the repeal of the Chinese Exclusion Act. The number of Chinese immigrants rose again only after the passage of the Immigration and Nationality Act of 1965 that established a relatively loose hemispheric quota system.

<sup>&</sup>lt;sup>16</sup>The states were sometimes vague about the access of Chinese to public educational facilities as they received little guidance from the federal government.

tice certain privileged occupations, such as law and medicine. Local governments frequently enacted taxes and regulations that specifically targeted Chinese-owned businesses.<sup>17</sup>

Local anti-Chinese incidents following the passage of the Act saw attempts to force the dislocation of Chinese communities. In this "Driving Out" period so named by Professor Jean Pfaelzer, more than 500 anti-Chinese incidents occurred in the United States between 1882 and 1890 in the form of expulsion, assault, demonstration, boycott, or government action (Pfaelzer, 2008). In those incidents with violence involved, the Chinese often failed to protect their properties or even their lives.<sup>18</sup> Notably, many of the roundups and purges were lawfully permitted or even organized by local governments.<sup>19</sup> In illegal, violent incidents perpetrated against the Chinese, perpetrators usually escaped conviction or received minimal punishments if they were convicted because Chinese witnesses could not testify in court.<sup>20</sup>

The socioeconomic status of Chinese immigrants in the United States deteriorated significantly in the Exclusion Era. Figure 1 plots the average occupational income scores (regression-adjusted) of Chinese immigrants, non-Chinese immigrants, and U.S.-born natives from 1850 to 2000.<sup>21</sup> The occupational standings of Chinese immigrants exhibit a U-shaped pattern in the long run with a significant dip in the Exclusion Era. Their occupational distribution also show that they disproportionately took relatively low-income unskilled jobs in the service sectors (most typically, as laundry and restaurant

<sup>&</sup>lt;sup>17</sup>For instance, laundry ordinances in many cities banned washhouses in wooden buildings because most of the laundry businesses were run by Chinese immigrants and stone buildings were much less common with substantially higher rents at that time (McClain, 1994).

<sup>&</sup>lt;sup>18</sup>In the notorious Rock Springs Massacre that took place at Rock Springs, Wyoming in September 2, 1885, 28 Chinese miners were killed, and 15 others were wounded in the incident.

<sup>&</sup>lt;sup>19</sup>For example, the anti-Chinese movement in Tacoma, Washington in 1885 was led by Mayor Jacob Weisbach, the candidate of the Workingmen's Party and the Knights of Labor, who established a deadline of November 1 for all Chinese to leave the city. On November 3, two days after the mayor's deadline, an organized mob that consisted of dozens of police and the mayor himself went from house to house to evict the Chinese residents and force them to board a train to Portland.

<sup>&</sup>lt;sup>20</sup>Sixteen suspects were arrested after the Rock Springs Massacre but the Sweetwater County grand jury refused to indict any of them, declaring that there was no cause for legal action: "Though we have examined a large number of witnesses, no one has been able to testify to a single criminal act committed by any known white person that day" (Daniels, 2011).

<sup>&</sup>lt;sup>21</sup>The regression-adjusted occupational income score is the residual from regressing individual occupational income score on age and age square using all the males in the census samples from 1850 to 2000 to account for the difference in demographic composition.

workers) in these years (Figure A2–A4).

#### [Figure 1 here]

The Chinese community fought relentlessly against systemic discrimination during the Exclusion Era. They used legal means to challenge the enforcement of the laws and the policy of exclusion itself in courts (McClain, 1994). They also organized protests and petitions through various forums (Lee, 2005). The most prominent struggle was their demand the right to education for Chinese children. In the landmark case Tape v. Hurley (66 Cal. 473) where the Tapes sued the San Francisco Board of Education after their daughter, Mamie Tape, was denied admission to Spring Valley School because of her Chinese ancestry, the California Supreme Court ruled the exclusion of Chinese Americans from public schools unconstitutional. Terrified by this court decision, the state legislature quickly passed a bill to a separate school system for Chinese based on the premise of "Separate but Equal" so as to force Chinese children like Mamie into segregated public schools. Despite that limited resources were financed to construct separate educational facilities and that further attempts to challenge the segregation ended in failure, mission and private schools emerged to fill the gap (Jorae, 2009). The struggle for equal education of the Chinese community did not only lay the groundwork for their future upward mobility but also served as evidence to refute anti-Chinese rhetoric that characterized them as an "inferior race" and a threat to white society.<sup>22</sup>

<sup>&</sup>lt;sup>22</sup>Mary Bo-Tze Lee, who completed the master's degree in education at the University of California, Berkeley, stated in her thesis the positive influences of valuing education of Chinese: "They are industrious and are willing to work hard in order to secure an education; for they reverence learning itself. All of these provide stimulating influences for the American children" (Lee, 1920).

## 3 Data

#### 3.1 Micro-samples of the U.S. Censuses

To examine the impact of discrimination on different outcomes of the Chinese, we compile five separate datasets using the micro-samples of the U.S. censuses of various years from the IPUMS (Ruggles et al., 2020) because the availability of key variables varies in the census samples of different years. The detailed description of the availability of variables and sample construction is provided in Table B1 in the Data Appendix.

#### **Occupational Assimilation**

To examine the impact of discrimination on occupational assimilation, we use all males aged 18 to 64 in the full-count samples of the 1900–1930 U.S. censuses since the key variable–*the year of immigration to the U.S.*–to estimate the assimilation model is not available before 1900 or after 1930. In this sample, we define Chinese as individuals who are born in China and report their race as "non-white" to include only first-generation Chinese immigrants since the assimilation model does not apply to second-generation immigrants. The sample contains 26,632,625 observations, 156,996 of whom are Chinese.<sup>23</sup>

We exploit an immigrant's year of immigration to the U.S. (*yrimmig*) and the year of survey (t) to retrospectively determine how many years she remained in the U.S. in the pre-Exclusion Era (pre-1882) and in the Exclusion Era (1882–1943).<sup>24</sup> Specifically, we calculate an immigrant's years in the pre-Exclusion Era as:

$$pre\_ysm = min(1882 - yrimmig, 0) \tag{1}$$

<sup>&</sup>lt;sup>23</sup>Given the extremely large number of U.S.-born natives in the full-count sample, we randomly select 10% of U.S.-born natives into our final sample. Table B2 provides simple summary statistics of the sample.

<sup>&</sup>lt;sup>24</sup>One detail is that the 1900 census asks the year when the immigrant arrived in the United States and later censuses ask the year of their first arrival. Thus, the variable *yrimmig* in the 1900 census may record the year of immigrant's re-entry, which increases the measurement error. We drop the observations in the 1900 census in unreported regressions to estimate the assimilation rate, and the results are consistent with those using the full sample.

Correspondingly, we calculate an immigrant's years in the Exclusion Era (*excl\_ysm*) as the total years since migration minus the years in the pre-Exclusion Era. The values of these two variables are set to zero for U.S.-born natives.

Because individual incomes were not reported before the 1940 census, we use the occupational income score as the indicator for an individual's labor market outcome, which is imputed as the median of the annual incomes of individuals in each occupation from the 1950 census. Although the occupational income score is widely used to study individual economic standings in historical periods when data on incomes are not available (Chiswick, 1991; Abramitzky et al., 2012; Abramitzky et al., 2014; Bi-avaschi et al., 2017), we caution on its limitation that it cannot capture within-occupation changes in individual incomes. Therefore, we interpret the assimilation process of immigrants characterized in this study in terms of occupational upward mobility (i.e., immigrants improve their economic standing relative to natives by upgrading faster from low-income occupations to high-income occupations).

#### School Attendance and Literacy Status

The sample for the analysis of school attendance is all males aged under 18 who are foreign-born or whose fathers are foreign-born in the 1880 100%, 1900 5%, and 1910–1940 100% census samples.<sup>25</sup> The sample contains 19,550,569 observations, of which 26,141 are Chinese. To examine literacy status, we use the sample of all males aged over 9 and under 18 who are foreign-born or whose fathers are foreign-born in the 1880–1930 100% census samples where individual literacy status is available.<sup>26</sup> We focus on individuals under 18 who are at the prime stage of human capital accumulation to correspond with the analysis of school attendance. The sample contains 9,287,361 observations, of which 12,730 are Chinese. In these two and the following samples, we define Chinese as non-white individuals who are born in China or whose fathers are born in China (to include second-generation Chinese immigrants). We define "being

<sup>&</sup>lt;sup>25</sup>The 1890 census sample is not available due to fire destruction. School attendance status is not available in the 1900 100% census sample.

<sup>&</sup>lt;sup>26</sup>The censuses do not collect the literacy status of individuals aged under 10.

literate" as being able both to read and write.

Figure 2 presents the school attendance rate and the literacy rate of Chinese and non-Chinese immigrants by birth cohort. The cyclical pattern of the school attendance rate in Figure 2a is because some birth cohorts were relatively young when they were surveyed.<sup>27</sup> Regardless of the fluctuations, Chinese born before 1882 had a substantially lower propensity to attend school than non-Chinese immigrants born before 1882. This discrepancy in school attendance rate disappeared among post-1882 birth cohorts, as the school attendance rate of Chinese immigrants born after 1882 increased remarkably. Figure 2b shows that the literacy status of Chinese and non-Chinese immigrants exhibited a pattern similar to their school attendance: Chinese born before 1882 were less literate than their counterparts, and the increase in the literacy rate of Chinese born after 1882 quickly narrowed this gap.

#### [Figure 2 here]

#### **English Skills and Name Americanization**

The sample for the analysis of the English skills is all foreign-born males aged over 9 *who migrated to the U.S. before the age of 18* and U.S.-born males aged over 9 whose fathers are foreign-born in the 1900–1930 100% census samples.<sup>28</sup> Unlike in the samples of school attendance and literacy, we do not restrict the sample to immigrants in childhood for the purpose of keeping observations born before 1882 for the DID strategy since the information on English skills is only available in the 1900–1930 censuses. The reason to exclude immigrants who migrated to the U.S. in their adulthood from our sample is that they have passed the critical period of language acquisition at the time of arrival (Bleakley and Chin, 2010). The sample contains 36,645,856 observations, of which 92,406 are Chinese. For the analysis of name Americanization, we use all males who are foreign-born or whose fathers are foreign-born in the 1880 10%, 1900 5%, 1910

<sup>&</sup>lt;sup>27</sup>For instance, individuals in the 1876–1881 birth cohort were under 5 in the 1880 census.

<sup>&</sup>lt;sup>28</sup>The censuses do not collect the English skills of individuals aged under 10.

1%, 1920 1%, and 1930 5% census samples where individual names are available. The sample contains 2,791,124 observations, of which 24,389 are Chinese.

To measure the level of conformity of individual names to naming norms in the United States, we construct the Americanization index of names following the procedure of Biavaschi et al. (2017) and Fouka (2019b). This index is calculated as the normalized frequency of an individual's first name in each U.S.-born birth cohort relative to the frequency of the most common first name in the same cohort, for which a larger value indicates a more American-sounding name. The detailed procedure to construct the index is illustrated in the Data Appendix.

Figure 3a shows the average percentage of English speaker of Chinese and non-Chinese immigrants by birth cohort. The share of English speakers in Chinese cohorts born before 1882 was lower than non-Chinese by 25 percentage points. This share increased markedly in post-1882 Chinese cohorts from 76% to 93%, which greatly shortened the gap between Chinese and non-Chinese immigrants. Figure 3b shows that the Americanization indexes of Chinese and non-Chinese immigrants also experienced a convergence over time. The average index of non-Chinese immigrants was relatively high among early birth cohorts (around 0.27–0.28) and declined steadily over time. Despite extremely low values in cohorts before 1882 (below 0.02), the average index of Chinese rose substantially in cohorts born after 1882, which suggests that they tended to use more American-sounding names.

