# Changes in the Assimilation of Asian Americans from 1860–1940

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**Abstract**

Asian immigration to the United States motivated the first instance of federal immigration legislation with the Chinese Exclusion Act of 1882, but little is known about Asian immigration during the period despite a robust literature on their European counterparts. I use linked cohorts drawn from complete-count census data to find that Asian immigrants displayed the "u-shaped" pattern of occupational assimilation characterizing contemporaneous European immigrants. I also find that they displayed a "catch-up" assimilation phenomenon: successive Asian cohorts steadily reduced their outcome gaps with the native population, and despite starting at a lower occupational tier than European immigrants, they assimilated more than European immigrants in all cohorts but the post-Exclusion cohort of 1880–1900. These findings provide insight into the assimilation process of an understudied immigrant community, furthering the understanding of assimilation in the United States.

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# 1 Introduction

Asian migration has spanned nearly the entire course of American migration history. It motivated the first instance of federal immigration restriction with the Chinese Exclusion Act of 1882 (Wellborn 1912, p. 50; Chen 1992, p. 4). Today, Asians constitute one of the largest racial groups of new immigrants to the United States (Ward and Batalova 2023). Throughout their migration history, their presence has provoked the conversations that have built the modern United States. Asians pushed our understanding about national identity and inclusion with the 19th-century Yellow Peril (Hsu 2015). They are uniquely linked to our current challenges in the debate about the American role in a globalized world with the Covid-19 pandemic (Gover et al. 2020) and competition with China (Lee 2022).

I examine a relatively unknown phenomenon—the degree to which Asian immigrants assimilated. Little is known about historic Asian immigration. In contrast, the dynamics of their European counterparts are well-established. The study of European immigrants during the Age of Mass Migration (1850–1940) has led to the conventional belief that European immigrants started with low-status occupations but displayed high occupational mobility that led them to converge with the native population (Abramitzky et al. 2014). Though subsequent work has both challenged (Abramitzky et al. 2014) and clarified (Collins and Zimran 2023; Eriksson 2020) this perception, it remains evident that scholarly attention has centered on European-origin groups during this period in American migration history.

Meanwhile, the popular image of the modern Asian immigrant is that of the educated white-collar worker (Hsu 2015) whose migration was facilitated by the 1965 Immigration Act, which sharply increased the number of highly-educated Asian immigrants to the United States (Keely 1971, p. 163–165). Yet the Asian immigrants of that early period resemble their European counterparts more than their modern successors: they came to the United States as laborers who worked in the mining, agriculture, and railroad-building industries of the American West (Chen 1992, p. 3–4) from countries marked not just by political and economic turbulence but also by a sense of broader marginalization on the global stage (Yu 1993). To my knowledge, I am the first to bridge these contrasting images of the Asian immigrant by investigating the course of Asian assimilation in the pre-1965 era, providing empirical insight into the complete history of Asian assimilation in the

United States.

I employ a linked cohort strategy using complete-count census data to compare the economic assimilation of male immigrants of Asian and European origin from 1860–1940. By incorporating the the Postel (2023) technique for linking Chinese names into the standard ABE matching algorithm to address changes in cohort quality (Abramitzky et al. 2019) and selective return migration (Lubotsky 2007; Abramitzky et al. 2014), I am able to include expanded Asian cohorts at a linkage match rate comparable to European cohorts, leading to highly robust findings that suggest Asian assimilation followed a comparable course to European assimilation.

I examine economic assimilation both as convergence to the native white population in occupational status (Villarreal and Tamborini 2018; Collins and Zimran 2023) and as residence in a geographical space not classified as an ethnic enclave (Logan et al. 2002). I contribute two main findings: first, I find that Asian immigrants displayed a "u-shaped" pattern of assimilation. They demonstrated positive convergence in the 1860–1880, 1900–1920, and 1920–1940 cohorts and negative convergence in the 1880–1900 cohort. Second, I find that they demonstrated a "catch-up" pattern of assimilation: in periods of positive convergence, their degree of convergence was generally higher than their European counterparts despite consistently starting at a lower occupational status than European immigrants, and successive Asian cohorts decreased their outcome gap relative to the native white population over time. These findings reveal a distinct pattern of Asian assimilation behavior that has not been previously described in the literature and distinguishes them from the known assimilation behaviors of European populations.

As a result, I make significant contributions to the study of migration. First, I employ a linked cohort strategy for Asian immigrants. This has not been previously attempted due to linkage problems associated with inconsistent transliterations of Asian-language names over time (Hilger 2016), leading to cohorts of a reduced quantity and quality. By incorporating the Postel (2023) technique for linking Chinese names, I derive highly robust findings from my Asian cohorts that clarify the course of Asian assimilation.

My work also confirms several unique characteristics of Asian assimilation that clarifies previous interpretations of assimilative behavior. Most notably, I find evidence for the "catch-up" phenomenon in select cohorts of Asian immigrants, which has been contested in the literature on European immigrants (Abramitzky et al. 2014). Additionally, the trough in the "u-shape" of the

Asian assimilation pattern occurs one cohort or twenty years before the trough of the European assimilation pattern, suggesting that assimilative behavior may not necessarily be uniform across various immigrant groups.

In fact, an examination of occupational assimilation for residents of ethnic enclaves reveals that an increase in the proportion of co-ethnics for Asian immigrants is associated with a dramatic decrease their occupational assimilation, while an increase in the proportion of co-ethnics for European immigrants is generally associated with an increase their assimilation. This finding confirms prior hypotheses that Asian enclave behavior (Logan et al. 2002; Li 2005, p. 38; Chaney 2010, p. 19–20) diverges from the traditional characterization of European enclaves, in which they are negatively associated with economic convergence (Abramitzky et al. 2020; Eriksson 2020).

This paper advances the study of migration, especially in the context of the understudied population of Asian immigrants to the United States. As the United States contends with demographic shifts—the Asian American population is predicted to nearly quadruple in size by 2060 (Budiman and Ruiz 2021)—their unique experiences must inform the broader understanding on migration and assimilation.

## 2 Background

### 2.1 Historic Patterns of Asian Assimilation

In 1852, Long Achick of San Francisco published an open letter to California Governor John Bigler. He sought to defend the character of his friend Hab Wa, who came to the United States to work in California's mines, and his countrymen, who labored for wages as little as 3 dollars a month (Wa and Achick 1852). Over the course of that decade, the number of Chinese immigrants would rise from 607 to over 35 thousand, and the white population was beginning to grow nervous.

They had "slantindicular eye[s]" and a complexion of "yellow mud." They spoke in strange, clipped syllables, preoccupied with "drunk-soup" and opium (The Atlanta Daily Constitution 1875). Simultaneously, they conspired to take away opportunities from white Americans. Three years later, Governor Bigler remained alarmed, warning that Chinese migrants were hoarding "the rich products of our soil," and that soon, they would grow numerous enough to "[fill] our cities" (Bigler 1855).

But Long Achick was not like these other Chinamen. He cut an exotic figure in "silks, satins,

and furs," speaking in "pure English" (New York Daily Tribune 1859). Among the white residents of San Francisco, he was known as "the intelligent Chinaman," and he kept busy as a prominent member of the community (The New York Herald 1853). By 1859, he was confident enough to introduce himself as the "authorized expressor of his countrymen's feelings" to Generals Winfred Scott and J.P. Haven (New York Daily Tribune 1859).

Yet little is known about the life of a man with such distinction: a search of the complete-count 1850 and 1860 censuses reveals no individual under that name. Most likely, Long Achick was from Guangdong, China, as was the case for the majority of Chinese immigrants during the period (Walker 1977). The circumstances of his own migration to the United States are mysterious, but he appeared to be intimately familiar with the typical arrangement of the period, wherein a merchant would provide a loan to the prospective migrant, to be paid with interest upon employment in the United States (Wa and Achick 1852).

Perhaps Long Achick made his influence as one of those merchants: he was certainly knowledgeable about the dealings of other immigrants in the city. He wrote that Chy Lung had recently sold $10,000 of Chinese goods and that Fei-Chaong had seen a similarly prosperous season. He listed the most popular Chinese imports and claimed that it was American cargo ships that best carried them. Most impressively, he minced through a contentious set of international relations, navigating the laws and the social mores of his Chinese and American audience to distinguish himself in his adopted homeland (Wa and Achick 1852).

How did such a complex network of multi-ethnic interaction develop? In the following sections, I describe the characteristics of the earliest Asian immigrants to the United States: who they were, how they lived, and the ways in which their identity shaped their integration into the United States.

### 2.1.1 Co-Ethnic Interaction

A chief complaint of Governor Bigler was the strength of Chinese co-ethnic cooperation. They had "no community of feeling or interest with the mass of our citizens," he warned, "hording [sic] together and forming distinct and separate communities" (Bigler 1855). By 1880, they had become a sizable minority in the West Coast—up to 10% of the population in many California counties (Figure 1).

Long Achick saw this ethnic solidarity differently. He reminisces that in China, he could rely on the support of his clan, his district, and his neighborhood (Wa and Achick 1852). It is little surprise

that Chinese immigrants sought a similar comfort.

Chinese ethnic enclaves featured clan organizations, ordered by the shared surname, that provided community support for its members (Fei and Liu 1982, p. 375; Chen 1992, pp. 3–4). Other groups such as district organizations and secret societies served as alternative methods of support (Chen 1992, pp. 9–11).

In the absence of a conventional family structure—Chinese immigrants at the time were men and usually temporary migrant workers (Walker 1977)—these organizations provided crucial support. For example, a San Fransiscan of the surname Dear could find employment at a fruit or candy shop: the Dear clan had a monopoly on fruit and candy in Chinatown (Lyman 1974, p. 478). As Chinese immigrants spread eastward from California, similar structures began to develop in other locations. Large cities like Chicago featured several clan-based monopolies, while those settled in small towns were likely of the same clan (Lyman 1974, p. 478–479).

However, these collective privileges also meant restrained economic choices. Chinese immigrants did not negotiate their labor as individuals. Instead, they worked through intermediaries, typically Chinese merchants of a common familial or geographical background, who dictated their jobs and purchases (Walker 1977, pp. 264–265). Most became laborers in the mining and railroad industries (Chen 1992, p. 3). Long Achick was rare company indeed: the prototypical Chinaman was less like him and more like the men that he defended to Governor Bigler.

The literature provides some clues of how these two characteristics of ethnic enclave residency and co-ethnic cooperation may have shaped the assimilation of Chinese immigrants in the United States. Under the conventional spatial assimilation model, ethnic enclaves are occupied by new immigrants who leave following assimilation into the mainstream economy (Li 2005, p. 38; Chaney 2010, p. 19). In fact, for European immigrants during the Age of Mass Migration, ethnic enclaves were negatively associated with economic convergence (Abramitzky et al. 2020; Eriksson 2020).

However, the literature is divided on the economic implications of ethnic enclave residency for Asian populations. While White et al. (1993) find that Asian immigrants do adhere to the conventional model, more recent literature on Asians and Latinos suggest that suburban enclave residence may be positively correlated with economic status (Logan et al. 2002) and that these groups may be less likely to leave ethnic enclaves following economic convergence (Li 2005, p. 38; Chaney 2010, p. 19–20).