[Figure 3 here]

#### 3.2 Measures of State-level Discrimination

We construct two indicators of the intensity of discrimination against the Chinese at the state level. The first indicator is the voting outcome of the Chinese Exclusion Act by each state in the legislative process. Based on the congressional voting record from GovTrack.us, we calculate the percentage of votes in favor of passing the bill for each state in the House of Representatives and the Senate to measure the state-level support rate of the Act. As a case of regional agendas that turned into national policies, the Chinese Exclusion Act showed a substantial variation in its support rate across states (Table B4). Western states, California particularly, were enthusiastic advocates of federal legislation to restrict Chinese immigration while Northeastern states showed less support for the Act.<sup>29</sup> Narrative evidence shows that Western states reacted rapidly to the passage of the Act by enacting extensive laws and regulations to exclude the Chinese, which was less observable in other states that lacked enthusiasm for the exclusion (McClain, 1994).<sup>30</sup> Therefore, we consider the support rate of the Act in each state as a reasonable measure of the intensity of institutional discrimination at the state level. The limitation of this indicator is that it does not apply to the several states that did not occupy any seat in Congress in 1882, although these states, except for Washington, had relatively small Chinese populations.<sup>31</sup>

The second indicator is the number of anti-Chinese incidents that occurred in each state after the passage of the Act. Pfaelzer (2008) comprehensively collects all documented incidents against Chinese immigrants in the United States between 1880 and 1890. We geocode these incidents that occurred after 1882 to each state and use the number of incidents in each state normalized by the population of the state as the second measure of discrimination. We argue that the frequency of anti-Chinese incidents is positively correlated with the intensity of institutional discrimination since many of the incidents were initiated and organized by local governments directly. Discrim-

<sup>&</sup>lt;sup>29</sup>Democrats were unified behind legislation to exclude Chinese immigration. Republicans were divided and somewhat reluctant to embrace strict restrictions for fear of violating the U.S. treaties with China and jeopardizing cooperative trade relations. For instance, George F. Hoar, a Republican senator from Massachusetts, mentioned that immigration was described as an "inalienable right of man" in the Burlingame Treaty of 1868 between the United States and China (Lew-Williams, 2018).

<sup>&</sup>lt;sup>30</sup>California enacted several discriminatory local laws to restrict the rights of Chinese immigrants before the Chinese Exclusion Act was passed. Local legislation in California that discriminated against Chinese immigrants can be dated back to the 1840s. For instance, Tuolumne and Placer counties prohibited Chinese laborers from obtaining mining licenses in the 1840s. California passed the Foreign Miner's Tax Act of 1850, which imposed a monthly tax of \$20 on foreign miners, which was mainly enforced on Chinese miners. Governor John McDougall repealed the Act because he favored Chinese immigrants as a way to address the state's labor shortage. His successor, John Bigler, reintroduced a new Foreign Miners' License Tax Act of \$3 per month. Kanazawa (2005) argues that the improved financial condition of the California government after the late 1850s alleviated its reliance on taxing Chinese miners and thus pushed for the harsh exclusion of Chinese immigrants.

<sup>&</sup>lt;sup>31</sup>See detailed information in the Data Appendix.

inatory institutions also served as the catalyst for those incidents that only involved conflicts between civilians since the cost of violence against the discriminated group (i.e., legal punishments of crimes) was substantially reduced. The shortcoming of this indicator is that the distribution of anti-Chinese incidents is skewed as most of the incidents took place in California (Table B1).

## **4** Occupational Assimilation

In this section, we use the methods of difference-in-differences (DID) and triple difference (DDD) to identify the effect of discrimination on the occupational assimilation of Chinese immigrants. Section 4.1 presents our empirical specifications, and section 4.2 discuss the estimated results.

#### 4.1 Empirical Method

#### **Baseline Difference-in-Differences**

The classical assimilation model can be expressed as the following equation (Chiswick, 1978; Borjas, 1985):

$$Y_{ij} = \alpha y s m_i + X_i \gamma + D_j + c + \varepsilon_i \tag{2}$$

where the outcome is individual earnings.  $X_i$  is a vector of individual characteristics, and  $D_j$  is the immigrant cohort's fixed effects to account for the changes in the cohort quality (Borjas, 1985). The key variable  $ysm_i$  is the number of years since migration, which equals zero for natives. The coefficient  $\alpha$  is the assimilation rate that indicates how fast immigrants can close the earning gap with natives.

We apply the DID strategy to this standard model to identify the effect of discrimination on the assimilation rate of Chinese immigrants in terms of occupational mobility. Specifically, we estimate the assimilation rates before and after the Act of Chinese immigrants ( $\alpha_t$  and  $\alpha'_t$ ) and of non-Chinese immigrants ( $\alpha_c$  and  $\alpha'_c$ ). Under the assumption of parallel trends, the treatment effect is ( $\alpha'_t - \alpha_t$ ) – ( $\alpha'_c - \alpha_c$ ). This empirical strategy is formally expressed as the following model:

$$Y_{ijst} = \alpha_1 pre\_ysm_i + \alpha_2 excl\_ysm_i + \beta_1 pre\_ysm_i \times ch_i + \beta_2 excl\_ysm_i \times ch_i$$
  
+  $X_i \gamma + D_j^N + D_j^C + \sigma_t + \phi_s + c + \varepsilon_i$  (3)

where  $Y_{ijst}$  is the occupational income score of individual *i* residing in state *s* in census year *t* who arrived in the U.S. in time *j* (if an immigrant).  $D_j^N$  is the fixed effects of non-Chinese immigrant cohorts. We also include the Chinese-specific cohort fixed effects  $(D_j^C)$  to account for the different trend in the cohort quality of Chinese immigrants. An immigrant cohort is defined as those who arrived in the same decade.  $X_i$  includes age, squared age, the dummy for being married, the dummy for being non-white, and the dummies for country of birth.  $\sigma_t$  and  $\phi_s$  are the year and state fixed effects.  $pre_ysm_i$ and  $excl_ysm_i$  are the number of years of the immigrants spent in the pre-Exclusion Era and in the Exclusion Era, respectively.  $chn_i$  is a dummy variable indicating Chinese immigrants. The coefficients on the interactions,  $\beta_1$  and  $\beta_2$ , identify the differences in the assimilation rates between Chinese and non-Chinese immigrants, before and after the Act respectively. Therefore, the treatment effect is  $\beta_2 - \beta_1$ .<sup>32</sup>

#### **Triple Difference with State-level Variation**

Due to the changing composition of non-Chinese immigrants over time in this period, their assimilation rate might have changed endogenously, causing the violation of the assumption of parallel trends.<sup>33</sup> Therefore, we exploit the variation in discrimination at the state level and use the DDD approach in the following specification:

$$Y_{ijst} = \alpha_1 pre\_ysm_i + \alpha_2 excl\_ysm_i + \beta_1 pre\_ysm_i \times ch_i + \beta_2 excl\_ysm_i \times ch_i + \beta_3 excl\_ysm_i \times ch_i \times disc_s + X_{is}\gamma + D_j^N + D_j^C + \sigma_t + \phi_s + c + \varepsilon_i$$
(4)

In this specification, we add the triple interaction  $excl_ysm_i \times ch_i \times disc_s$ , where  $dist_s$ 

<sup>&</sup>lt;sup>32</sup>Simple algebra shows that  $(\alpha'_t - \alpha_t) - (\alpha'_c - \alpha_c) = [(\alpha_2 + \beta_2) - (\alpha_1 + \beta_1)] - (\alpha_2 - \alpha_1) = \beta_2 - \beta_1$ . <sup>33</sup>The National Origins Formula, effective since 1921, imposed annual quotas on immigration from each country, which substantially altered the composition of U.S. immigrants (Abramitzky and Boustan, 2017).

is one of the measures of discrimination in state s.<sup>34</sup> In this DDD setting, we essentially identify the impact of discrimination on the assimilation rates from  $\beta_3$  by comparing the assimilation rates of Chinese immigrants who were exposed to various levels of discrimination in different states, which validates our results even if the parallel trends assumption does not hold strictly.

#### 4.2 Estimates

Table 1 Panel A presents the DID estimates from the regressions of equation 3. Panels B and C present the DDD estimates from the regressions of equation 4 that use the two different measures of state-level discrimination. In all regressions, we control for age, age squared, the dummy for married, the dummy for non-white, and non-Chinese and Chinese cohort fixed effects. The regressions in Panels B and C also control for the interactions of the number of years in the Exclusion Era, the dummy for Chinese, and the measure of state-level discrimination. From columns 1 to 3, we sequentially add the fixed effects of state of residence, survey year, and country of birth.

#### [Table 1 here]

The DID estimates in Panel A shows that the assimilation rate of Chinese immigrants was significantly lowered since the passage of the Act. The estimated treatment effect is -0.132 and statistically significant at the 5% level in column 1. After controlling for state and year fixed effects, the treatment effect declines to -0.092 in column 2 but remains statistically significant at the 10% level. Column 3 shows that the treatment effect is -0.089 from the specification with full controls. This reduction accounts for more than half of the assimilation rate of Chinese before the passage of the Act (0.155). In the absolute term, the assimilation rates of Chinese before and after the Act are 0.155 and 0.104 in column 3, respectively, which indicates that Chinese narrowed the earnings gap with natives by \$15.5 and \$10.4 per year. It is notable that the assimilation rates of

 $<sup>^{34}</sup>X_{is}$  includes the remaining interactions required in the DDD estimation that are not explicitly shown.

non-Chinese immigrants (-0.024 and 0.014) may give the misleading impression that non-Chinese immigrants assimilated much more slowly than Chinese immigrants. It is in fact the opposite: non-Chinese immigrants did not have a significant initial income gap with the natives to fill.<sup>35</sup>

Panel B presents the estimates from the DDD specification that uses the share of votes in favor of passing the Act to measure state-level discrimination. The estimated coefficients on the triple interaction is around -0.47 and statistically significant at the 1% level in columns 1–3, suggesting that the occupational mobility of Chinese was more negatively affected in states with higher support rates of the Act. The economic interpretation of the coefficient in column 3 is that the assimilation rate of Chinese immigrants was lower by 0.048 (\$4.8 per year) if the support rate of the Act was 10 percentage points higher in the state of residence. Panel C presents the DDD estimates using the normalized number of anti-Chinese incidents to measure discrimination. The coefficients on the triple interaction are also negative and statistically significant at the 1% level except in column 1, suggesting that the assimilation of Chinese immigrants was lower in states with greater anti-Chinese activities.

The results in Table 1 unanimously indicate that institutional discrimination posed a great obstacle to the occupational assimilation of Chinese immigrants. Chinese immigrants had a much lower occupational upward mobility after the passage of the Act and the geographical variation shows that Chinese assimilated slower in states where they experienced more intense discrimination in the Exclusion Era.

## **5** Reactions to Discrimination

In this section, we use the DID and DDD strategies to identify the effect of discrimination on school attendance, literacy status, English skills, and name Americanization of Chinese immigrants. Section 5.1 presents our empirical specification and section 5.2 discusses the estimated results.

<sup>&</sup>lt;sup>35</sup>This is illustrated by the estimates of the coefficients on the dummies for immigrant cohorts that are not reported in the table. These estimates suggest that certain early non-Chinese immigrant cohorts even had higher incomes than their U.S.-born counterparts when they initially migrated to the U.S.

#### 5.1 Empirical Method

The regression specification is as follows:

$$Y_{icst} = \beta_1 T_{ic} + \beta_2 T_{ic} \times dist_s + X_{ics}\gamma + \sigma_c + \phi_s + \psi_t + c + \varepsilon_i$$
(5)

where  $Y_{icst}$  is the outcome variable of individual *i* born in year *c* and living in state *s* in census year *t*. The outcomes include the dummy for attending school, the dummy for being literate, the dummy for speaking English, and the Americanization index of the individual's name.  $T_{ic}$  is the treatment indicator that equals 1 for Chinese born after 1882. We define Chinese as non-white individuals who are born in China or have a Chinese-born father. For the DDD estimation, we further include the interaction of the treatment indicator  $T_{ic}$  and the state-level discrimination  $dist_s$ .  $X_{ics}$  entails the rest of the corresponding terms for the DID or DDD estimation.  $\sigma_c$ ,  $\phi_s$ , and  $\psi_t$  are birth year, state, and survey year fixed effects. The coefficient  $\beta_1$  identifies the treatment effect in the DID specification (when not including the interaction  $T_{it} \times dist_s$ ). In the DDD specification, the coefficient  $\beta_2$  captures the effect of discrimination on the outcomes of the Chinese at the state level.

#### 5.2 Estimates

Tables 2–5 presents the estimates from the regressions of equation 5 with the dummy for attending school, the dummy for being literate, the dummy for speaking English, and the Americanization index as the dependent variable, respectively. In each table, Panel A reports the DID estimate from the regressions that do not include the triple interaction with state-level discrimination. Panels B and C report the DDD estimates from the regressions that use two measures of state-level discrimination. From columns 1 to 4, we sequentially control for the fixed effects of state of residence, birthplace, survey year, and year of birth. Column 5 introduces the tightest specification where we add separate linear trends of birth year for Chinese and non-Chinese immigrants.

#### [Tables 2–5 here]

The estimates in Table 2 Panel A show that the Chinese had a significantly lower propensity to attend school than non-Chinese immigrants by 31 to 63 percentage points in cohorts born before 1882. The coefficients on the treatment indicator show that the school attendance rate of Chinese increased significantly in cohorts born after the passage of the Act by 19 to 61 percentage points, which virtually made up for the gap before 1882. This effect represents a more than 200% increase than the average school attendance rate of Chinese in the pre-Exclusion Era. Panels B and C show that the Chinese attended school more in states with higher intensities of discrimination measured by either the support rate of the Act or the number of anti-Chinese incidents. Taking the estimated coefficient on the triple interaction in Panel B column 5 as an example, a 10 percentage-point increase in the support rate of the Act in a state increased the school attendance rate of Chinese by 5.7 percentage points.

The pattern of literacy status in Table 3 corresponds with that of school attendance. The estimates in Panel A show that the Chinese had a literacy rate lower than their non-Chinese counterparts by 16 to 17 percentage points before 1882. The interaction coefficients show that the literacy rate of Chinese increased by 11 percentage points following the passage of the Act except in column 5. This increase is approximately 14% of the average literacy rate of Chinese in the pre-Exclusion Era. Panels B and C show that the coefficients on the triple interactions are positive and statistically significant, suggesting that the Chinese had a higher literacy rate in states with more intense discrimination after the passage of the Act.

We also observe the patterns of their English skills and name Americanization in Tables 4–5, similar to those of human capital. As a response to the passage of the Act, the Chinese were significantly more likely to be English speakers and adopted more American-sounding names. The interaction coefficients from different specifications in Table 4 Panel A show a 4 to 11 percentage-point increase in the share of English speakers among Chinese born after 1882. Table 5 Panel A shows that the increase in the Americanization index of Chinese born after 1882 is between 0.045 and 0.097, which amounts to a 400% to 900% increase in the average index of Chinese born before 1882. Panels B and C in Tables 4–5 show that these reactions also varied geographically. The positive coefficients on the triple interactions indicate the higher tendency to speak English and to adopt American-sounding names of Chinese who resided in states with more intense discrimination during the Exclusion Era.

The conclusion from Tables 2–5 is that Chinese immigrants reacted actively and strategically to discrimination by increasing their school attendance, their literacy, their English skills, and their adoption of American-sounding names in the Exclusion Era, especially in states that exhibited more severe discrimination against the Chinese. We view these reactions as the strategic investments of Chinese parents in the assimilation of their next generation, although their own assimilation outcomes were greatly restrained by the discriminatory environment.

# 6 Robustness Checks

#### 6.1 Selection in Immigration

One challenge to our identification is that the Chinese Exclusion Act caused the selection of Chinese immigrants (Chen, 2015). Such selection could bias our DID estimates if Chinese admitted after the Act differed significantly from those admitted before the Act in their ability to assimilate and their preference for investments in their children. It might also threaten the validity of our DDD estimates if Chinese who migrated to the U.S. after 1882 were further selected to different states by the intensity of discrimination.

To deal with this issue, we exclude Chinese who migrated to the U.S. after 1882 from our sample in the analysis of occupational assimilation. Table 6 shows the results estimated from using this subsample. Although the treatment effect in the DID specification (column 1) is at the margin of statistical significance, its magnitude is still large,

which amounts to one-third of the assimilation rate of Chinese in the pre-Exclusion Era. The DDD estimates also show that the assimilation rate was still substantially lower in states with higher intensities of discrimination (columns 2 and 3). Therefore, the selection in immigration is not likely to be the main driver of our results.

#### [Table 6 here]

We conduct the same exercise in the regressions of human capital, English skills and name Americanization. Furthermore, to take into account the possibility that Chinese who migrated to the U.S. before and after 1882 might have different preferences for investments in their children, we additionally exclude Chinese whose fathers migrated to the U.S. after 1882 based on the information on the intra-family relationships in the censuses. The estimates from the regressions using these subsamples are presented in Table 7. The magnitudes and statistical significance of the estimates from both DID and DDD are minimally affected, which suggests the robustness of our findings to the potential issue of selection in immigration.

[Table 7 here]

#### 6.2 Selection in Survival and Fertility

The selection in survival is the issue of return migration. If more assimilated Chinese had had a lower propensity to emigrate and a stronger preference for investments in their children's assimilation in the Exclusion Era, the DID estimates in the analyses of human capital and name Americanization might be the outcomes of self-selection.<sup>36</sup> A related concern is the selection in fertility. If more assimilated Chinese had had higher fertility in the Exclusion Era, Chinese born in the U.S. after 1882 would have been more

<sup>&</sup>lt;sup>36</sup>The selection in return migration does not affect the our estimations in occupational assimilation and English skills since the samples (1900–1930 censuses) only include individuals observed after 1882 who had chosen not to emigrate. In addition, the potential direction of bias tends us to underestimate the true effect on occupational assimilation.

likely to come from more assimilated families.

To address these concerns, we identify individuals whose fathers' occupational income scores are above the median in the original samples used in the analyses of school attendance, literacy status, and English skills in order to focus on children from relatively assimilated families. Using these subsamples, we re-estimate the regressions that control for the number of siblings and the father's occupational income score in order to account for the differences in fertility and family background. Table 8 Panels A–C show the estimates from the regressions using school attendance, literacy status, and English skills as the outcome respectively. The estimates do not change substantially in magnitude, although the statistical significance of some estimates decreases due to the loss of observations of Chinese.

#### [Table 8 here]

We conduct a different test in the analysis of name Americanization because the approach above yields insufficient observations of Chinese to obtain precise estimates. First, we exclude observations in the 1880 census from the original sample to keep a subsample of non-emigrants who are all observed after 1882. Second, we further focus on non-emigrants who have at least one male sibling in the household and control for household fixed effects in the regressions, which is to compare the outcomes of non-emigrant siblings born before and after 1882 within the same household. Table 8 columns 1–3 present the estimates from the regressions using the non-emigrant sample and controlling for number of siblings and columns 4–6 present the estimates from the regressions using the non-emigrant of siblings and household fixed effects. The results still hold in both samples despite that the magnitudes of the coefficients decline slightly in columns 4–6. We conclude from the results of this check that the selection in survival and fertility is unlikely to drive our main findings.

#### [Table 9 here]

To further alleviate the concern about the negative selection in return migration, we collect data on the occupational distribution of Chinese who left the U.S. in the Exclusion Era from *the Annual Report of the Commissioner-General of Immigration to the Secretary of Commerce and Labor* of fiscal years 1908–1932 that report the tabulations of emigrants who departed from the U.S. by occupation and origin. Table A1 shows that, on average, 3178 Chinese left the U.S. per year between 1908 and 1932. About 75% of those Chinese emigrants were common laborers or had no occupation. This unskilled share of emigrants was lower than the unskilled share of the overall Chinese population in the United States the 1880 census (higher than 85%), which implies that the selection in return migration is more likely to be positive.

#### 6.3 Chinese Ethnic Enclave

Since the intensity of discrimination was usually higher in states with a larger Chinese population, one may have concerned whether the estimates capture the effects on assimilation of the Chinese ethnic enclave, the size of which changed over time in various states.<sup>37</sup> To account for the potential impact of the Chinese ethnic enclave, we control for the size of the Chinese population in the state of residence in the corresponding census year interacting with the dummy for Chinese in all regressions. Tables 10 and 11 present the estimates from this specification for different outcomes. The results show that partialling out the effects of the Chinese ethnic enclave does not significantly affect our estimates, thus ruling out this alternative explanation.

[Tables 10 and 11 here]

<sup>&</sup>lt;sup>37</sup>It is not conclusive how ethnic enclaves affect the socioeconomic outcomes of ethnic groups. For instance, Cutler and Glaeser (1997) find that blacks living in more segregated areas had worse educational and labor market outcomes. By contrast, Damm (2009) shows that the incomes of immigrants increase with the size of the ethnic enclave due to better job match.

#### 6.4 **Phonetic Matching of Names**

Using original names directly to create the Americanization index of names might cause the measurement error in the frequencies of phonetically equivalent names (e.g., "John" and "Jon") mistakenly recorded by the census enumerators. To examine whether using phonetically matched names to construct the index significantly affects our estimates, we first convert all first names using Soundex, a phonetic algorithm to index names by sound, and calculate the Americanization index based on the Soundex-coded names. The estimates in Table 12 from using the index of the Soundex-coded names as the outcome are consistent with those in Table 5, which suggests the issue of phonetically equivalent names does not affect our findings.

[Table 12 here]

### 7 Additional Results

In this section, we offer suggestive evidence on the intergenerational and long-term effects of discrimination on Chinese immigrants in the United States. Although we cannot eliminate confounding factors to a causal interpretation of these results due to data limitations, we attempt to provide some implications of the consequences of discrimination in the long run and point to the direction of future research.

#### 7.1 Intergenerational Educational Mobility

Since Chinese immigrants exhibited a higher preference for human capital of in response to discrimination, this shift in preference possibly reduced the correlation between Chinese parents' socioeconomic standings and their children's educational outcomes. To examine the impact of discrimination on the intergenerational mobility in Chinese households, we use the samples for the analysis of human capital and focus on the subsample of individuals whose fathers can be identified in the same household. We apply a difference-in-differences method in a simple model of intergenerational mobility to estimate the impact of discrimination on the intergenerational educational mobility of the Chinese population in the U.S. The regression specification is as follows:

$$Y_{icst} = \beta_1 F_i + \beta_2 T_{ic} \times F_i + X_{ict} \gamma + \sigma_c + \phi_s + \psi_t + c + \varepsilon_i$$
(6)

where  $Y_{icst}$  is the individual's school attendance or literacy status.  $F_i$  is the literacy status or occupational income score of individual *i*'s father.  $T_{ic}$  is the treatment indicator that equals 1 for Chinese born after 1882.  $X_{ict}$  includes the number of siblings and the remaining interactions for DID estimates. In this specification, the coefficient  $\beta_1$ measures the intergenerational correlation between a father's educational or economic standing and his child's educational outcomes and  $\beta_2$  captures the effect of discrimination on the intergenerational mobility of the Chinese.

The estimates presented in Table A2 show a strong correlation between Chinese fathers' occupational income scores and their children's probability of attending school, which decreased significantly after 1882 (column 1). Similarly, the probability of Chinese children being literate was strongly and positively correlated with their fathers' incomes and literacy statuses before 1882, and this correlation disappeared after 1882 (columns 3 and 4). We do not observe a clear correlation between Chinese fathers' literacy statuses and their children's school attendance either before or after 1882 (column 2).

#### [Table A2 here]

Overall, these results suggest that the intergenerational mobility of the Chinese population in the U.S. increased noticeably after 1882, as Chinese parents invested more in children's human capital regardless of their own educational or economic standings. We acknowledge the limitations of this analysis since we can only link children and fathers who are recorded in the same households in the census manuscript, which may be subject to the issue of self-selection. This finding does not provide the full picture of their intergenerational mobility in the long term since we do not observe the outcomes of Chinese children in their adulthood. Rigorous research in this area becomes possible and should be conducted if linked individual data over generations become available.

#### 7.2 Long-term Impact on Human Capital

We also attempt to explore whether this strengthened preference for human capital in the Exclusion Era persisted after the repeal of the Act in 1943. To examine the long-term effect of discrimination on human capital investment, we extend our samples to include individuals in the 1950–2000 U.S. censuses and introduce the interaction of the dummies for "born after 1943" and Chinese into the regressions.<sup>38</sup> We also add the triple interaction of the dummies for "born after 1943" and Chinese into the regressions and the measure of state-level discrimination to examine whether this persistence also varies at the state level using the DDD strategy. Table A3 presents the estimates from the regressions using the extended samples. The positive and statistically significant coefficients on the interaction of the dummies for "born after 1943" and Chinese suggest that Chinese immigrants still had a higher school attendance rate and were more educated after the repeal of the Act. The DDD estimates also suggest that, even in the post-Exclusion Era (post-1943), Chinese immigrants showed a stronger preference for human capital in states where they used to experience more severe discrimination before 1943.