Indeed, the literature has proposed the intriguing alternative that the conventional model is specific to European assimilation patterns during the Age of Mass Migration (Li 2005, p. 38; Chaney 2010, p. 19). This may be a result of enclaves functioning as a broader mechanism of group solidarity for a highly visible minority group such as the Chinese; protection against social discrimination is consistently cited as a motivation for enclave settlement patterns in early Chinese immigrant history (Li 2005, p. 31; Zhou and Lee 2013, p. 29) and even in the post-1965 literature (Waters and Eschbach 1995).

### 2.1.2 Discrimination

As proof of their work ethic, Long Achick had boasted that his countrymen labored for wages as little as three dollars a month (Wa and Achick 1852). Indeed, the restrictive labor choices of early Chinese immigrants extended to rampant wage discrimination. One 1881 headline proclaimed, "The Heathen at Seventy-Five Cents a Day [is] Preferable to White Men at Higher Rates" (San Francisco Chronicle 1881).

The expectation and ability of Chinese immigrants to work for comparatively lower wages field racialized resentment. In an 1878 discussion about Chinese exclusion, committee members pivoted quickly from economics—for example, the suggestion that California employers abstain from employing the Chinese as they "drove the whites from the labor field"—to loaded speculation about the "evil reaches" of a "servile race" (San Francisco Chronicle 1878).

This hostile environment toward Chinese immigration cumulated in the Chinese Exclusion Act of 1882, which was the first instance of a federal immigration restriction to the United States. The Act was motivated, designed, and implemented as an explicit result of racialized opposition to the integration of the Chinese community into the United States, and its passage halted the immigration of Chinese laborers to the United States (Lee 2002). In the majority opinion for *Chae Chan Ping v. United States* (1889), which held the Act as Constitutional, Justice Stephen J. Field went as far as to write that the United States government had the right to exclude "foreigners of a different race in this country" who "will not assimilate with us" (Field 1889).

However, the question of integration persisted for those immigrants who remained. Negative racial sentiment against Chinese immigrants remained rampant during the late 20th century (Lee 2002); its effects are ambiguous in the literature. Some findings suggest that discrimination may be a

motivating factor for assimilative behavior. Abramitzky et al. (2016) determine that the adoption of English-language names is associated with favorable economic outcomes; similarly, Saavedra (2021) finds increased assimilation among Japanese Americans via the adoption of English names in the period following Pearl Harbor, showing that assimilation acts as a defensive mechanism during periods of sudden and intense discrimination.

Alternatively, reductions in discrimination may increase the attractiveness of integration into mainstream community life. For example, reductions in labor market discrimination during the Civil Rights Movement have been cited as the cause of increased economic convergence (Duleep and Sanders 2012) and "economic and social assimilation" (Nee and Holbrow 2013, p. 67) of Asian Americans and Asian immigrants during the period.

In 1943, the Act was repealed, but changes were already on the way. Demographic changes including the introduction of female immigration and the advent of second-generation Chinese Americans (Chen 1992, p. 11) had weakened the influence of traditional enclave organization. Existing Chinese immigrants and their descendants had dispersed across the United States after the Exclusion (Chen 1992, p. 4–5). In their place, other groups, primarily from Japan and the Philippines, began to immigrate to the United States in large numbers (Figure 2).

### 2.1.3 Cohort Composition

The Chinese Exclusion Act prohibited Chinese laborers from entering the United States, setting a precedent for race- and class-based immigration restrictions (Lee 2002). In the place of Long Achick and his peers was a profoundly different type of Asian immigrant.

First is that many were non-Chinese Asians. Some took the low-wage, low-status jobs formerly available to their Chinese counterparts; California State Commissioner of Horticulture G.H. Heoke was on record calling for the "importation" of 25,000 Filipinos to harvest crops in the state following a World War I labor shortage (The Shanghai Times 1917). Many also faced many of the same obstacles, particularly in California, where they were concentrated. In 1909, California legislators unsuccessfully attempted to bar Japanese residents from holding property (Los Angeles Times 1909). A ban on Japanese immigration was even discussed as early as 1920 (Los Angeles Times 1920).

These new groups were poised to react to these circumstances differently than the Chinese. While the assimilation rates of historic European immigrants were not materially affected by their

country of origin (Collins and Zimran 2023), Asian immigrants were distinguishable from an early period. For example, Chinese immigrants rarely pursued farming. But Japanese immigrants were successful farmers (Lee 2002, p. 44), and as noted previously, Filipino immigrants were used as farm laborers (The Shanghai Times 1917). Unsurprisingly, these groups may have also assimilated in different ways: Chiswick (1983) observes using 1970 census data that Chinese and Japanese cohort groups were more economically assimilated than Filipino-origin immigrants, suggesting early differences in Asian-origin immigrants.

More broadly, changes in the American economy were forthcoming. The United States urbanized over the 19th and 20th centuries (Boustan et al. 2013). Other changes in the structure of the American economy include an increase in the capital-to-labor ratio and a capital-saving bias (Crafts 1999, p. 26), the stabilization of business-cycle fluctuations (James 1993), and population transfers from poorer to richer regions of the country (Vedder and Gallaway 1980). These developments, combined with the post-Exclusion Asian cohorts, suggest that a variety of factors may have affected the course of Asian assimilation.

### 2.2 Current Patterns of Asian Assimilation

The empirical study of Asian assimilation is specific to the period after the Immigration Act of 1965 for two reasons. First, there were simply more immigrants to study: the percent of Asian immigrants relative to the total immigrant population increased from 6.7% in 1965 to 12.3% in 1966, remaining in the double-digits for years afterward (Keely 1971, p. 162). Second, these immigrants were from different class backgrounds than their European contemporaries, with a large increase in professional-class immigrants from Asia (Keely 1971, p. 165). Subsequently, the study of Asian migration today centers on the characteristics—educational (Hirschman and Wong 1986), cultural (Chetty et al. 2020), or otherwise (Sakamoto et al. 2022)—that explain the high assimilation of the archetypal Asian immigrant.

Chetty et al. (2020) find that Asians display the highest rates of income mobility relative to Hispanics, African Americans, Native Americans, and white Americans; additionally, Asian immigrants display higher convergence over their lifetimes than second-generation Asian Americans, the latter of whom have a minimal income gap (and minimal differences in mobility) relative to the white population (p. 714). Together, these results suggest that Asian immigrants undergo rapid

economic assimilation over their lifetimes, resulting in their second-generation children displaying similar economic behaviors (ie., successful assimilation) relative to the white population.

The pre-convergence economic gap between Asians and white Americans is attributed to a variety of factors. Zeng and Xie (2004) suggest that it may be the place of education, as opposed to race or nativity, that determines disparate outcomes between Asian and white populations within the United States. Disparate outcomes can also be minimized via residency choices; Xie and Gough (2011) find that Chinese immigrants to the United States have positive gains to co-ethnic interaction via residency in ethnic enclaves, while other Asian-origin immigrant groups[1] have neither gains or losses.

Finally, work comparing the assimilation of European immigrants and Asian immigrants suggests that the two groups may assimilate differently. For example, Reitz and Sklar (1997) conclude that the economic assimilation of European immigrants in Canada is more rapid compared to Asian and Latino immigrants with the caveat that the assimilation of the former group is contingent on cultural assimilation while the latter group faces no such penalty. This conceptual separation is consistent with the descriptive evidence found in the historical literature, emphasizing the unique contributions that the study of Asian immigration can make to the migration literature as a whole.

# 3 Data/Methods

I construct four linked cohorts spanning the concurrent twenty-year examination periods of 1860–1880, 1880–1900, 1900–1920, and 1920–1940 for populations of Asian male immigrants, white male immigrants, and native white males aged 18–40 in the first census and aged 35–63 in the second census.

## 3.1 Linkage Data

The lack of linked data for Asian populations is a primary obstacle in the study of their assimilation (Hilger 2016). Postel (2023) notes that Chinese names in the census are frequently misspelled and commonly include name-ordering issues derived from the structure of Chinese-language names, wherein the surname precedes the given name.

[1] That is, Filipino, Indian, Vietnamese, and Korean immigrants.

I have observed some additional difficulties with Chinese-language names in the time span investigated. First, Chinese immigrants often give a diminutive to the census enumerator instead of a full name, a phenomenon that is especially frequent in the 1860 and 1880 censuses, and accounts for nearly all Chinese-language names in the 1860 census. This is found when the given name of an individual is recorded as "Ah" or "A" while the surname is a single-syllable word; in these cases, the "first name" is actually a standard prefix, while the "surname" is a character that may or may not be found in the individual's full name.[2] Given that diminutives reduce information about the full name and frequently overlap, the proportion of false links in the early period of the investigation will likely be much higher than anticipated.

An additional complication is the adoption of English-language names by Chinese immigrants beginning in the 20th century. Chinese immigrants may choose an English given name and retain their Chinese-language given name as a "surname," as was the case of David Lai-Gim in the 1940 census. The opposite case also occurs; most frequently, Chinese immigrants appear to adopt the surname "Louie" while retaining their Chinese-language given names. Given the transliteration issues associated with Chinese-language names, linkage will privilege those who choose to adopt English-language names in some capacity. Additionally, the true Chinese surname is lost or difficult to discern, further complicating linkage efforts.

These problems make it unsurprising that conventional linking methods do poorly with Asian cohorts: Table 1 shows the reduced linkage quality of Asian cohorts relative to white cohorts in the 1880–1900 period using a series of widely available methodologies including the Census Linking Project (CLP), the Census Tree (CT), and the Multigenerational Longitudinal Panel (MLP). In all cases, the low match rates of Asian cohorts make their study implausible.

However, the new Postel (2023) linkage strategy provides a name-cleansing technique that increases the number of Chinese individuals linked under standard algorithms. This is done by standardizing and re-ordering Chinese names in the census, with the caveat that this technique cannot compensate for the use of diminutives or the use of hybrid Chinese-English names.

Nevertheless, Postel (2023) finds that when the ABE exact-standard matching algorithm[3] is

[2] For example, my Chinese name is Chen (surname) Ling-Yin (given name). Valid diminutives for my name include "Ah Ling" or "Ah Yin." My actual diminutive is "Ah Tao," highlighting how diminutives usually give no information about the true surname, and may give little information about the true given name.

[3] A successful link with the ABE exact-standard matching algorithm is defined as an exact match on standardized names and birth states with ages that match within 2 years.

applied to a cleansed cohort of Chinese individuals in the 1880–1900 period, the linkage rate for the 1880–1900 cohort jumped to 9.6%[4], which is a rate comparable to those of white native and white immigrant cohorts created from the same matching algorithm.

I employ a linked cohort strategy using a combination of standard linkage packages and the Postel (2023) technique. I link Asian cohorts if there is a successful match with at least one of the six standard methods provided in the corresponding Census Linking Project crosswalk[5], which are derived from the ABE matching algorithm first developed by Ferrie (1996) and adapted by Abramitzky, Boustan and Eriksson (2012, 2014, 2017). I then cleanse Chinese name data using the Postel (2023) technique. I expand her original 1880–1900 links to all cohorts by correcting and separating name fragments that are then reordered and matched using the ABE exact-standard algorithm.

I link white cohorts using the ABE Exact-Standard links in the Census Linking Project crosswalks. Because there is a much larger pool of linked European immigrants, a stricter linkage technique that is partially observed in the Asian cohorts reduces the number of false positive matches.

Cohorts consist of non-southern men aged 18–40 in first year and 35–63 in the final year with an allowance of 3 years in case of age misidentification. For Asian cohorts, the foreign national groups included are from China, Japan and the Philippines; other national groups common today such as immigrants from Korea or India are of a negligible number during the period studied. The foreign national groups for white cohorts are consistent with the groups discussed in Collins and Zimran (2023) and include a spread of communities from across Europe. Cohorts are then modified along racial and national groups so that three sets of comparisons can be made: first, between Asian immigrants and the native white population, second, between European immigrants and the native white population, and third, between Asian immigrants and European immigrants. Figure 3 and Table 2 identify the proportion and the number of successful links given these guidelines, respectively.[6]

The linked sample is generally representative to the census population. This is because linked

[4] Calculated for cohorts of Chinese men of any age.

[5] That is, exact-standard, NYSIIS-standard, exact-conservative, NYSIIS-conservative, race-NYSIIS-standard, and race-NYSIIS-conservative. Each method has a degree to which first name, last name, and age (along with other demographic characteristics such as race and birth state, if included) must agree across censuses to be defined as a successful match.

[6] I identify an Asian native group to show the development of the Asian American population of the United States. This group is excluded from the normal cohorts.

cohorts are weighted using a variety of cohort-dependent factors drawn from Collins and Zimran (2023). Examples include but are not limited to age, occupational category, urban status, literacy, property holdings, and marital status. As an additional robustness check, the main analysis is also run conditional on the occupational upgrading, occupational distribution, and nationality patterns displayed in each cohort (see Appendix A: Other Relevant Figures). This controls for the unique distribution patterns of each cohort.

To explain the significance of the robustness check, consider the following example. The integration of the Postel (2023) technique, which is specific to names of Chinese origin, results in cohorts that consistently underrepresent Filipino immigrants as shown by the low proportion of Filipinos in linked cohorts (Table 3 and Figure 4). By running the main analysis conditional on the counterfactual that all cohorts feature the nationality distribution of the 1860–1880 cohort, and so forth, the concern that differential assimilation patterns arise because of a specific cohort's national-origin proportions is minimized.

Additionally, note that my linkage method for Asians is much less strict than the Collins and Zimran (2023) method. By including links generated from matches for any one of the six name transcriptions methods provided in the Census Linking Project crosswalk, I increase the chance that Asian individuals with inconsistently-transcribed names are included in my cohorts. This may partially account for the divergences from the original assimilation patterns described in Collins and Zimran (2023) and are indicative of the chosen linkage method and not the accuracy of the replication itself.

As a final robustness check, I also create Asian cohorts linked entirely through the ABE Exact-Standard method. This is done by linking cohorts using the ABE Exact-Standard links in the Census Linking Project crosswalks and then appending the Postel Postel (2023) links. The results are generally similar to the main results but statistically insignificant due to the reduced cohort sizes. Replications of all main tables and figures can be found in Appendix B: ABE Exact-Standard Linkage.

### 3.2 Occupational Data

Income (Borjas 2015) is the obvious proxy used to quantify economic assimilation. However, wage and salary income was not collected until the 1940 decennial census. Therefore, investigations of

early economic history commonly use occupational status (Villarreal and Tamborini 2018; Collins and Zimran 2023) to quantify economic assimilation. Not only can occupations be ranked against one another by approximating their typical wage, but the occupational distributions of different populations can also be examined to determine how preferences may affect engagement in otherwise similarly-ranked occupations. In fact, specific professions have been closely associated with various immigrant groups, such as the Chinese laundry industry in the early 20th century (Wang 2004).

The Collins and Zimran (2023) replication package ranks socioeconomic status as an average of two rankings constructed using occupational data in 1900 ("occscore") and property data in 1870 ("wealthscore"). This ranking system is preferable to the IPUMS 1950-basis occupational classification system because it implements occupational and wealth data consistent with the time periods examined. The resultant ranking system creates a proxy for economic status that is used to quantify the convergence of immigrant economic status to the native population over time.

Wealth scores are calculated using the 1870 census as a baseline. Occupational scores are calculated by using a 1910-basis occupational classification system, and all scores are calculated from the pool of Asian and white men in the corresponding year who are working-aged with an occupation. Thus, occupational mobility can be conceptually understood as the change in the average of these scores at the beginning and at the end of a cohort period.

Individuals are assigned to one of the six occupational categories of White Collar, Farmer, Craft, Operative, Unskilled, and Farm Family. Occupations are determined from the IPUMS 1950-basis occupational classification system. Examples of White Collar occupations include those engaged in medical, educational, or engineering professions. Craft occupations encompass skilled tradesmen like blacksmiths and carpenters. Operative occupations can either describe apprentices in the trades or less skilled occupations like launderers and mine operators. Unskilled occupations describe the widest range of occupations; generally, they are not in skilled trades and are not associated with a high level of formal education, with examples that range from midwives to waitresses to policemen.

The Farm Family category requires additional clarification. Broadly speaking, it consists of men who live in a household with a family member who is a farmer (Collins and Zimran 2023, p. 249). To account for this ambiguous occupational status in the IPUMS classification system, rankings for the Farm Family occupational category are separated into lower estimates, middle estimates, and upper estimates as Farm Labor, Midpoint, and Farmer, respectively. For example, the Farm

Labor estimate classifies Farm Family members as low-status laborers, while the Farmer estimate classifies Farm Family members as higher-status farm owners. As a result, three ranking systems corresponding to each type of Farm Family classification are constructed.

These rankings are relevant for white cohorts because of the engagement of white natives, and some white immigrants, in farming occupations. Since Asian immigrants were not commonly found in farming occupations, the rankings are not crucial to their analysis. Additional details about the implications of rankings for white cohorts can be found in Collins and Zimran (2023).

Figure 5 compares the broader occupational distributions of the white native population to European immigrants and Asian immigrants for the starting year of each cohort. It shows that relative to the native white population, both Asian and European immigrants are less likely to be in higher occupational tiers, such as the White Collar category, and more likely to be in the lower occupational tiers (with the exception of the Farmer and Farm Family occupations, which are dominated by white natives). Asian immigrants are typically concentrated in the Operative and Unskilled workers. Examples of common professions include miners, cooks, laborers, and launderers. Meanwhile, European immigrants are employed in a greater variety of work within the lower occupational tiers; unlike Asian immigrants, they are more frequently employed as skilled craftsmen like carpenters or in industrial occupations like machinists. Longitudinal trends reveal that both immigrants and natives are increasingly classified as White Collar, while a decreasing proportion are classed as Farmer or Farm Family, which may be related to the urbanization of the United States over the 19th and 20th centuries (Boustan et al. 2013).

### 3.3 Enclave Data

In addition to occupational status, I use proportion of co-ethnics as a proxy for economic assimilation. The conventional view is that ethnic enclaves are occupied by new immigrants who leave following assimilation into the mainstream economy (Li 2005, p. 38; Chaney 2010, p. 19). Assimilation can thus be observed by examining the frequency and characteristics of immigrants who stay in these enclaves. Enclaves also provide insight into non-economic components of assimilation, including socialization and cultural cohesion. These relations are particularly relevant in the modern period, with Borjas (2015) finding that decreased economic assimilation for post-1965 immigrant populations results from increased interaction with preexisting co-ethnics.

Enclave boundaries are determined using IPUMS time-stable county data. I do not define ethnic enclave residency in absolute terms: rather, I determine the changes associated with one percentage-point increase in the proportion of co-ethnics within a county, in which co-ethnics are defined as those in the same county sharing a foreign birth country with the individual. Similar definitions of an ethnic enclave have precedence in the recent literature, such as with Eriksson (2020)'s use of Norwegian enclaves.

A general understanding of ethnic enclave patterns can be found in Figure 6. Here, approximately 10%–70% of Asian immigrants within the 1860–1940 period live in an IPUMS county that contains at least 10% co-ethnics or a minimum of 2,000 co-ethnics. In comparison, the rate of enclave residence for white immigrants is remarkably low: around 7%–8% of European immigrants reside in these types of counties.

As a robustness check, enclave boundaries can also be determined using more specific geographic boundaries, such as with the Census Place Project sub-county definitions. Once again, similar proportions of Asian and white immigrants reside in sub-counties fulfilling the 10% or 2,000 co-ethnic threshold (Figure 7).

More broadly, it can be concluded that Asian immigrants reside more frequently with co-ethnics. They do so at a much higher frequency than their European counterparts, though the average size of such gatherings is difficult to determine. Additionally, these results are remarkably consistent at the sub-county level, showing that these results hold at finer boundary levels.

## 3.4 Empirical Strategy

### 3.4.1 Main Strategy

I calculate the change in occupational rank for cohorts of Asian immigrants, European immigrants, and white natives using the Collins and Zimran (2023) definition of occupational rank as an average of two rankings constructed using occupational data in 1900 and property data in 1870. Change in occupational rank can be informally interpreted as the change in assimilation, wherein positive changes in rank are associated with increased assimilation and vice versa.

Three estimator equations, drawn from the Collins and Zimran (2023) conceptual equations and corresponding to three different types of cohorts, are used to create the main findings. In Equation

1, I calculate the change in occupational rank by comparing Asian immigrants to the white native population in each cohort period. It is as follows:

$$\Delta\text{rank}_\text{I} = \beta_0 + \beta_1 \,\text{foreign}_\text{A} + \beta_2 \,\text{age}_\text{S} + \epsilon \tag{1}$$

The outcome variable is the change in an individual's occupational rank $\Delta\text{rank}_\text{I}$, which is calculated for each member of a given twenty-year cohort interval. It can be informally interpreted as the change in assimilation, wherein positive changes in rank are associated with increased assimilation and vice versa. Recall that the change in rank is constructed as the average of the "wealthscore" and "occscore" metrics constructed by Collins and Zimran (2023).

The outcome variable is a function of two variables. First, it is a function of the binary variable Asian immigrant status $\text{foreign}_\text{A}$, which takes on a value of 1 if the individual is an Asian immigrant and 0 if an individual is not an Asian immigrant (that is, the individual is a white native). Immigration status is determined by the "birthplace" variable in IPUMS, wherein those born outside of the states of the United States, including United States territories, are denoted as immigrants, while those born within the states of the United States are denoted as natives. Occasionally, birthplaces are inconsistently designated between the two censuses used to construct each cohort. As a result, immigrants must have a foreign birthplace in both the earlier and the later census, while in rare cases, natives may have a foreign birthplace in either the earlier or the later census.

Additionally, the outcome variable is a function of age at the start of the cohort period $\text{age}_\text{S}$. To clarify the magnitude of the outcome variable, consider the following examples. An individual in the 1860–1880 Asian panel with an average rank of 0.1647 in 1860 and an average rank of 0.9642 in 1880 can be conceptualized per the OCC1950 categorization as a laborer who ascended to management ($\Delta\text{rank}_\text{I} = 0.7995$). Most individuals display less mobility, however: in that same panel, a mine operative with an average rank of 0.2628 in 1860 and climbs to an average rank of 0.2903 with his promotion as a laundry operative ($\Delta\text{rank}_\text{I} = 0.0275$). The magnitude of the results in the following section displays the patterns of the latter case, which are modest developments or declines in ranking that are generally contained within a broad socioeconomic class.