#### [Table A3 here]

It is tempting to conclude that institutional discrimination had a long-term positive effect on the human capital investment of Chinese immigrants; we nonetheless refrain from fully attributing these findings to the persistence of the preference for human

<sup>&</sup>lt;sup>38</sup>Literacy status is replaced by educational attainment since the 1940 census. To construct an indicator for human capital that is consistent over time, we define a dummy for "educated" indicating being literate in census years before 1940 or above 8th grade in census years since 1940.

capital since Chinese immigrants have changed vastly in terms of origin and characteristics since the 1960s. We note especially that the civil rights movement might have also improved the situations of Chinese in the United States (Duleep and Sanders, 2012). The search for evidence that can refute alternative explanations is warranted for a strict causal interpretation.

## 8 Concluding Remarks

The Chinese Exclusion Act of 1882 not only closed the U.S. gate for Chinese immigration for more than half a century but also profoundly shaped the historical experience of Chinese immigrants in the United States, where institutional discrimination diffused every aspect of their daily activities. In this study, we examine how discrimination resulting from the Act affected the social and economic integration of Chinese into U.S. society as well as how they reacted to discrimination.

Chinese immigrants faced great challenges in assimilating economically, as their occupational upward mobility virtually stalled in the Exclusion Era. We also observe, nonetheless, that Chinese immigrants made significant efforts to assimilate. As responses to discrimination, they invested in human capital, improved English skills, and adopted American-sounding names. Chinese born in the Exclusion Era attended significantly greater amounts of schooling and thus became more literate even in the face of several institutional obstacles to their education. In other words, we witness a change in the preference for human capital investment by the Chinese in the face of discrimination and expulsion.<sup>39</sup>

These findings also have a contemporary implication from the perspective of intergenerational mobility. The shift in the preference for human capital essentially reduced the correlation between the educational and socioeconomic status of Chinese parents and the educational outcomes of their children in the Exclusion Era. If this effect that

<sup>&</sup>lt;sup>39</sup>This finding interestingly echoes that of the Jewish experience, according to which the high educational attainments of Jews is attributed to their long history of expulsions, persecutions, and their recognition and consequent emphasis on investment in intangible assets (Stigler and Becker, 1977; Oz, 2005), though Botticini and Eckstein (2012) challenges this argument.

stemmed from the experience of discrimination had persisted in the post-Exclusion Era, it could have potentially contributed to the high social mobility of Chinese Americans observed in modern U.S. society. This notion calls for future research when data of better quality are available that can link individuals over generations.

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# **Figures and Tables**

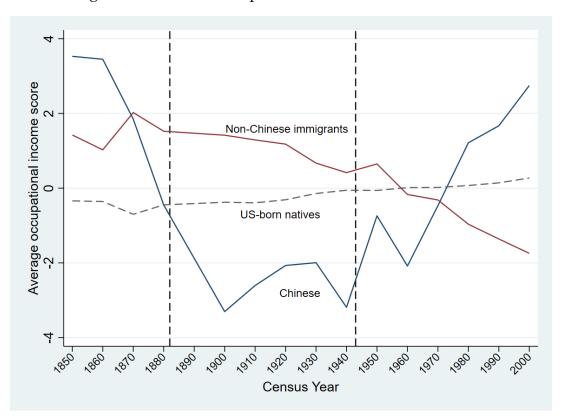
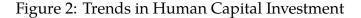
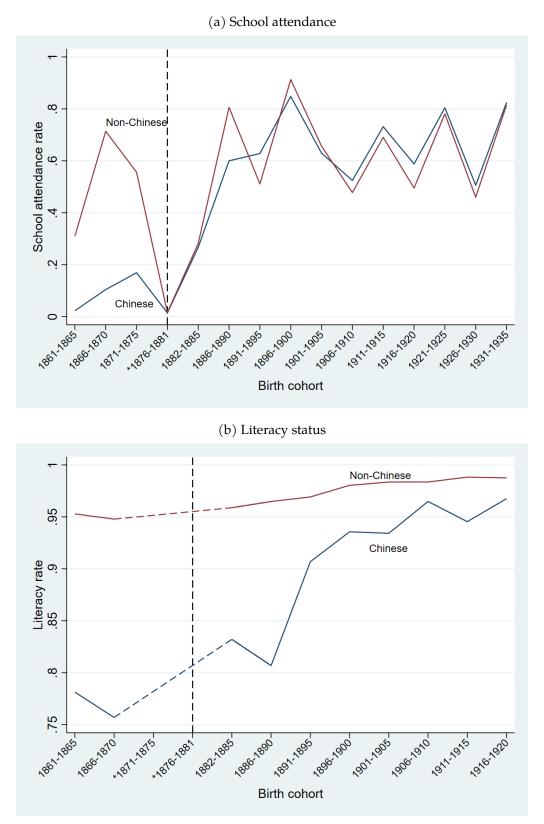


Figure 1: Trends in Occupational Income Score, 1850–2000

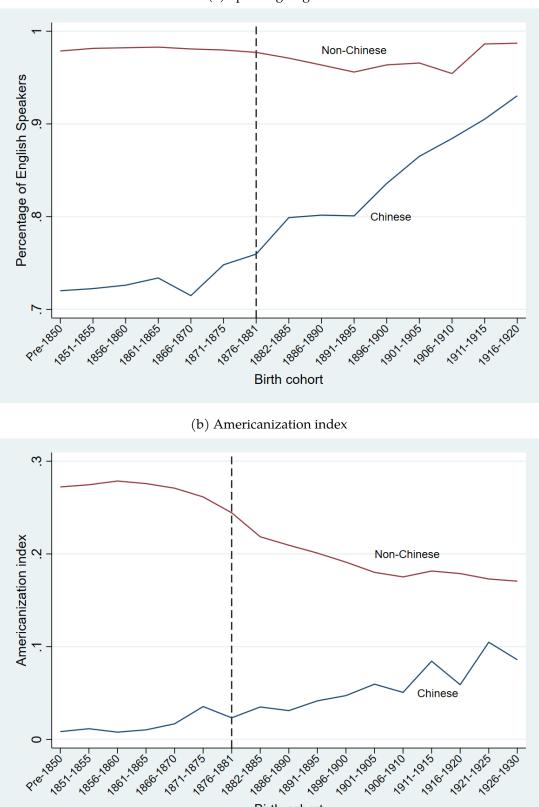
Note: This figure presents the means of regression-adjusted occupational income scores for Chinese immigrants, non-Chinese immigrants, and U.S.-born natives by census year from 1850 to 2000. The regression-adjusted occupational income scores are the residuals from regressing individual occupational income scores on age and age squared in each census year using the census samples of males aged 18 to 64 from the IPUMS.





Note: These figures present the average school attendance rate (a) and literacy rate (b) for Chinese immigrants and non-Chinese immigrants by birth cohort. The low school attendance rate of birth cohort 1876–1881 is because that individuals in this cohort are under 5 years of age in the 1880 census. The average literacy rates of birth cohorts 1871–1875 and 1876–1881 are not available because individuals in these two cohorts are under 10 in the 1880 census.

Figure 3: Trends in English Skills and Name Americanization



(a) Speaking English

Note: This figure presents the average percentage of English speaker (a) and the Americanization index of names (b) for Chinese immigrants and non-Chinese immigrants by birth cohort.

Birth cohort

Dependent variable	Occupationa	l income score (	Mean: 23.15)
	(1)	(2)	(3)
Panel A. DID		(obs: 26,632,625	)
Years in the pre-Exclusion Era (pre-1882)	-0.080***	-0.023	-0.024
1 1 /	(0.020)	(0.019)	(0.017)
a. Years in the pre-Exclusion Era×Chinese	0.215***	0.185***	0.179***
-	(0.033)	(0.027)	(0.027)
Years in the Exclusion Era (1882-1943)	0.081***	0.012	0.014
	(0.009)	(0.008)	(0.009)
b. Years in the Exclusion Era×Chinese	0.083*	0.092*	0.090*
	(0.044)	(0.047)	(0.046)
Treatment effect	-0.132**	-0.092*	-0.089*
	(0.066)	(0.054)	(0.053)
State of residence, survey year FE	No	Yes	Yes
Country of birth FE	No	No	Yes
Panel B. DDD: Support for legislation		(obs: 24,771,744	)
Years in the pre-Exclusion Era	-0.078***	-0.022	-0.022
-	(0.024)	(0.020)	(0.017)
Years in the pre-Exclusion Era×Chinese	0.227***	0.161***	0.157***
	(0.045)	(0.051)	(0.054)
Years in the Exclusion Era	0.092***	$0.018^{*}$	0.021
	(0.012)	(0.011)	(0.013)
Years in the Exclusion Era×Chinese	0.148***	0.161***	0.158***
	(0.037)	(0.038)	(0.039)
Years in the Exclusion Era×Chinese	-0.467***	-0.456***	-0.479***
×Percentage of "Yea" votes	(0.062)	(0.049)	(0.050)
State of residence, survey year FE	No	Yes	Yes
Country of birth FE	No	No	Yes
Panel C. DDD: Anti-Chinese incidents		(obs: 26,632,625	)
Years in the pre-Exclusion Era	-0.080***	-0.024	-0.025
-	(0.020)	(0.019)	(0.017)
Years in the pre-Exclusion Era×Chinese	0.249***	0.231***	0.230***
	(0.031)	(0.023)	(0.022)
Years in the Exclusion Era	0.091***	0.019**	0.019**
	(0.012)	(0.008)	(0.008)
Years in the Exclusion Era×Chinese	0.146***	0.177***	0.176***
	(0.031)	(0.029)	(0.029)
Years in the Exclusion Era×Chinese	-0.001	-0.276***	-0.318***
×Incidents per 1,000 persons	(0.079)	(0.082)	(0.084)
State of residence, survey year FE	No	Yes	Yes
Country of birth FE	No	No	Yes

## Table 1: Occupational Assimilation

Note: The estimates are from OLS regressions of equation 3 (Panel A) and equation 4 (Panels B and C). The sample is all males aged 18 to 64 in the 1900–1930 U.S. censuses. All regressions control for age, age squared, married, non-white, non-Chinese and Chinese immigrant cohort fixed effects. The regressions in Panels B and C also control for the rest of the interactions of years in the Exclusion Era, the dummy for Chinese, and the measure of state-level discrimination. Standard errors clustered at the state level are reported in parentheses.

Dependent variable		Attend s	chool (Mea	an: 0.570)		
	(1)	(2)	(3)	(4)	(5)	
Panel A. DID		(obs: 19,550,569)				
Chinese	-0.616***	-0.634***	-0.597***	-0.299***	-0.312***	
	(0.013)	(0.026)	(0.026)	(0.024)	(0.023)	
Chinese×Born after 1882	0.611***	0.618***	0.566***	0.282***	0.191***	
	(0.016)	(0.022)	(0.018)	(0.020)	(0.028)	
State of residence, birthplace FE	No	Yes	Yes	Yes	Yes	
Survey year FE	No	No	Yes	Yes	Yes	
Year of birth FE	No	No	No	Yes	Yes	
Linear birth year trend×Chinese	No	No	No	No	Yes	
Panel B. DDD: Support for legislation		(ol	os: 18,462,2	.53)		
Chinese	-0.383***	-0.358***	-0.336***	-0.091**	-0.106**	
	(0.041)	(0.058)	(0.055)	(0.041)	(0.041)	
Chinese×Born after 1882	0.373***	0.358***	0.303***	0.073*	-0.024	
	(0.045)	(0.051)	(0.050)	(0.037)	(0.042)	
Chinese×Born after 1882	0.648***	0.688***	0.721***	0.560***	0.573***	
imesPercentage of "Yea" votes	(0.134)	(0.136)	(0.137)	(0.107)	(0.108)	
State of residence, birthplace FE	No	Yes	Yes	Yes	Yes	
Survey year FE	No	No	Yes	Yes	Yes	
Year of survey FE	No	No	No	Yes	Yes	
Linear birth year trend×Chinese	No	No	No	No	Yes	
Panel C. DDD: Anti-Chinese incidents		(ol	os: 19,550,5	69)		
Chinese	-0.610***	-0.588***	-0.564***	-0.256***	-0.268***	
	(0.040)	(0.061)	(0.058)	(0.046)	(0.044)	
Chinese×Born after 1882	0.591***	0.593***	0.534***	0.244***	0.150***	
	(0.046)	(0.054)	(0.054)	(0.042)	(0.054)	
Chinese×Born after 1882	0.083	0.061	0.171	0.169*	0.185**	
×Incidents per 1,000 persons	(0.123)	(0.134)	(0.137)	(0.088)	(0.092)	
State of residence, birthplace FE	No	Yes	Yes	Yes	Yes	
Survey year FE	No	No	Yes	Yes	Yes	
Year of birth FE	No	No	No	Yes	Yes	
Linear birth year trend×Chinese	No	No	No	No	Yes	

Table 2: School Attendance

Note: The estimates are from OLS regressions of equation 5 using school attendance as the dependent variable. The sample is all males aged under 18 who are foreign-born or whose fathers are foreign-born in the 1880–1940 U.S. censuses. The regressions in Panels B and C control for the remaining interactions for the DDD estimates. Birthplace is defined as the country of birth for foreign-born individuals and the state of birth for U.S.-born individuals. Standard errors clustered at the state level are reported in parentheses.