Finally, note that the coefficient of interest in the Findings is the $\beta_1$ value, which is a function of $\text{foreign}_\text{A}$.

The second estimator equation is similar and calculates the change in occupational rank by comparing European immigrants to the white native population in each cohort period.

$$\Delta\text{rank}_\text{I} = \beta_0 + \beta_1 \,\text{foreign}_\text{W} + \beta_2 \,\text{age}_\text{S} + \epsilon \tag{2}$$

Once again, the coefficient of interest in the Findings is the $\beta_1$ value, which is now a function of European immigrant status as denoted by the binary variable $\text{foreign}_\text{W}$ and takes a value of 1 if the individual is an European immigrant and 0 if an individual is not an European immigrant (that is, the individual is a white native). As before, inconsistent birthplace designations mean that immigrants must have a foreign birthplace in both census years, while in rare cases, natives may have a foreign birthplace in either the earlier or the later census.

The third estimator equation calculates the change in occupational rank by comparing Asian immigrants to European immigrants. It is as follows:

$$\Delta\text{rank}_\text{I} = \beta_0 + \beta_1 \,\text{race}_\text{A} + \beta_2 \,\text{age}_\text{S} + \epsilon \tag{3}$$

Here, the outcome variable is a function of racial status $\text{race}_\text{A}$. It takes either a binary value of 1, corresponding to the Asian immigrant cohorts that are classified racially under the "Chinese," "Japanese," or "Other Asian or Pacific Islander" categories in the census, or a binary value of 0, corresponding to the European immigrant cohorts that are classified racially under the "White" category in the census. Once again, the coefficient of interest in the Findings are the $\beta_1$ values, which are a function of $\text{race}_\text{A}$.

In summary, the main estimator equations regress foreign or racial status on occupational outcomes.

### 3.4.2 Enclave Strategy

The enclave estimator equations are not binary. Rather than determining an absolute threshold for the concentration of co-ethnics required to designate a space as an ethnic enclave, the main outcome variable of occupational outcome is regressed on the proportion of co-ethnics in the earlier cohort year to determine how changes in that proportion modify the outcome variable. This strategy, derived from Eriksson (2020)'s work on Norwegian enclaves, accounts for differences in enclave sizes

in their effects on immigrants.

The first enclave estimator equation compares Asian immigrants to white natives by regressing the share of co-ethnics and the age of the individual on the outcome variable, which remains the change in an individual's occupational rank.

$$\Delta \text{rank}_{\text{I}} = \beta_0 + \beta_1 \, \text{share}_{\text{A}} + \beta_2 \, \text{age}_{\text{S}} + \epsilon \tag{4}$$

The variable denoting share of co-ethnics $\text{share}_{\text{A}}$ refers to proportion of individuals within county boundaries that share the birthplace of an Asian immigrant. Here, cohorts are constructed such that they consist of Asian immigrants and white natives. By construction, $\text{share}_{\text{A}}$ takes a value between 0 and 1 for Asian immigrants and automatically takes a value of 0 for white natives. The interpretation of the other variables in the equation remain the same as those in the main equations, with the caveat that the coefficient of interest $\beta_1$ must be interpreted in the context of a continuous variable rather than a binary variable.

The second enclave estimator equation compares European immigrants to white natives.

$$\Delta \text{rank}_{\text{I}} = \beta_0 + \beta_1 \, \text{share}_{\text{W}} + \beta_2 \, \text{age}_{\text{S}} + \epsilon \tag{5}$$

The only change is the variable denoting share of co-ethnics $\text{share}_{\text{W}}$, which now refers to the proportion of individuals within county boundaries that share the birthplace of an European immigrant. Cohorts are thus constructed such that they consist of European immigrants and white natives, in which $\text{share}_{\text{W}}$ takes a value between 0 and 1 for European immigrants and automatically takes a value of 0 for white natives. The interpretation of other variables and coefficients remain the same.

In summary, the enclave estimator equations regress the proportion of co-ethnics within a county on occupational outcomes.

# 4 Findings

## 4.1 Main Results

I contribute two main findings. First, I find that the shape of Asian assimilation follows a "u-shaped" pattern, with cohorts at the beginning and end of the period assimilating more than cohorts in the

middle of the period. Second, I find that Asian assimilation reflects a "catch-up" pattern wherein Asian immigrants, who started less assimilated than their European counterparts, demonstrated more rapid cohort convergence to native occupational characteristics.

Figure 8, Figure 9, Table 4, and Table 5 capture the pace of assimilation within Asian and white cohorts. Figure 9a suggests that Asian immigrants display a distinct "u-shaped" pattern of assimilation with a trough during the 1880–1900 period. This trough coincides with the post-Exclusion period, and though my results are not causal, the sudden and sharp decrease in the pace of assimilation during the Exclusion suggests that the legislative or social environment may affect assimilation behaviors.

Figure 9b requires further discussion due to its divergence from the Collins and Zimran (2023) findings. There, European immigrants display a "u-shaped" assimilation pattern wherein they saw a greater increase in occupational rank at the earliest and latest cohorts relative to the middle cohorts. My replication of the study reveals a "u-shaped" assimilation pattern for the Farm Labor weighting with a trough located in the 1900–1920 cohort, but the Midpoint and Farmer rankings suggest a pattern of increasing assimilation over time. This is likely due to my linkage strategy, which is less strict than the strategy used in the original study.

However, when the findings of Figure 9b are positioned relative to Asian immigrants as in Figure 8, distinct patterns are revealed that are independent of the Farm Family weights: Asian assimilated faster than European immigrants in all cohorts besides 1880-–1900 for all weights. Per the robustness checks conducted in Appendix A: Other Relevant Figures, these findings are generally consistent even when upgrading is held conditional on the occupational upgrading, occupational distribution, and nationality distribution levels for each cohort as evidenced by the similarities of the assimilation patterns to the main findings. As result, I conclude that the specific patterns of Asian assimilation that I describe are highly distinct and hold across several robustness checks.

The next set of figures relate to the "catch-up" finding. Figure 10 and Figure 11 compare assimilation between cohorts as opposed to the rate of assimilation within a cohort and show that Asian immigrants started at a significantly lower occupational tier than European immigrants, who in turn started at a lower occupational tier than white natives. These results are not surprising: immigrants generally have a lower economic standing than the native population, and Asian immigrants during this period were specially recruited for low-ranking manual occupations.

Figure 12 and Figure 13 describe differences in the average ending rank for Asian immigrants and European immigrants. They suggest that while Asian immigrants had a larger final occupational gap compared to European immigrants in all cohorts, successive Asian cohorts reduced this larger final occupational gap, excluding a lack of reductions between the 1860–1880 and 1880–1900 cohorts. This is in contrast to the European example, whose occupational gap persisted over time and suggests a lack of convergence to the native population as noted in Abramitzky et al. (2014). However, since Asian immigrants generally increased their pace of assimilation over time, there is convincing evidence for the Asian "catch-up" assimilation phenomenon.

### 4.2 Enclaves

Asian immigrants and European immigrants also displayed divergent behavior with regards to their proximity to co-ethnics. Two conclusions are immediately evident. First, greater proximity to co-ethnics is associated with extremely negative occupational outcomes for Asian immigrants. In contrast, European immigrants are associated with positive to slightly negative occupational outcomes given greater co-ethnic proximity. Second, co-ethnic proximity in Asian immigrants is highly associated with occupational status, while for European immigrants, co-ethnic proximity does not appear to be highly associated with occupational status.

Figure 14a and Table 6 demonstrate the first conclusion: an increase in the proportion of co-ethnics within a county is associated with a negative effect on change in occupational rank, an effect that is statistically significant for all but the 1920–1940 cohort. Figure 14b and Table 7 show a contrasting finding for European immigrants. Here, an increase in the proportion of co-ethnics within a county is associated with a slightly positive effect on change in occupational rank for the 1860–1880 and 1880–1900 cohorts, a positive-to-neutral effect for the 1900–1920 cohort, and a slightly negative effect for the 1920–1940 cohort.

The characteristics of Asian immigrants with increased co-ethnic proximity are similarly relevant. For all but the 1860–1880 cohort, an increase in the proportion of co-ethnics within a county is associated with an increase in starting occupational status: that is, higher-status Asians in the earlier year of the cohort tend to gather together. This phenomenon is also interesting because it is almost entirely absent for European immigrants. In their case, co-ethnic proximity appears entirely unrelated to the starting occupational status of European immigrants.

The relationship between co-ethnic proportions and final occupational status is more ambiguous. For Asians in the 1860–1880 and 1900–1920 cohorts, an increase in co-ethnic proportions is associated with a positive final occupational rank, while in the 1880–1900 and 1920–1940 cohorts, there is a negative association with final occupational rank. Once again, co-ethnic proximity does not appear to be a particularly relevant predictor in the final occupational status of European immigrants.

Nevertheless, co-ethnic proximity remains relevant in assessing changes in occupational status and initial occupational statuses. Though these findings do not account for selection-into bias,[7] when they are taken in conjunction with the prior discussion on patterns of assimilation in ethnic enclaves, they provide some insight patterns of assimilation for Asian and European immigrants in enclaves, most notably suggesting divergences in assimilation behavior that should be examined further.

## 5 Conclusion

Asian immigrants during the Age of Mass Migration displayed distinct assimilation patterns that have not yet been described in the literature. First, they started at lower occupational rankings than their European counterparts. Despite this characteristic, they generally displayed more assimilation than European immigrants. Additionally, their co-ethnic interactions appear to be materially relevant to their occupational standings, both in that greater co-ethnic interaction is related to higher initial occupational standing and that this co-ethnic interaction actually hurts their assimilation in the long run.

Asian immigration is also highly relevant in the broader study of migration. Not only was it crucial for the development of select American industries, but it also served as the center of debate about the globalization of markets and the boundaries of national identity. Indeed, Asian immigration was the target of the earliest federal immigration legislation and has periodically pushed immigration legislation ever since.[8]

To my knowledge, I am the first to use linked cohorts to describe patterns of historic Asian

[7] Selection-into bias suggests that immigrants who choose to stay in enclaves are distinct from the general population because they have characteristics (eg., lack of language fluency) that may prevent a barrier to assimilation.

[8] Examples include *United States v. Wong Kim Ark (1898)*, *United States v. Wong Kim Ark (1898)*, and the Immigration and Nationality Act of 1965.

assimilation in the United States. I also challenge conventional theories about immigrant assimilation during the Age of Mass Migration and confirm previously-qualitative hypotheses about Asian immigrant behavior. These contributions provide a blueprint for the study of an important group that can clarify the broader understanding of migration and assimilation.

In fact, this investigation motivates some additional sources of inquiry that can clarify their contributions to American migration history. Most notably, it should be possible to extend the Postel (2023) technique to other Asian languages that are inconsistently Romanized or that have non-English name ordering patterns, which would address the large numbers of Japanese immigrants found in cohorts after the 1880–1900 period.

Additionally, I believe that immigration policy may have effects on assimilation: I find that Asians display the least amount of occupational convergence in the 1880–1900 cohort, which coincides with the passage of the 1882 Chinese Exclusion Act. Though I do not conduct a casual investigation, the Act itself may generate several environmental changes that may affect assimilation. For example, it may be that some combination of an exclusionary immigration policy, a dramatic reduction in co-ethnics, and a hostile social environment serve as contributing factors that affect the integration of current residents.

Finally, the enclave study can be further tested by examining selection-into bias. An understanding of the types of Asian immigrants choosing to reside in enclaves is especially relevant given that co-ethnic interaction is significant for Asian populations in this preliminary analysis. Indeed, the endurance of Chinese enclaves in most major metropolitan areas today also points toward their continued relevance for some Asian populations.

In all, this work demonstrates the relevance of Asian immigration in the study of migration. Asian migration is growing quickly, and awareness of Asian American contributions is increasingly entering the national stage. As a result, understanding their historic patterns of assimilation is crucial to the integration of this growing population into the United States.

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# Tables: Main Results

Table 1: Linkage Matches, 1880–1900

| | (1) Default | (2) ABE Exact-Standard | (3) All CLP | (4) CT | (5) MLP–Backward | (6) MLP–Forward |
|---|---|---|---|---|---|---|
| Asian Native | 8 | 6 | 21 | 4 | 9 | 1 |
| Asian Immigrant | 6,590 | 1,960 | 4,441 | 10 | 31 | 34 |
| White Native | 1,005,388 | 1,005,388 | 1,036,909 | 1,349,889 | 1,880,390 | 1,546,428 |
| White Immigrant | 179,824 | 179,824 | 219,067 | 193,398 | 355,598 | 303,363 |

*Sources:* IPUMS Full-Count Censuses, 1880 and 1900; Census Linking Project Crosswalk, 1880–1900; Postel (2023) data package; The Census Tree, 1880–1900.

*Notes:* The "Default" link uses the paper's main linkage technique; see Table 2 for details. The "ABE Exact-Standard" link uses the ABE exact-standard method. The "All CLP" link describes matches with at least one of the six standard methods provided in the Census Linking Project's 1880–1900 crosswalk. The "CT" link is defined using the Census Tree's 1880–1900 crosswalk. The "MLP–Backward" link uses the 1880 Multigenerational Longitudinal Panel identifier in the 1900 census, while the "MLP–Forwrad" link uses the 1900 Multigenerational Longitudinal Panel identifier in the 1880 census. Cohorts are restricted to non-southern males aged 18–63. The Asian immigrant cohort is defined as non-southern males aged 18–63 of Chinese, Japanese or Filipino national origin.

Table 2: Linkage Matches

| | (1) 1860–1880 | (2) 1880–1900 | (3) 1900–1920 | (4) 1920–1940 |
|---|---|---|---|---|
| Asian Native | 0 | 8 | 635 | 729 |
| Asian Immigrant | 2,034 | 6,590 | 6,051 | 4,335 |
| White Native | 499,397 | 1,005,388 | 1,576,395 | 2,783,357 |
| White Immigrant | 110,004 | 179,824 | 243,785 | 376,690 |

*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package. Corresponds to Figure 4.

*Notes:* White cohorts are linked using the ABE exact-standard method. Asian cohorts are linked if there is a successful match with at least one of the six standard methods provided in the Census Linking Project crosswalk. These cohorts are then supplemented using the links generated from the Postel (2023) technique, which uses the ABE

exact-standard method. Cohorts are restricted to non-southern males aged 18–63. The Asian immigrant cohort is defined as non-southern males aged 18–63 of Chinese, Japanese, or Filipino national origin.

Table 3: Linked Asian Immigrants by Country of Origin

| | (1) 1860–1880 | (2) 1880–1900 | (3) 1900–1920 | (4) 1920–1940 |
|---|---|---|---|---|
| China | 2,031 | 6,588 | 4,526 | 2,001 |
| Japan | 0 | 2 | 1,524 | 2,182 |
| Philippines | 0 | 0 | 1 | 152 |

*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package. Corresponds to Figure 2.

*Notes:* Asian cohorts are linked if there is a successful match with at least one of the six standard methods provided in the Census Linking Project crosswalk. These cohorts are then supplemented using the links generated from the Postel (2023) technique, which uses the ABE exact-standard method. Cohorts are restricted to non-southern males aged 18–63. The Asian immigrant cohort is defined as non-southern males aged 18–63 of Chinese, Japanese, or Filipino national origin.

Table 4: Change in Rank, Asian Immigrants

| | (1) Farm Labor | (2) Midpoint | (3) Farmer |
|---|---|---|---|
| 1860–1880 Asian | 0.065*** | 0.068*** | 0.052*** |
| | (0.009) | (0.010) | (0.010) |
| 1880–1900 Asian | -0.104*** | -0.050*** | -0.022*** |
| | (0.005) | (0.005) | (0.005) |
| 1900–1920 Asian | 0.026*** | 0.075*** | 0.093*** |
| | (0.007) | (0.007) | (0.007) |
| 1920–1940 Asian | 0.077*** | 0.091*** | 0.095*** |
| | (0.018) | (0.019) | (0.018) |

*Significance levels:* *** p<0.01, ** p<0.05, * p<0.1

*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package; Collins and Zimran (2023) data package. Corresponds to **??**.

Table 5: Change in Rank, White Immigrants

| | (1) | (2) | (3) |
|---|---|---|---|
| | Farm Labor | Midpoint | Farmer |
| 1860–1880 White | -0.016*** | -0.019*** | -0.026*** |
| | (0.001) | (0.001) | (0.001) |
| 1880–1900 White | -0.026*** | -0.012*** | -0.008*** |
| | (0.001) | (0.001) | (0.001) |
| 1900–1920 White | -0.034*** | -0.010*** | -0.000 |
| | (0.001) | (0.001) | (0.001) |
| 1920–1940 White | 0.031*** | 0.039*** | 0.040*** |
| | (0.002) | (0.002) | (0.002) |

*Significance levels:* *** p<0.01, ** p<0.05, * p<0.1

*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package; Collins and Zimran (2023) data package. See Tables A.5(a), A.5(b), and A.5(c) in Collins and Zimran (2023). Corresponds to **??**.

# Tables: Enclaves

Table 6: Change in Rank for Enclave Residents, Asian Immigrants

| | (1) | (2) | (3) |
|---|---|---|---|
| | Farm Labor | Midpoint | Farmer |
| 1860–1880 Asian | -0.379** | -0.412** | -0.440*** |
| | (0.157) | (0.161) | (0.163) |
| 1880–1900 Asian | -0.279*** | -0.295*** | -0.256*** |
| | (0.061) | (0.063) | (0.063) |
| 1900–1920 Asian | -0.133** | -0.151** | -0.148** |
| | (0.060) | (0.060) | (0.060) |
| 1920–1940 Asian | -0.312 | -0.325 | -0.318 |
| | (0.373) | (0.376) | (0.373) |

*Significance levels:* *** p<0.01, ** p<0.05, * p<0.1

*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package; Collins and Zimran (2023) data package. Corresponds to Figure 13a.

*Notes:* Residence in an ethnic enclave is defined as an individual of foreign birthplace residing in an IPUMS-defined county that contains 10% or greater of co-ethnics or a minimum of 2000 co-ethnics.

Table 7: Change in Rank for Enclave Residents, White Immigrants

| | (1) Farm Labor | (2) Midpoint | (3) Farmer |
|---|---|---|---|
| 1860–1880 White | 0.002 | 0.012*** | 0.020*** |
| | (0.001) | (0.001) | (0.001) |
| 1880–1900 White | 0.037*** | 0.024*** | 0.016*** |
| | (0.001) | (0.001) | (0.001) |
| 1900–1920 White | 0.038*** | 0.006*** | -0.008*** |
| | (0.001) | (0.001) | (0.001) |
| 1920–1940 White | -0.009*** | -0.025*** | -0.030*** |
| | (0.001) | (0.001) | (0.001) |

*Significance levels:* *** p<0.01, ** p<0.05, * p<0.1

*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package; Collins and Zimran (2023) data package. Corresponds to Figure 13b.

*Notes:* Residence in an ethnic enclave is defined as an individual of foreign birthplace residing in an IPUMS-defined county that contains 10% or greater of co-ethnics or a minimum of 2000 co-ethnics.

## Figures: Main Results

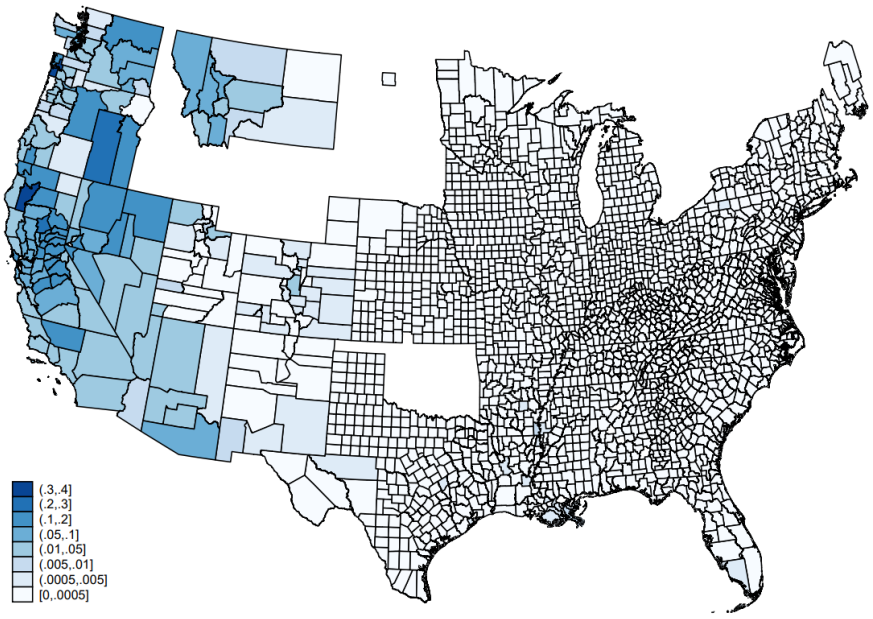



Figure 1: Percent of Chinese Immigrants by County, 1880

*Source:* IPUMS Full-Count Census, 1880.

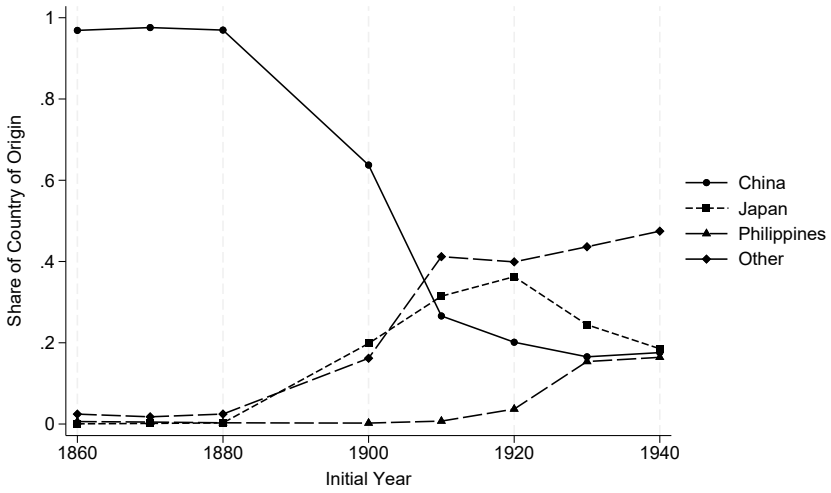



Figure 2: Asian Immigrants by Country of Origin

*Sources:* IPUMS Full-Count Censuses, 1860, 1870, 1880, 1900, 1910, 1920, 1940, and 1950; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940.