Dependent variable		Litera	te (Mean:	0.974)	
	(1)	(2)	(3)	(4)	(5)
Panel A. DID		(0	bs: 9,287,3	61)	
Chinese	-0.173***	-0.164***	-0.159***	-0.162***	-0.165***
	(0.014)	(0.014)	(0.014)	(0.014)	(0.015)
Chinese×Born after 1882	0.118***	0.112***	0.109***	0.112***	-0.004
	(0.019)	(0.016)	(0.016)	(0.016)	(0.019)
State of residence, birthplace FE	No	Yes	Yes	Yes	Yes
Survey year FE	No	No	Yes	Yes	Yes
Year of birth FE	No	No	No	Yes	Yes
Linear birth year trend×Chinese	No	No	No	No	Yes
Panel B. DDD: Support for legislation		(0	bs: 8,760,7	63)	
Chinese	-0.143***	-0.121**	-0.118**	-0.121**	-0.124**
	(0.051)	(0.046)	(0.046)	(0.046)	(0.046)
Chinese×Born after 1882	0.069	0.060	0.057	0.060	-0.066
	(0.044)	(0.041)	(0.041)	(0.041)	(0.042)
Chinese×Born after 1882	0.206*	0.190	0.193*	0.194*	0.212*
$\times$ Percentage of "Yea" votes	(0.116)	(0.114)	(0.114)	(0.113)	(0.110)
State of residence, birthplace FE	No	Yes	Yes	Yes	Yes
Survey year FE	No	No	Yes	Yes	Yes
Year of birth FE	No	No	No	Yes	Yes
Linear birth year trend×Chinese	No	No	No	No	Yes
Panel C. DDD: Anti-Chinese incidents		(0	bs: 9,287,3	61)	
Chinese	-0.138***	-0.111***	-0.108***	-0.111***	-0.114***
	(0.029)	(0.030)	(0.030)	(0.030)	(0.029)
Chinese×Born after 1882	0.063**	0.059**	0.056*	0.059*	-0.062*
	(0.031)	(0.029)	(0.030)	(0.030)	(0.036)
Chinese×Born after 1882	0.251***	0.215**	0.223***	0.223***	0.241***
×Incidents per 1,000 persons	(0.082)	(0.081)	(0.083)	(0.083)	(0.087)
State of residence, birthplace FE	No	Yes	Yes	Yes	Yes
Survey year FE	No	No	Yes	Yes	Yes
Year of birth FE	No	No	No	Yes	Yes
Linear birth year trend×Chinese	No	No	No	No	Yes

Table 3: Literacy Status

Note: The estimates are from OLS regressions of equation 5 using literacy status as the dependent variable. The sample is all males aged over 9 and under 18 who are foreign-born or whose fathers are foreign-born in the 1880–1930 U.S. censuses. The regressions in Panels B and C control for the remaining interactions for the DDD estimates. Birthplace is defined as the country of birth for foreign-born individuals and the state of birth for U.S.-born individuals. Standard errors clustered at the state level are reported in parentheses.

Dependent variable		Speak Er	nglish (Mea	an: 0.971)	
	(1)	(2)	(3)	(4)	(5)
Panel A: DID		(ol	os: 36,645,8	56)	
Chinese	-0.239***	-0.171***	-0.171***	-0.171***	-0.263***
	(0.025)	(0.029)	(0.028)	(0.028)	(0.048)
Chinese×Born after 1882	0.110***	0.083***	0.082***	0.082***	0.041***
	(0.021)	(0.021)	(0.021)	(0.021)	(0.014)
State of residence, birthplace FE	No	Yes	Yes	Yes	Yes
Survey year FE	No	No	Yes	Yes	Yes
Year of birth FE	No	No	No	Yes	Yes
Linear birth year trend×Chinese	No	No	No	No	Yes
Panel B. DDD: Support for legislation		(ol	os: 34,169,3	06)	
Chinese	-0.214***	-0.145***	-0.146***	-0.147***	-0.230***
	(0.016)	(0.017)	(0.017)	(0.017)	(0.027)
Chinese×Born after 1882	0.085***	0.061***	0.060***	0.060***	0.025**
	(0.010)	(0.010)	(0.011)	(0.011)	(0.012)
Chinese×Born after 1882	0.168***	0.130***	0.132***	0.132***	0.123***
$\times$ Percentage of "Yea" votes	(0.036)	(0.030)	(0.031)	(0.031)	(0.029)
State of residence, birthplace FE	No	Yes	Yes	Yes	Yes
Survey year FE	No	No	Yes	Yes	Yes
Year of birth FE	No	No	No	Yes	Yes
Linear birth year trend×Chinese	No	No	No	No	Yes
Panel C. DDD: Anti-Chinese incidents		(ol	os: 36,645,8	56)	
Chinese	-0.192***	-0.110***	-0.112***	-0.112***	-0.185***
	(0.016)	(0.013)	(0.013)	(0.013)	(0.026)
Chinese×Born after 1882	0.071***	0.042***	0.042***	0.041***	0.011
	(0.015)	(0.012)	(0.013)	(0.013)	(0.013)
Chinese×Born after 1882	0.223***	0.173***	0.177***	0.178***	0.169***
×Incidents per 1,000 persons	(0.040)	(0.038)	(0.039)	(0.039)	(0.040)
State of residence, birthplace FE	No	Yes	Yes	Yes	Yes
Survey year FE	No	No	Yes	Yes	Yes
Year of birth FE	No	No	No	Yes	Yes
Linear birth year trend×Chinese	No	No	No	No	Yes

Table 4: English Skills

Note: The estimates are from OLS regressions of equation 5 using the dummy for speaking English as the dependent variable. The sample is all males aged over 9 who are foreign born and migrated to the U.S. under the age of 18 or whose fathers are foreign-born in the 1900–1930 U.S. censuses. The regressions in Panels B and C also control for the remaining interactions for the DDD estimates. Birthplace is defined as the country of birth for foreign-born individuals and the state of birth for U.S.-born individuals. Standard errors clustered at the state level are reported in parentheses.

Dependent variable	Aı	mericaniza	tion index (	(Mean: 0.23	35)
	(1)	(2)	(3)	(4)	(5)
Panel A: DID		(obs: 2,791,124)			
Chinese	-0.246***	-0.191***	-0.194***	-0.193***	-0.288***
	(0.005)	(0.011)	(0.011)	(0.011)	(0.014)
Chinese×Born after 1882	$0.097^{***}$	$0.079^{***}$ (0.006)	0.086***	0.079*** (0.007)	$0.045^{***}$ (0.011)
	(0.005)	. ,	(0.006)	· · · ·	. ,
State of residence, birthplace FE	No No	Yes No	Yes Yes	Yes Yes	Yes Yes
Survey year FE Year of birth FE	No	No	No	Yes	Yes
Linear birth year trend×Chinese	No	No	No	No	Yes
Panel B. DDD: Support for legislation			bs: 2,638,34		
Chinese	-0.228***	-0.182***	-0.178***	-0.180***	-0.261***
	(0.005)	(0.006)	(0.005)	(0.006)	(0.011)
Chinese×Born after 1882	0.079***	0.065***	0.066***	0.060***	0.037***
	(0.007)	(0.006)	(0.006)	(0.006)	(0.007)
Chinese×Born after 1882	0.070***	0.038***	0.060***	0.056***	0.040***
imesPercentage of "Yea" votes	(0.011)	(0.011)	(0.009)	(0.010)	(0.011)
State of residence, birthplace FE	No	Yes	Yes	Yes	Yes
Survey year FE	No	No	Yes	Yes	Yes
Year of birth FE	No	No	No	Yes	Yes
Linear birth year trend×Chinese	No	No	No	No	Yes
Panel C. DDD: Anti-Chinese incidents		(0	bs: 2,791,12	24)	
Chinese	-0.238***	-0.184***	-0.183***	-0.184***	-0.274***
	(0.006)	(0.011)	(0.012)	(0.012)	(0.017)
Chinese×Born after 1882	0.092***	0.074***	0.078***	0.072***	0.043***
	(0.009)	(0.009)	(0.010)	(0.010)	(0.012)
Chinese×Born after 1882	0.053**	0.010	0.028	0.033	0.018
×Incidents per 1,000 persons	(0.025)	(0.024)	(0.026)	(0.025)	(0.023)
State of residence, birthplace FE	No	Yes	Yes	Yes	Yes
Survey year FE	No	No	Yes	Yes	Yes
Year of birth FE	No	No	No	Yes	Yes
Linear birth year trend×Chinese	No	No	No	No	Yes

Table 5: Name Americanization

Note: The estimates are from OLS regressions of equation 5 using the Americanization index of individual names as the dependent variable. The sample is all males who are foreign-born or whose fathers are foreign-born in the 1880–1930 U.S. censuses. The regressions in Panels B and C also control for the remaining interactions for the DDD estimates. Birthplace is defined as the country of birth for foreign-born individuals and the state of birth for U.S.-born individuals. Standard errors clustered at the state level are reported in parentheses.

Dependent variable	Occup	Occupational income score			
Sample	Exclude	Exclude Chinese who migrated to the U.S. after 1882			
	(1)	(2)	(3)		
Years in the pre-Exclusion Era	-0.024 (0.017)	-0.022 (0.017)	-0.025 (0.017)		
Years in the pre-Exclusion Era×Chinese	0.159*** (0.032)	0.133** (0.054)	0.208*** (0.023)		
Years in the Exclusion Era	0.014 (0.009)	0.021 (0.013)	0.019** (0.008)		
Years in the Exclusion $Era \times Chinese$	0.108*** (0.039)	0.277*** (0.049)	0.169** (0.064)		
Years in the Exclusion Era×Chinese ×Percentage of "Yea" votes		-0.745*** (0.116)	× /		
Years in the Exclusion Era×Chinese ×Incidents per 1,000 persons		( )	-0.108 (0.177)		
Treatment effect	-0.050 (0.037)	-	-		
Observations	26,547,729	24,694,453	26,547,729		

## Table 6: Account for the Selection in Immigration (1)

Note: The estimates are from OLS regressions of equations 3 and 4. The sample includes all males aged 18 to 64 in the 1900–1930 U.S. censuses but excludes Chinese who migrated after 1882. All regressions control for age, age squared, married, non-white, the fixed effects of non-Chinese and Chinese immigrant cohorts, state of residence, survey year, and country of birth. The regressions in columns 2 and 3 also control for the rest of the interactions of years in the Exclusion Era, the dummy for Chinese, and the measure of state-level discrimination. Standard errors clustered at the state level are reported in parentheses.