*Notes:* Shares calculated as a fraction of the total population of individuals from countries designated under the "Asian" categorization in IPUMS. The "Other" share denotes all countries excluding China, Japan, and the Philippines that are designated under the "Asian" categorization in IPUMS, when applicable. The large share of "Other" immigrants starting in the 20th century can be attributed to immigration from the former Ottoman Empire.

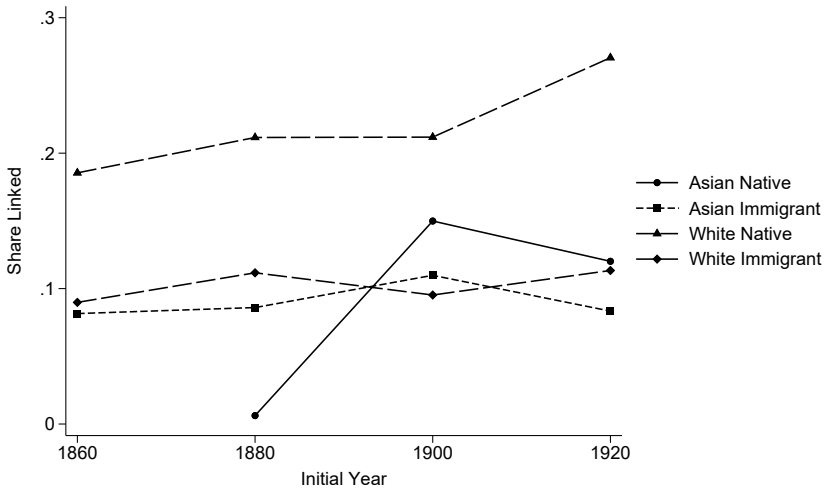



Figure 3: Linkage Match Rates

*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package. Corresponds to Table 2.

*Notes:* Linked cohorts calculated from the ABE matching algorithm with a match defined as a successful link from least one of the six standard methods provided in the Census Linking Project crosswalk. Asian cohort links are supplemented using the links generated from the Postel (2023) technique. Linked cohorts are restricted to non-southern males aged 18–63. The Asian immigrant cohort is defined as non-southern males aged 18–63 of Chinese, Japanese, or Filipino national origin. The number of potential links available is calculated from the number of men aged 18–40 of the correct race and birthplace in the earlier year of the cohort.

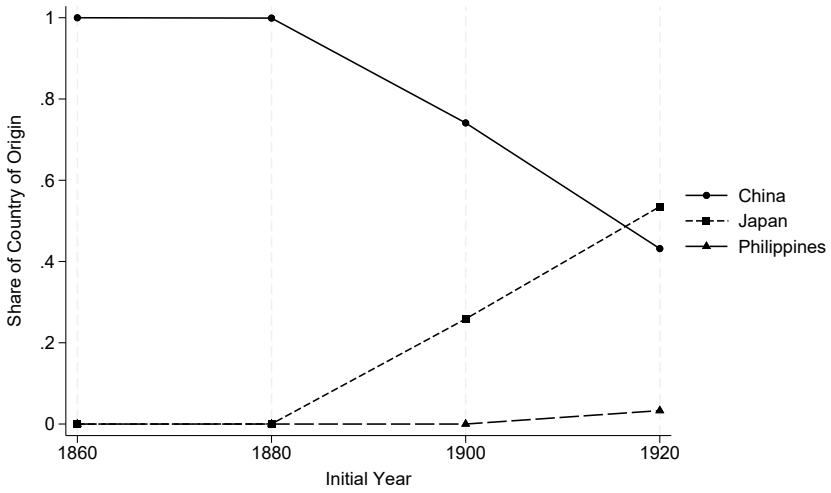



Figure 4: Linked Asian Immigrants by Country of Origin

*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package. Corresponds to Table 3.

*Notes:* Shares calculated as a fraction of the linked population of individuals from China, Japan, or the Philippines. Cohorts are linked using the ABE matching algorithm with a match defined as a successful link from least one of the six standard methods provided in the Census Linking Project crosswalk. Asian cohort links are supplemented using the links generated from the Postel (2023) technique. Asian cohorts are restricted to non-southern males aged 18–63. The Asian immigrant cohort is defined as non-southern males aged 18–63 of Chinese, Japanese, or Filipino national origin.

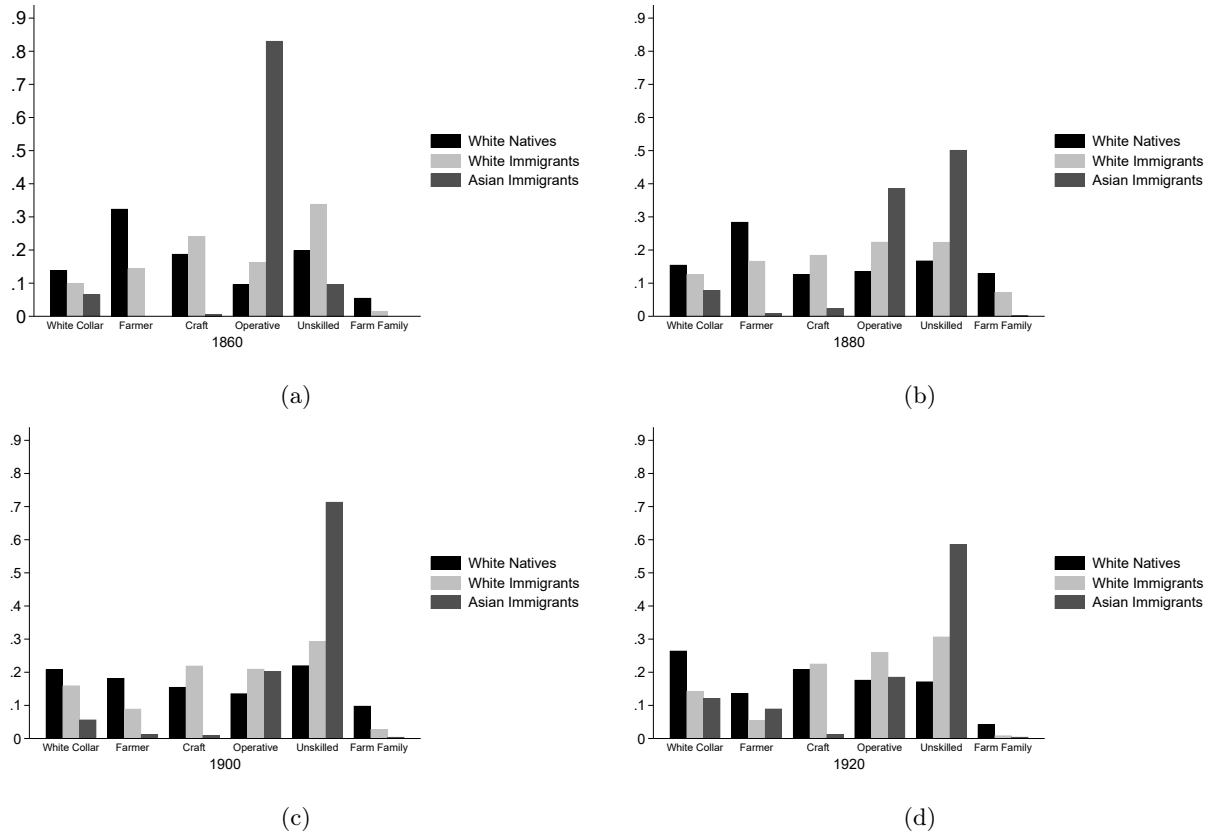



Figure 5: Occupational Distributions in Cohort Start Year

*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, and 1920; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package; Collins and Zimran (2023) data package. See Figure 4 in Collins and Zimran (2023).

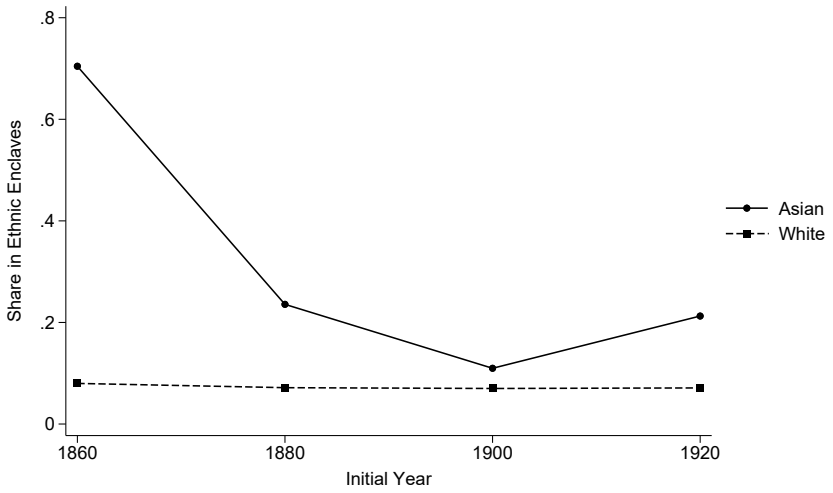



Figure 6: Share of Immigrants in Ethnic Enclaves per Cohort, IPUMS County

*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package.

*Notes:* Shares calculated as fraction of immigrants who remain in an ethnic enclave that corresponds to their foreign birthplace for the entire cohort period. Shares may encompass immigrants who move to a different ethnic enclave. Residence in an ethnic enclave is defined as an individual of foreign birthplace residing in an IPUMS-defined county that contains 10% or greater of co-ethnics or a minimum of 2000 co-ethnics.

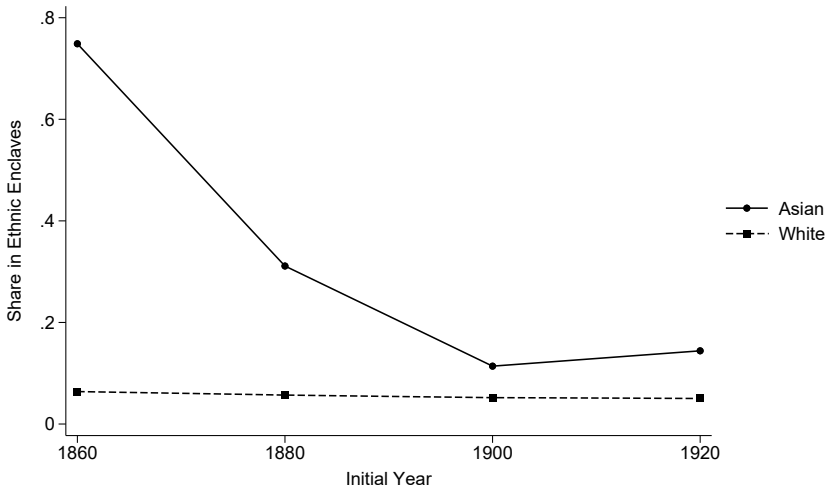



Figure 7: Share of Immigrants in Ethnic Enclaves per Cohort, Census Place Project Sub-County

*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Census Place Project Crosswalks, 1860, 1880, 1900, 1920, and 1940; Postel (2023) data package.