Sample	Exclude Chinese who migrated to the U.S. after 1882		Exclude Chinese w migrated after 1882 whose father migra after 1882		: 1882 or nigrated	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A. School attendance		Deper	dent varial	ole: Attend	school	
	(oł	os: 19,540,5	79)	(oł	os: 19,535,0	52)
Chinese	-0.214***	-0.027	-0.168***	-0.214***	-0.027	-0.168***
Chinese×Born after 1882	(0.028) 0.216*** (0.027)	(0.049) 0.026 (0.051)	(0.047) $0.172^{***}$	(0.028) $0.227^{***}$	(0.049) 0.033 (0.051)	(0.047) $0.185^{***}$ (0.047)
Chinese×Born after 1882 ×Percentage of "Yea" votes	(0.027)	(0.051) $0.546^{***}$ (0.111)	(0.046)	(0.029)	(0.051) $0.556^{***}$ (0.109)	(0.047)
Chinese×Born after 1882 ×Incidents per 1,000 persons		(0)	0.192** (0.078)		(0.207)	$0.181^{**}$ (0.083)
Panel B. Literacy status		De	pendent va	riable: Lite	rate	
	(0	bs: 9,282,83	33)	(0	bs: 9,281,60	50)
Chinese	-0.186***	-0.143***	-0.135***	-0.186***	-0.143***	-0.135***
Cl :	(0.012)	(0.048)	(0.033)	(0.012)	(0.048)	(0.033)
Chinese×Born after 1882	$0.144^{***}$ (0.012)	$0.095^{*}$ (0.051)	0.100*** (0.035)	0.131*** (0.012)	0.068 (0.046)	0.083** (0.039)
Chinese×Born after 1882 ×Percentage of "Yea" votes	(0.012)	(0.051) 0.176 (0.140)	(0.000)	(0.012)	(0.040) $0.224^{*}$ (0.125)	(0.007)
Chinese×Born after 1882		~ /	0.187**		~ /	0.204*
×Incidents per 1,000 persons			(0.092)			(0.102)
Panel C. English skills		Depen	dent varia	ole: Speak l	English	
		os: 36,617,4			os: 36,615,8	
Chinese	-0.173***	-0.145***	-0.111***	-0.173***	-0.146***	-0.111***
Chinese×Born after 1882	(0.027) $0.084^{***}$	(0.017) $0.056^{***}$	(0.013) $0.045^{***}$	(0.027) $0.079^{***}$	(0.017) $0.051^{***}$	(0.014) $0.041^{***}$
Chinese > Dont unter 1002	(0.001)	(0.010)	(0.010)	(0.017)	(0.001)	(0.011)
Chinese×Born after 1882		0.154***	~ /		0.154***	
×Percentage of "Yea" votes		(0.024)	0.450***		(0.024)	0 4 50 ***
Chinese×Born after 1882 ×Incidents per 1,000 persons			$0.158^{***}$ (0.045)			$0.153^{***}$ (0.045)
Panel D. Name Americanization		Dopondop	. ,	Amoricaniz	ation indo	. ,
ranei D. Manie Americanization		1		Americaniz		
Chinese	(o -0.203***	bs: 2,787,39 -0.190***	92) -0.197***	(o -0.203***	bs: 2,787,14 -0.190***	+1) -0.198***
Childot	(0.014)	(0.007)	(0.014)	(0.014)	(0.007)	(0.014)
Chinese×Born after 1882	0.082***	0.058***	0.075***	0.060***	0.032**	0.057**
Chinese×Born after 1882	(0.015)	(0.013) $0.092^{***}$ (0.026)	(0.018)	(0.014)	(0.013) $0.094^{***}$ (0.024)	(0.022)
×Percentage of "Yea" votes Chinese×Born after 1882		(0.020)	0.036		(0.024)	0.013
×Incidents per 1,000 persons			(0.040)			(0.052)

## Table 7: Account for the Selection in Immigration (2)

Note: The estimates are from the OLS regressions of equation 5. Columns 1–3 present the estimates from the regressions where we exclude Chinese who migrated after 1882 from the corresponding original sample. Columns 4–6 further exclude Chinese whose fathers migrated after 1882 from the sample in columns 1–3. All regressions control for the fixed effects of the state of residence, birthplace, survey year, and year of birth. Standard errors clustered at the state level are reported in parentheses.

Sample	Individuals whose fathers' occupation income scores are above the mediar			
	(1)	(2)	(3)	
Panel A. School attendance	Depender	nt variable: Atte	end school	
Chinese	-0.253***	-0.068**	-0.258***	
	(0.015)	(0.030)	(0.045)	
Chinese×Born after 1882	0.229*** (0.014)	0.039 (0.034)	$0.234^{***}$ (0.046)	
Chinese×Born after 1882	(0.014)	0.467***	(0.040)	
×Percentage of "Yea" votes		(0.106)		
Chinese×Born after 1882			0.021	
×Incidents per 1,000 persons			(0.122)	
Number of siblings	Yes	Yes	Yes	
Father's occupational income score Observations	Yes 8,598,599	Yes 8,293,361	Yes 8,598,599	
Panel B. Literacy status		ident variable: I		
•	-0.229***		-0.189***	
Chinese	(0.013)	-0.151 (0.117)	(0.034)	
Chinese×Born after 1882	0.198***	0.120	0.165***	
	(0.012)	(0.123)	(0.037)	
Chinese×Born after 1882		0.222		
×Percentage of "Yea" votes		(0.342)	0.110	
Chinese×Born after 1882 ×Incidents per 1,000 persons			0.119 (0.100)	
	Yes	Yes	Yes	
Number of siblings Father's occupational income score	Yes	Yes	Yes	
Observations	3,468,852	3,348,680	3,468,852	
Panel C. English skills	Depender	nt variable: Spea	ak English	
Chinese	-0.229***	-0.161**	-0.096*	
	(0.055)	(0.063)	(0.055)	
Chinese×Born after 1882	0.148***	0.103*	0.060	
$C_{1}$ , $\mathbf{P}$ (t. 1000	(0.041)	(0.059)	(0.051)	
Chinese×Born after 1882 ×Percentage of "Yea" votes		0.088 (0.191)		
Chinese×Born after 1882		(0.191)	0.311**	
×Incidents per 1,000 persons			(0.136)	
Number of siblings	Yes	Yes	Yes	
Father's occupational income score	Yes	Yes	Yes	
Observations	4,963,123	4,784,891	4,963,123	

Table 8: Account for the Selection in Survival and Fertility (1)

Note: The estimates are from OLS regressions of equation 5. The sample in each panel is individuals whose fathers' occupational income scores are above the median from the corresponding original sample. All regressions control for the fixed effects of the state of residence, birthplace, survey year, and year of birth. Columns 2 and 3 also control for the remaining interactions for the DDD estimates. Standard errors clustered at the state level are reported in parentheses.

Dependent variable		Americanization index				
Sample	Non-emigrants			No	on-emigrar sibling(	
	(1)	(2)	(3)	(4)	(5)	(6)
	(0	bs: 1,975,05	54)	((	obs: 905,21	4)
Chinese	-0.185***	-0.176***	-0.178***	-0.174***	-0.170***	-0.160***
	(0.011)	(0.006)	(0.011)	(0.009)	(0.015)	(0.017)
Chinese×Born after 1882	0.073***	0.060***	0.068***	0.047***	0.035***	0.041**
	(0.007)	(0.007)	(0.010)	(0.011)	(0.010)	(0.019)
Chinese×Born after 1882		0.049***			0.080***	
×Percentage of "Yea" votes		(0.010)			(0.022)	
Chinese×Born after 1882			0.030			0.034
imesIncidents per 1,000 persons			(0.025)			(0.052)
Number of siblings	Yes	Yes	Yes	Yes	Yes	Yes
Household FE	No	No	No	Yes	Yes	Yes

## Table 9: Account for the Selection in Survival and Fertility (2)

Note: The estimates are from OLS regressions of equation 5 using the Americanization index of individual names as the dependent variable. The sample in columns 1–3 is all males who are foreignborn or whose fathers are foreign-born in the 1900–1930 U.S. censuses. The sample in columns 4–6 is a subsample of the non-emigrant sample that includes individuals who can be identified to have at least one male sibling in the household. Standard errors clustered at the state level are reported in parentheses.

Dependent variable	Occupa	ational incom	e score
1	(1)	(2)	(3)
Years in the pre-Exclusion Era	-0.025	-0.022	-0.025
	(0.017)	(0.017)	(0.017)
Years in the pre-Exclusion Era×Chinese	0.217***	0.189***	0.211***
Years in the Exclusion Era	$(0.029) \\ 0.014$	(0.047) 0.021	(0.030) $0.019^{**}$
Tears in the Exclusion Era	(0.014)	(0.021)	(0.019)
Years in the Exclusion Era×Chinese	0.071	0.127***	0.147***
	(0.045)	(0.037)	(0.031)
Years in the Exclusion Era×Chinese		-0.463***	
×Percentage of "Yea" votes		(0.044)	
Years in the Exclusion Era×Chinese			-0.297***
×Incidents per 1,000 persons			(0.067)
Treatment effect	-0.147**	-	-
	(0.057)	-	-
$ln(Chinese population) \times Chinese$	Yes	Yes	Yes
Observations	26,632,625	24,771,744	26,632,625

Table 10: Account for the Effects of Chinese Ethnic Enclave (1)

Note: The estimates are from OLS regressions of equations 3 and 4.  $ln(Chinese population) \times Chinese$  is the interaction of the natural log form of the number of Chinese in the individual's state of residence in the survey year and the dummy for Chinese. All regressions control for age, age squared, married, non-white, and non-Chinese and Chinese immigrant cohort fixed effects. The regressions in columns 2 and 3 also control for the rest of the interactions of years in the Exclusion Era, the dummy for Chinese, and the measure of state-level discrimination. Standard errors clustered at the state level are reported in parentheses.

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable	А	ttend scho	ol		Literate	
	(01	os: 19,550,5	69)	(C	bs: 9,287,3	61)
Chinese	-0.253***	-0.094	-0.236***	-0.080*	-0.067	0.033
	(0.052)	(0.068)	(0.084)	(0.041)	(0.045)	(0.068)
Chinese×Born after 1882	0.277***	0.073*	0.243***	0.103***	0.063	0.045
	(0.021)	(0.037)	(0.043)	(0.018)	(0.043)	(0.027)
Chinese $\times$ Born after 1882		0.562***			0.168	
×Percentage of "Yea" votes Chinese×Born after 1882		(0.109)	0.167*		(0.122)	0.220***
×Incidents per 1,000 persons			(0.085)			(0.220) (0.072)
			. ,			
$ln(Chinese ppl.) \times Chinese$	Yes	Yes	Yes	Yes	Yes	Yes
Dependent variable	S	peak Englis	sh	Americanization index		index
	(Ol	os: 36,645,8	356)	(Obs: 2,791,124)		24)
Chinese	0.081***	0.091***	0.142***	-0.149***	-0.154***	-0.138***
	(0.023)	(0.032)	(0.043)	(0.017)	(0.018)	(0.026)
Chinese×Born after 1882	0.078***	0.059***	0.040***	0.076***	0.060***	0.071***
	(0.021)	(0.009)	(0.009)	(0.007)	(0.006)	(0.009)
Chinese×Born after 1882		0.126***			0.052***	
×Percentage of "Yea" votes		(0.028)	0 1 ( ( ****		(0.010)	0.007
Chinese×Born after 1882			0.166***			0.027
×Incidents per 1,000 persons			(0.030)			(0.024)
$ln(Chinese ppl.) \times Chinese$	Yes	Yes	Yes	Yes	Yes	Yes

Table 11: Account for the Effects of Chinese Ethnic Enclave (2)

Note: The estimates are from OLS regressions of equations 5.  $\ln(\text{Chinese ppl.}) \times \text{Chinese}$  is the interaction of the natural log form of the number of Chinese in the individual's state of residence in the survey year and the dummy for Chinese. All regressions control for the fixed effects of the state of residence, birthplace, survey year, and year of birth. Columns 2, 3, 5, and 6 also control for the remaining interactions for the DDD estimates. Standard errors clustered at the state level are reported in parentheses.

Dependent variable	Americanizatio	Americanization index of Soundex-coded name				
	(1)	(2)	(3)			
Chinese	-0.189***	-0.175***	-0.177***			
	(0.012)	(0.005)	(0.013)			
Chinese×Born after 1882	0.080***	0.058***	0.068***			
	(0.009)	(0.008)	(0.012)			
Chinese×Born after 1882		0.073***				
×Percentage of "Yea" votes		(0.016)				
Chinese×Born after 1882			0.051			
imesIncidents per 1,000 persons			(0.031)			
Observations	2,791,113	2,638,331	2,791,113			

## Table 12: Phonetic Matching of Names

Note: The estimates are from OLS regressions of equation 5 where the dependent variable is the Americanization index of Soundex-coded individual names. All regressions control for the fixed effects of the state of residence, birthplace, survey year, and year of birth. Columns 2 and 3 also control for the remaining interactions for the DDD estimates. Standard errors clustered at the state level are reported in parentheses.

# **Appendix: Figures and Tables**

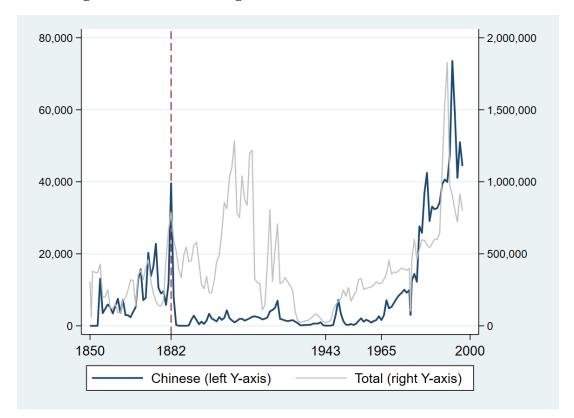
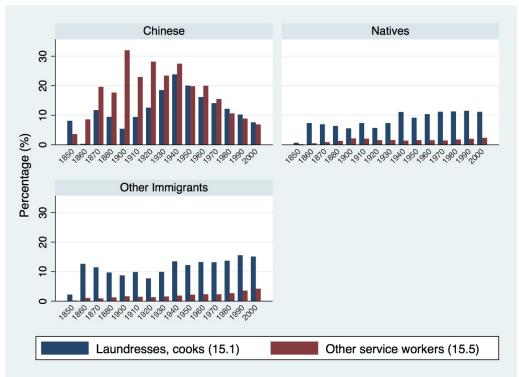


Figure 1: Chinese Immigration to the United States, 1850–2000

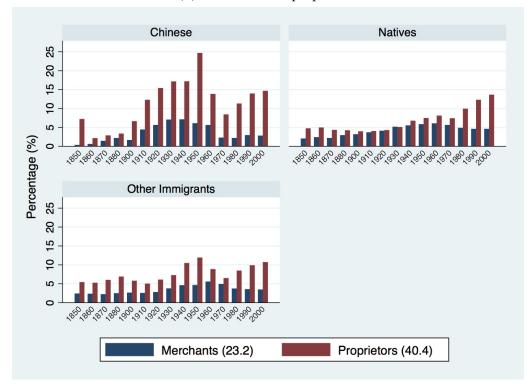
Note: The navy line shows the annual inflow of Chinese immigrants (left Y-axis) and the gray line shows the annual inflow of all immigrants (right Y-axis) between 1850 and 2000. Source: *Historical Statistics of the United States: Millennial Edition* (Carter et al., 2006)

## Figure A2: Occupational Distribution, 1850–2000 (1)

(a) Service jobs

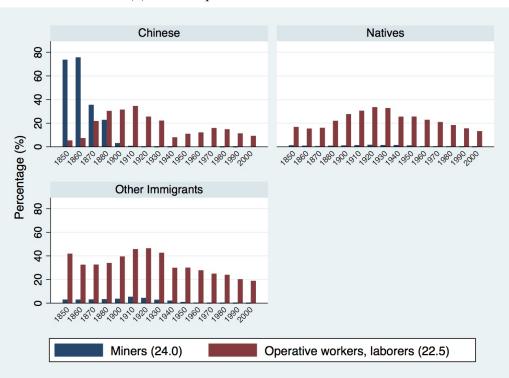


(b) Merchants and proprietors



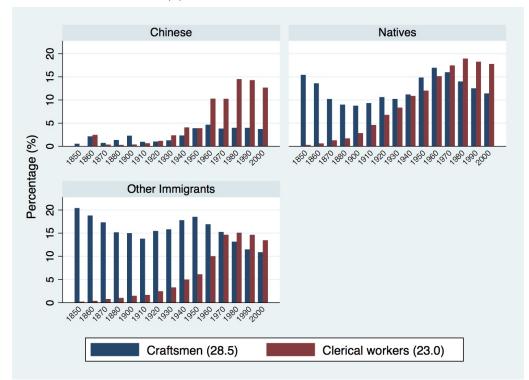
Note: The occupational distributions are calculated based on the micro-samples of the U.S. censuses from 1850 to 2000. Each bar represents the percentage of the population with the indicated occupation within each group (Chinese immigrants, non-Chinese immigrants, or U.S.-born natives) in each census year. The number in the parentheses is the occupational income score of the indicated occupation.

## Figure A3: Occupational Distribution, 1850–2000 (2)



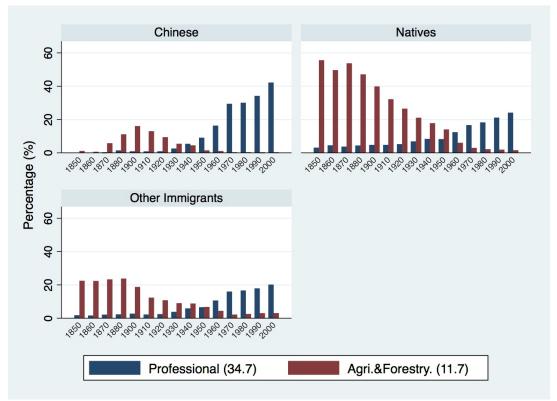
(a) Miners, operative workers, and laborers

(b) Craftsmen and clerical workers



Note: The occupational distributions are calculated based on the micro-samples of the U.S. censuses from 1850 to 2000. Each bar represents the percentage of the population with the indicated occupation within each group (Chinese immigrants, non-Chinese immigrants, or U.S.-born natives) in each census year. The number in the parentheses is the occupational income score of the indicated occupation.

### Figure A4: Occupational Distribution, 1850–2000 (3)



#### (a) Professional and agricultural jobs

Note: The occupational distributions are calculated based on the micro-samples of the U.S. censuses from 1850 to 2000. Each bar represents the percentage of the population with the indicated occupation within each group (Chinese immigrants, non-Chinese immigrants, or U.S.-born natives) in each census year. The number in the parentheses is the occupational income score of the indicated occupation.

Year	Total	Profes- sional	Skilled	Merchants	Laborers	No occu- pation	Unskilled share (%)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1908	3898	61	404	842	2369	222	66.5%
1909	3397	31	174	845	2232	115	69.1%
1910	2383	20	97	541	1610	115	72.4%
1911	2716	18	143	532	1936	87	74.5%
1912	2549	24	106	410	1908	101	78.8%
1913	2250	27	87	348	1727	61	79.5%
1914	2059	34	47	339	1567	72	79.6%
1915	1959	31	79	311	1473	65	78.5%
1916	2148	56	25	519	1424	124	72.1%
1917	1799	32	76	479	1057	155	67.4%
1918	2239	46	77	710	1283	123	62.8%
1919	2062	45	60	659	1172	126	62.9%
1920	2961	34	101	740	1947	139	70.4%
1921	5253	52	206	1334	3454	207	69.7%
1922	6146	56	187	1671	3998	234	68.9%
1923	3788	60	94	847	2612	175	73.6%
1924	3736	50	63	724	2690	209	77.6%
1925	3263	76	63	468	2200	456	81.4%
1926	2873	71	57	290	1974	481	85.5%
1927	4117	113	85	494	2726	699	83.2%
1928	4300	154	52	394	2976	724	86.0%
1929	3496	99	44	327	2400	626	86.6%
1930	3404	118	199	529	1766	792	75.1%
1931	3333	82	211	406	1961	673	79.0%
1932	3311	89	264	493	1666	799	74.4%
Average	3178	59	120	610	2085	303	75.2%

Table A1: Occupational Distribution of Chinese Emigrants, 1908–1932

Note: We use the classification of occupations in the original reports. Professional occupations (column 2) include actors, architects, clergy, editors, electricians, professional engineers, lawyers, literary and scientific persons, musicians, government officials, physicians, sculptors and artists, teachers, and others. Skilled occupations (column 3) include bakers, barbers and hairdressers, blacksmiths, bookbinders, brewers, butchers, cabinetmakers, carpenters and joiners, clerks and accountants, dressmakers, locomotive, marine, and stationary engineers, engravers, furriers and fur workers, gardeners, hat and cap makers, iron and steel workers, jewelers, locksmiths, machinists, mariners, masons, mechanics, metal workers, millers, milliners, miners, painters and glaziers, photographers, plasterers, plumbers, printers, saddlers and harnessmakers, seamstresses, shipwrights, shoemakers, stokers, stonecutters, tailors, tanners and curriers, textile workers, tinners, tobacco workers, upholsterers, watch and clock makers, weavers and spinners, wheelwrights, woodworkers, and others. Merchants (column 4) include merchants and dealers, bankers, and agents. Laborers (column 5) include unspecified common laborers, servants, farm laborers, farmers, fishermen, hotel keepers, draymen, hackmen, and teamsters. The share of the unskilled population (column 7) is calculated as the number of laborers and those with no occupations divided by the total number of emigrants.

Source: *The Annual Report of the Commissioner-General of Immigration to the Secretary of Commerce and Labor*, various years (U.S. Department of Labor, 1908–1932).

Dependent variable	Attendin	g school	Being literate		
-	(1)	(2)	(3)	(4)	
Father's occupational income score	0.000		0.002***		
-	(0.000)		(0.000)		
Father's occupational income score	0.003***		0.002**		
×Chinese	(0.001)		(0.001)		
Father's occupational income score	-0.005***		-0.001		
$\times$ Chinese $\times$ Born after 1882	(0.001)		(0.001)		
Father is literate		0.025***		0.148***	
		(0.006)		(0.012)	
Father is literate		-0.025		0.554***	
×Chinese		(0.028)		(0.064)	
Father is literate		-0.001		-0.492***	
$\times$ Chinese $\times$ Born after 1882		(0.033)		(0.064)	
Observations	15,34	4,208	6,60	9,396	

Table A2: Intergenerational Educational Mobility

Note: The estimates are from OLS regressions of equations 6. The sample in columns 1 and 2 is the subsample of that in Table 2 that only include those whose fathers can be identified in the households. The sample in columns 3 and 4 is the subsample of that in Table 3 that only includes those whose fathers can be identified in the households. All regressions control for the number of siblings, the remaining interactions, and the fixed effects of the state of residence, birthplace, survey year, and year of birth. Standard errors clustered at the state level are reported in parentheses.

	(1)	(2)	(3)
Panel A. School attendance	(-)	(-/	(-)
Chinese	-0.292*** (0.021)	-0.113*** (0.035)	$-0.255^{***}$ (0.034)
Chinese×Born between 1882 and 1943	0.295*** (0.025)	0.104*** (0.038)	0.253*** (0.043)
Chinese×Born after 1943	0.307*** (0.022)	$0.124^{***}$ (0.033)	$0.274^{***}$ (0.035)
Chinese×Born between 1882 and 1943 ×Percentage of "Yea" votes Chinese×Born after 1943 ×Percentage of "Yea" votes		$0.536^{***}$ (0.099) $0.464^{***}$ (0.096)	
Chinese×Born between 1882 and 1943 ×Incidents per 1,000 persons Chinese×Born after 1943 ×Incidents per 1,000 persons			0.192*** (0.071) 0.190** (0.091)
Observations	24,221,807	22,746,171	24,221,807
Panel B. Education attainment			
Chinese	-0.186***	-0.152***	-0.143***
Chinese $\times$ Born between 1882 and 1943	(0.017) $0.104^{***}$ (0.019)	(0.053) 0.057 (0.051)	(0.032) 0.049 (0.032)
Chinese×Born after 1943	$0.203^{***}$ (0.014)	$0.167^{***}$ (0.051)	0.161*** (0.029)
Chinese×Born between 1882 and 1943 ×Percentage of "Yea" votes Chinese×Born after 1943 ×Percentage of "Yea" votes		$\begin{array}{c} 0.188 \\ (0.133) \\ 0.112 \\ (0.141) \end{array}$	
Chinese×Born between 1882 and 1943 ×Incidents per 1,000 persons Chinese×Born after 1943 ×Incidents per 1,000 persons			$\begin{array}{c} 0.244^{***} \\ (0.082) \\ 0.170^{**} \\ (0.076) \end{array}$
Observations	16,924,840	15,838,365	16,924,840

#### Table A3: Long-term Impact on Human Capital Investment

Note: The estimates are from OLS regressions of equations 5 that further includes the interactions with the dummy for "born after 1943". The sample in Panel A is the extended sample of that in Table 2 to further include males aged under 18 who are foreign-born or whose fathers are foreign-born in the 1950–2000 censuses. The sample in Panel B is the extended sample of that in Table 3 to further include males aged under 18 who are foreign-born or whose fathers are foreign-born in the 1940–2000 censuses. The dependent variable in Panel A is the dummy for attending school. The dependent variable in Panel B is the dummy indicating being literate in census years before 1940 or above 8th grade in census years since 1940. All regressions control for the fixed effects of the state of residence, birthplace, survey year, and year of birth. Standard errors clustered at the state level are reported in parentheses.