*Notes:* Shares calculated as fraction of immigrants who remain in an ethnic enclave that corresponds to their foreign birthplace for the entire cohort period. Shares may encompass immigrants who move to a different ethnic enclave. Residence in an ethnic enclave is defined as an individual of foreign birthplace residing in an Census Place Project-defined subcounty that contains 10% or greater of co-ethnics or a minimum of 500 co-ethnics.

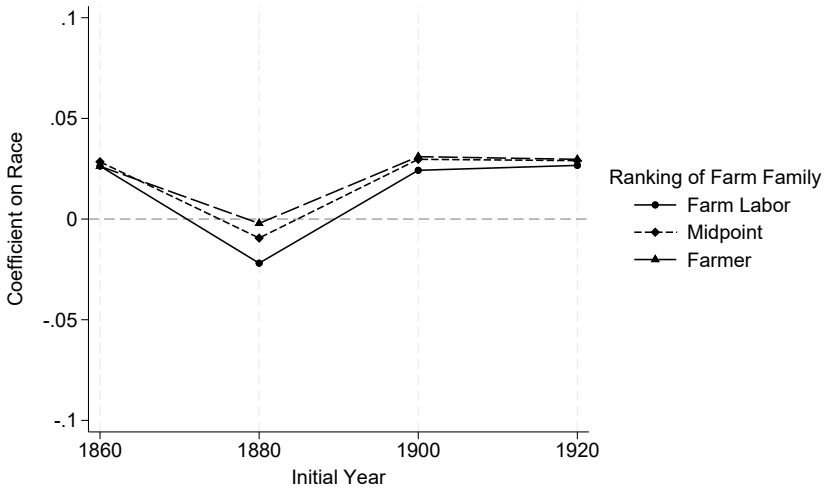
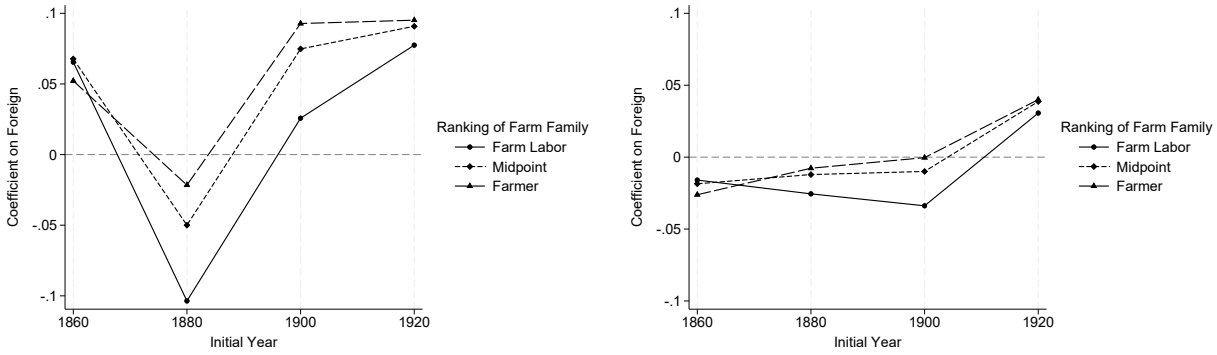



Figure 8: Change in Rank, Asian Immigrants to White Immigrants

*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package; Collins and Zimran (2023) data package.




(a) Asian Immigrants

(b) White Immigrants

Figure 9: Change in Rank, Relative to White Natives

*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package; Collins and Zimran (2023) data package. See Figure 7 in Collins and Zimran (2023). Corresponds to Table 4 and Table 5.

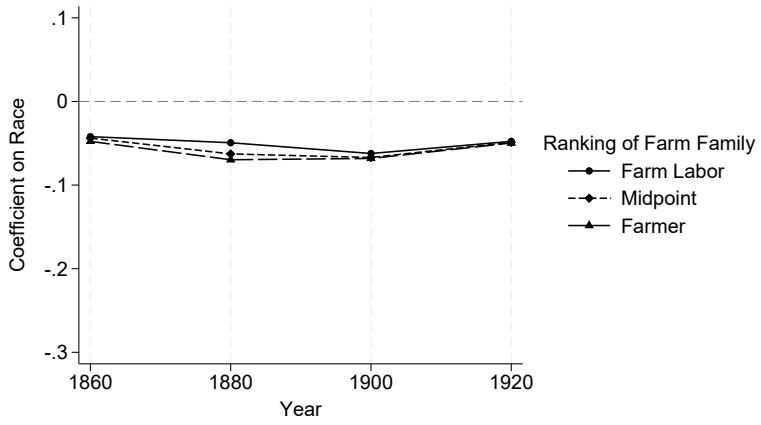
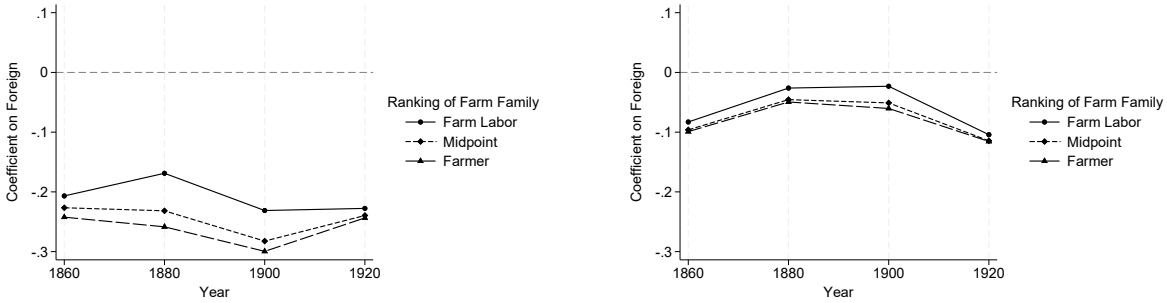



Figure 10: Initial Gap in Rank, Asian Immigrants to White Immigrants

*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package; Collins and Zimran (2023) data package.




(a) Asian Immigrants

(b) White Immigrants

Figure 11: Initial Gap in Rank, Relative to White Natives

*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package; Collins and Zimran (2023) data package. See Figure 5 in Collins and Zimran (2023).

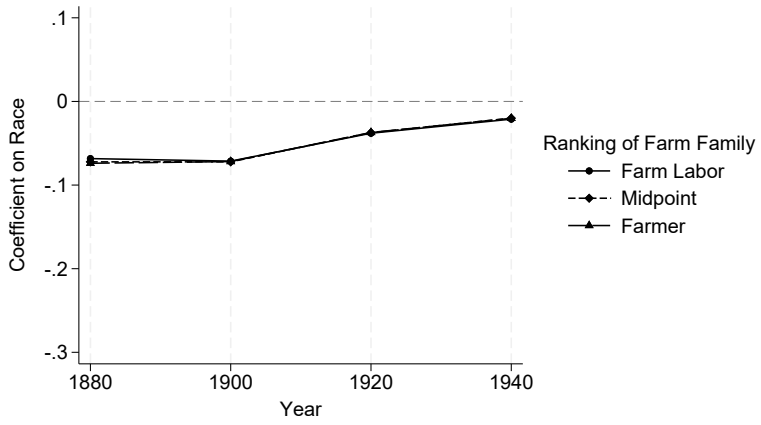
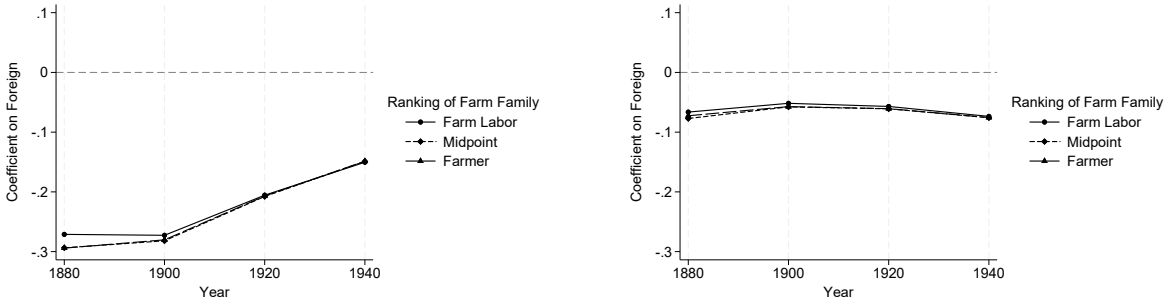



Figure 12: Final Gap in Rank, Asian Immigrants to White Immigrants

*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package; Collins and Zimran (2023) data package.



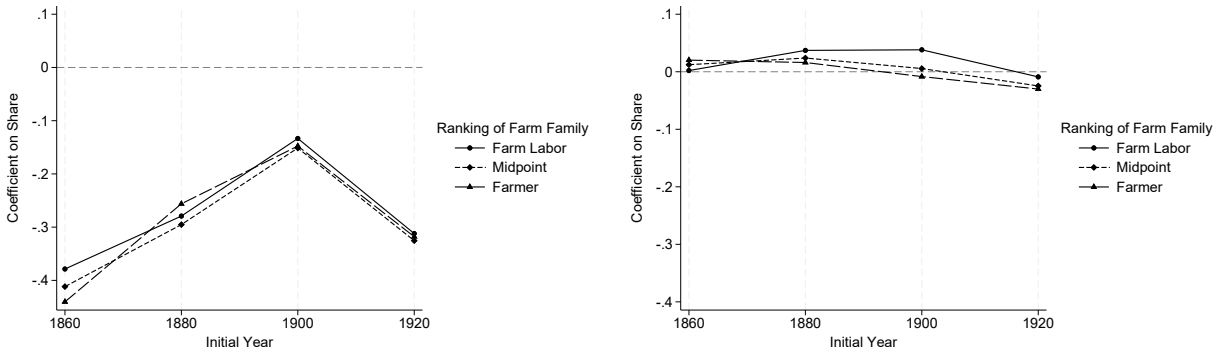

(a) Asian Immigrants

(b) White Immigrants

Figure 13: Final Gap in Rank, Relative to White Natives

*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package; Collins and Zimran (2023) data package.

# Figures: Enclaves

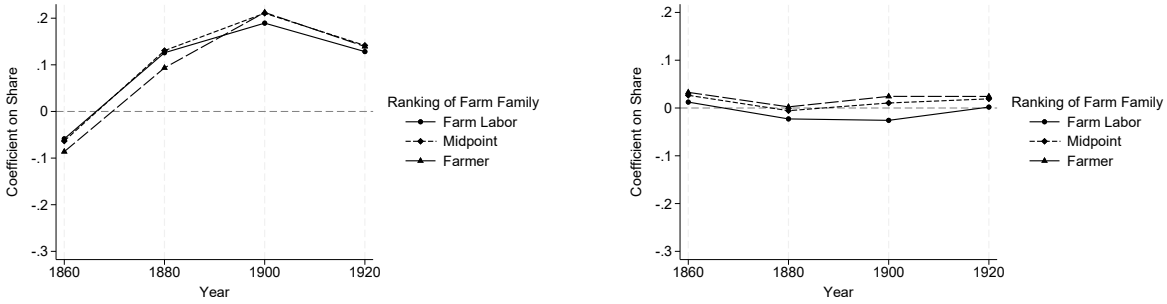



(a) Asian Immigrants

(b) White Immigrants

Figure 14: Change in Rank for Enclave Residents, Relative to White Natives

*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package; Collins and Zimran (2023) data package. Corresponds to Table 6 and Table 7.