## Data Appendix

## Sample Construction

Table B1 illustrates the data sources and sampling criteria of our sample for each analysis. Our priority is to use the full-count IPUMS census sample and we turn to the second-largest census sample if the key variable is not available in the full-count sample. School attendance is not available in the 1900 100% sample. Names are not available in the 1880–1930 100% samples.

In each sample, we exclude individuals who reside in Alaska, Hawaii, military reservations, or unknown states. In the sample for the analysis of occupational assimilation, we exclude individuals whose occupation is student, retired, disabled, inmate, gentleman/lady/at leisure, occupation missing/unknown, or not yet classified by the IPUMS. In the samples for the analyses of literacy status and English skills, we exclude individuals aged under 10 because the literacy status and Englisk skills of individuals under 10 is not collected in the censuses.

The definition of "Chinese" is individuals born in China who report their race as non-white in the sample for the analysis of occupational assimilation. In other samples, Chinese is defined as individuals either born in China or born to a Chinese-born father who report their race as non-white to include second-generation immigrants. We exclude those who report race as white to leave out Caucasians who were born in China or whose fathers were born in China since they were unlikely to be exposed to discrimination.

Sampling criteria	Data source	# of obs.	# of Chinese	Note				
Occupational mobility								
	1900 100%	5,254,886	64,986	"Year of immigration"				
All males aged between 18	1910 100%	6,961,627	40,056	not available before				
and 64	1920 100%	6,927,209	25,888	1900 and between 1940				
	1930 100%	7,488,903	26,066	and 1960.				
	Scho	ool attendan	ce					
All males and swar 0 and	1880 100%	2,979,952	4,712	"Father's birthplace"				
All males aged over 9 and under 18 who is	1900 5%	196,695	113	not available before				
foreign-born/whose	1910 100%	4,369,166	3,694	1880. "School				
fathers are foreign-born	1920 100%	4,874,468	3,629	attendance" not				
latiers are foreign-born	1930 100%	4,633,951	6,924	available in the 1900				
	1940 100%	2,496,337	7,069	100% sample.				
	Li	teracy status	3					
All males aged over 9 and	1880 100%	1,268,750	4,067	"Father's birthplace"				
under 18 who is	1900 100%	1,686,441	1,346	not available before				
foreign-born/whose	1910 100%	1,927,774	2,501	1880. "Literacy status"				
fathers are foreign-born	1920 100%	2,041,913	1,848	not available after 1930.				
	1930 100%	2,362,483	2,968					
English skills								
All males aged over 9 who	1900 100%	6,749,733	25,943					
is foreign-born and	1910 100%	8,752,437	24,572	"Speaking English" not available before 1900				
migrated under 18/whose	1920 100%	9,997,850	19,955	and after 1930.				
fathers are foreign-born	1930 100%	11,145,832	21,936	and after 1950.				
Name Americanization								
	1880 10%	816,066	16,306	"Father's birthplace"				
All males who is	1900 5%	647,445	3,924	not available before				
foreign-born/whose	1910 1%	194,361	837	1880. "Name" not				
fathers are foreign-born	1920 1%	177,493	529	available in 100%				
-	1930 5%	955,759	2,793	samples.				

## Table B1: Sample Construction

## Table B2: Summary Statistics of the Occupational Assimilation Sample

	Chinese	Non-Chinese immigrants	U.Sborn natives
	(1)	(2)	(3)
Age	42.3	39.3	35.8
	(11.2)	(11.7)	(12.3)
Years in the Pre-Exclusion Era	2.8	1.7	-
	(4.8)	(5.1)	-
Years in the Exclusion Era	19.1	18.1	-
	(8.6)	(10.5)	-
Occupational income scores (in \$100)	19.5	23.7	21.9
	(10.7)	(9.1)	(11.1)
Observations	156,996	19,073,595	7,402,034

## **Americanization Index**

We construct the Americanization index of individual names following the procedure of Biavaschi et al. (2017) and Fouka (2019b). The index is constructed as follows:

$$A_{ic} = \frac{F_{ic}}{Max(F_c^1, F_c^2, \dots, F_c^K)}$$

where the numerator  $F_{ic}$  is the frequency of an individual *i*'s name in the birth cohort *c* of U.S.-born natives. The denominator is the maximum frequency of names that appear in the same U.S.-born birth cohort. We define an individual's birth cohort as all U.S.-born natives no later than the year of birth of this individual to eliminate the contamination of the changes in naming customs after one's birth. This index is gender-specific and we construct the index based on all males in the census samples.

The value of the index is between zero and one. A larger value of the index indicates a higher level of conformity to the way that U.S.-born natives choose names and the maximum value of 1 represents that the individual chooses the most common name in his U.S.-born birth cohort. In our sample, John is the most common male name in all U.S.-born birth cohorts with the value of the index of 1, followed by William, James, George, and Charles. Table B3 shows the percentages of individuals who adopt these most American-sounding names among the population of non-Chinese immigrants, Chinese immigrants born before 1882, and Chinese immigrants born after 1882. The table shows that the Chinese were significantly more likely to adopt these most American-sounding names in birth cohorts after 1882.

Name	Average index value	Percentage of non-Chinese who adopt the name	Percentage of Chinese who adopt the name	
		-	Born before 1882	Born after 1882
	(1)	(2)	(3)	(4)
John	1	10.02%	0.56%	0.98%
William	0.77	5.03%	0.06%	1.20%
James	0.54	3.23%	0.04%	0.68%
George	0.46	3.13%	0.11%	1.55%
Charles	0.36	2.85%	0.32%	0.85%

Table B3: Percentages of Immigrants with Most American-sounding Names

Note: Column 1 shows the average value of the index of each name in all birth cohorts. Columns 2–4 show the percentage of individuals that adopt each name in the population of non-Chinese immigrants, Chinese immigrants born before 1882, and Chinese immigrants born after 1882.

## **State-level Measures of Discrimination**

We collect the congressional records of the voting to pass the Chinese Exclusion Act ("An Act to Execute Certain Treaty Stipulations Relating to Chinese") in the House of Representatives and the Senate from GovTrack.us. The bill was passed in the House of Representatives (202 Yea/37 Nay/52 Not Vote) and in the Senate with amendments (32 Yea/15 Nay/29 Not Vote). We combine the voting records in the House of Representatives and the Senate and divide the number of "Yea" votes by the total number of seats in both houses of Congress of each state to measure the support rate of the Act in each state (Table B4 column 7). Alaska, Arizona, Hawaii, Idaho, Montana, New Mexico, North Dakota, Oklahoma, South Dakota, Utah, Washington, and Wyoming did not have House seats in Congress in 1882.

We count the number of anti-Chinese incidents collected by Pfaelzer (2008) that occurred after the passage of the Act in each state. There are a total of 519 anti-Chinese incidents in this period. Those incidents include roundups and expulsions, physical assaults, demonstrations and rallies, boycotts against Chinese businesses, and government verdicts and actions against the Chinese. Figure **B1** shows the total numbers of anti-Chinese incidents in the United States and the numbers of incidents in California, Washington, and Wyoming,-the three states with the largest number of incidents between 1880 and 1890. The figure shows that the majority of the incidents took place in California.

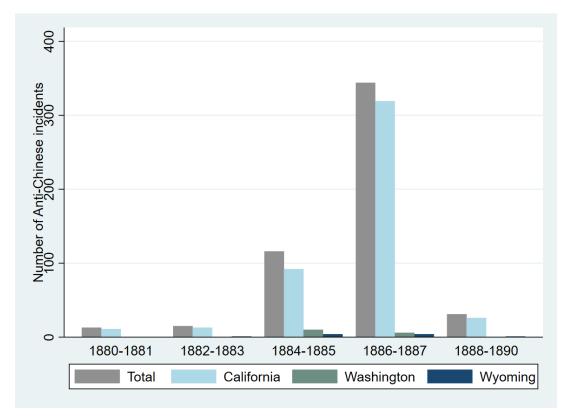


Figure B1: Number of Anti-Chinese Incidents, 1880-1890

Note: This figure presents the number of anti-Chinese incidents in total in the U.S. and the numbers of incidents in the three states with the largest numbers of incidents between 1880 and 1890. Source: *Driven Out: the Forgotten War against Chinese Americans* (Pfaelzer, 2008)

State	House of Representatives		Senate			Total	
	Seats	Yea	%	Seats	Yea	%	%
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Alabama	8	8	100%	2	2	100%	100%
Arkansas	4	3	75%	2	2	100%	83%
California	4	4	100%	2	2	100%	100%
Colorado	1	1	100%	2	2	100%	100%
Connecticut	4	3	75%	2	0	0%	50%
Delaware	1	0	0%	2	0	0%	0%
Florida	2	2	100%	2	1	50%	75%
Georgia	9	7	78%	2	0	0%	64%
Illinois	19	16	84%	2	1	50%	81%
Indiana	13	10	77%	2	0	0%	67%
Iowa	9	1	11%	2	0	0%	9%
Kansas	3	3	100%	2	0	0%	60%
Kentucky	10	8	80%	2	2	100%	83%
Louisiana	6	4	67%	2	1	50%	63%
Maine	5	3	67%	2	1	50%	67%
Maryland	6	6	100%	2	0	0%	75%
Massachusetts	11	2	18%	2	0	0%	15%
Michigan	9	8	89%	2	0	0%	73%
Minnesota	3	2	67%	2	0	0%	40%
Mississippi	6	5	83%	2	1	50%	75%
Missouri	12	11	92%	2	1	50%	86%
Nebraska	1	1	100%	2	2	100%	100%
Nevada	1	1	100%	2	2	100%	100%
New Hampshire	3	0	0%	2	0	0%	0%
New Jersey	7	5	71%	2	0	0%	56%
New York	33	17	52%	2	1	50%	51%
North Carolina	8	6	75%	2	1	50%	70%
Ohio	19	12	63%	2	1	50%	62%
Oregon	1	1	100%	2	2	100%	100%
Pennsylvania	27	19	70%	2	0	0%	66%
Rhode Island	2	2	100%	2	0	0%	50%
South Carolina	5	4	80%	2	2	100%	86%
Tennessee	10	7	70%	2	1	50%	67%
Texas	6	5	83%	2	2	100%	88%
Vermont	3	1	33%	2	0	0%	20%
Virginia	9	7	78%	2	1	50%	73%
West Virginia	3	2	67%	2	0	0%	40%
Wisconsin	8	5	63%	2	1	50%	60%
Total	291	202	69%	76	32	42%	64%

 Table B4: Congressional Record of Voting on the Chinese Exclusion Act

Note: Columns 1–3 show the number of seats, the number of "Yea" votes, and the percentage of "Yea" votes of each state in the House of Representatives. Columns 4–6 show the number of seats, the number of "Yea" votes, and the percentage of "Yea" votes of each state in the Senate. Column 7 shows the total percentage of "Yea" votes of each state combining the seats in both houses of Congress.

Source: GovTrack.us. House Vote #83 in 1882 (47th Congress), April 17, 1882: To suspend the rules and pass H.R. 5804 (22-STAT-58, 5/6/82), a bill executing certain treaty stipulations relating to Chinese immigration. (P. 2967-1) (https://www.govtrack.us/congress/votes/47-1/h83). Senate Vote #370 in 1882 (47th Congress), April 28, 1882: To pass H.R. 5804. (P. 3412) (https://www.govtrack.us/congress/votes/47-1/s370).