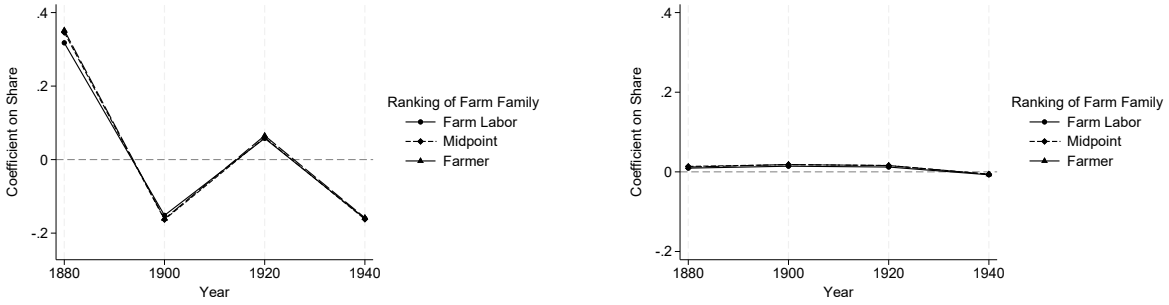



(a) Asian Immigrants

(b) White Immigrants

Figure 15: Initial Gap in Rank for Enclave Residents, Relative to White Natives

*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package; Collins and Zimran (2023) data package.




(a) Asian Immigrants

(b) White Immigrants

Figure 16: Final Gap in Rank for Enclave Residents, Relative to White Natives

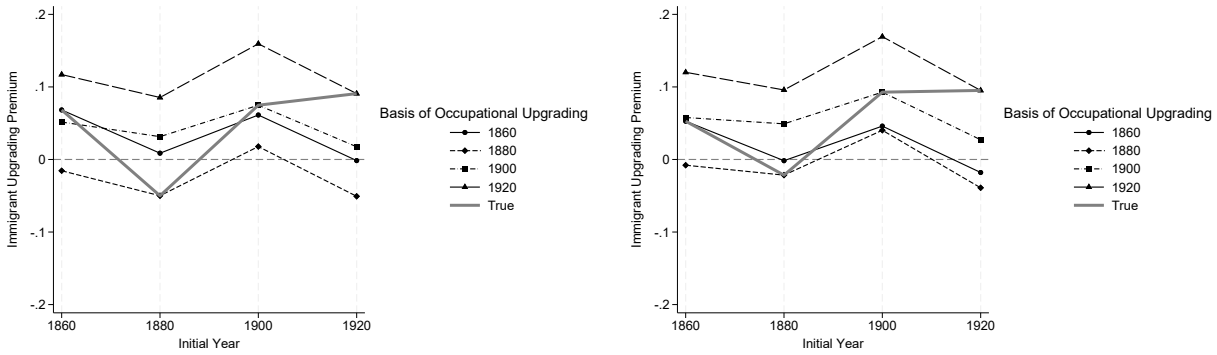
*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package; Collins and Zimran (2023) data package.

# Appendix A: Other Relevant Figures


(a) Farm Labor

Figure 17: Asian Immigrant Occupational Upgrading Conditional on Occupational Upgrading

*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package; Collins and Zimran (2023) data package.

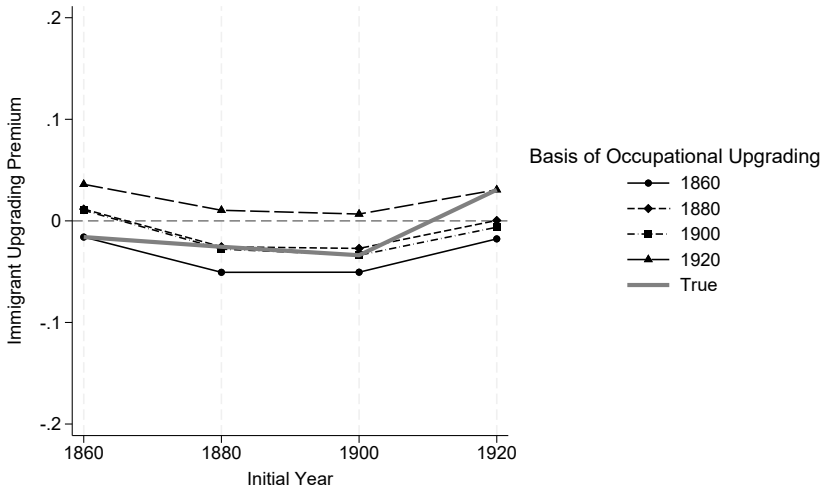



(a) Midpoint

(b) Farmer

Figure 18: Asian Immigrant Occupational Upgrading Conditional on Occupational Upgrading

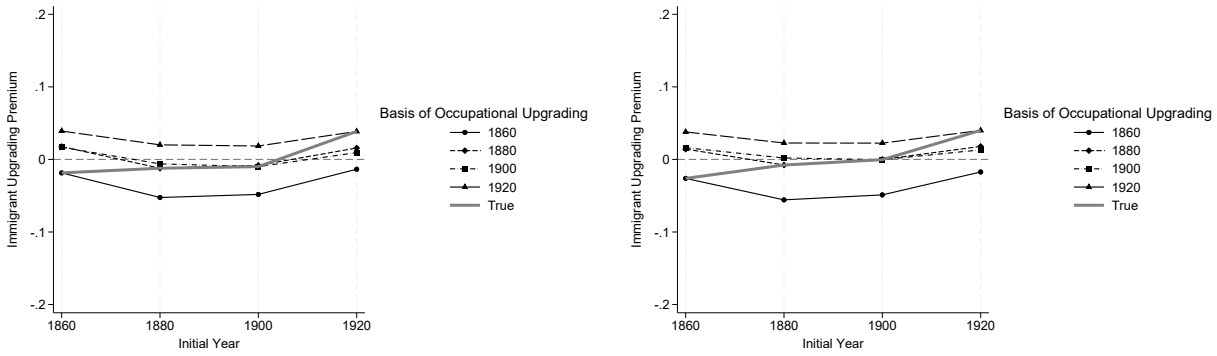
*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package; Collins and Zimran (2023) data package.




(a) Farm Labor

Figure 19: White Immigrant Occupational Upgrading Conditional on Occupational Upgrading

*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package; Collins and Zimran (2023) data package. See Figure A.3 in Collins and Zimran (2023).

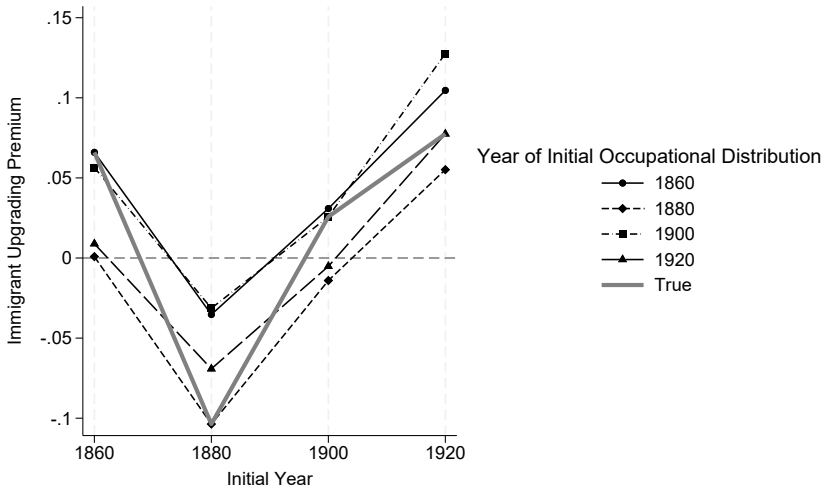



(a) Midpoint

(b) Farmer

Figure 20: White Immigrant Occupational Upgrading Conditional on Occupational Upgrading

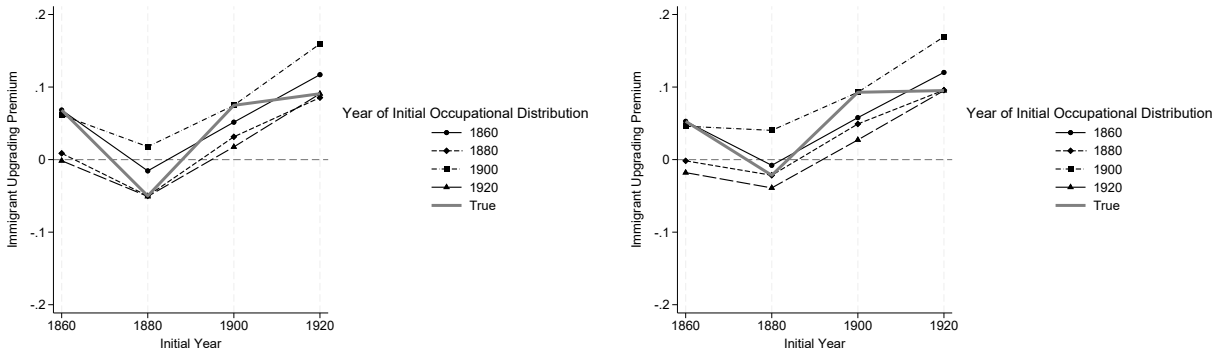
*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package; Collins and Zimran (2023) data package. See Figure A.3 in Collins and Zimran (2023).




(a) Farm Labor

Figure 21: Asian Immigrant Occupational Upgrading Conditional on Occupational Distribution

*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package; Collins and Zimran (2023) data package.




(a) Midpoint

(b) Farmer

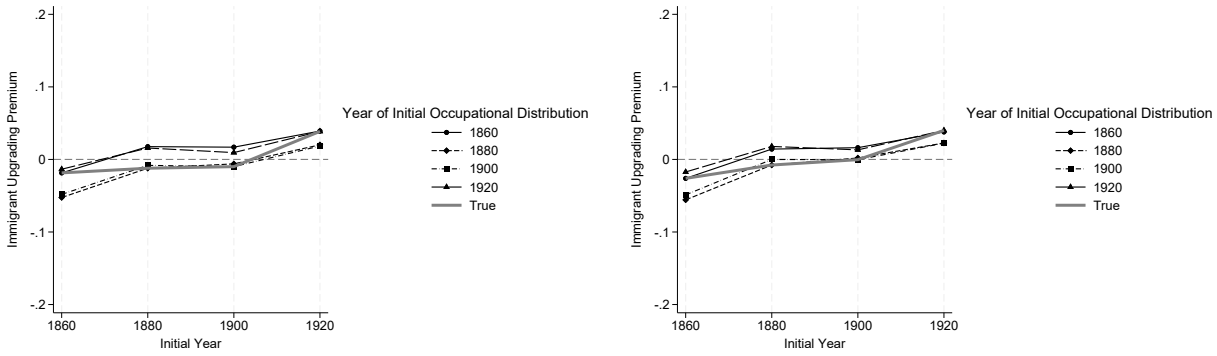
Figure 22: Asian Immigrant Occupational Upgrading Conditional on Occupational Distribution

*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package; Collins and Zimran (2023) data package.


(a) Farm Labor

Figure 23: White Immigrant Occupational Upgrading Conditional on Occupational Distribution

*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package; Collins and Zimran (2023) data package. See Figure A.4 in Collins and Zimran (2023).

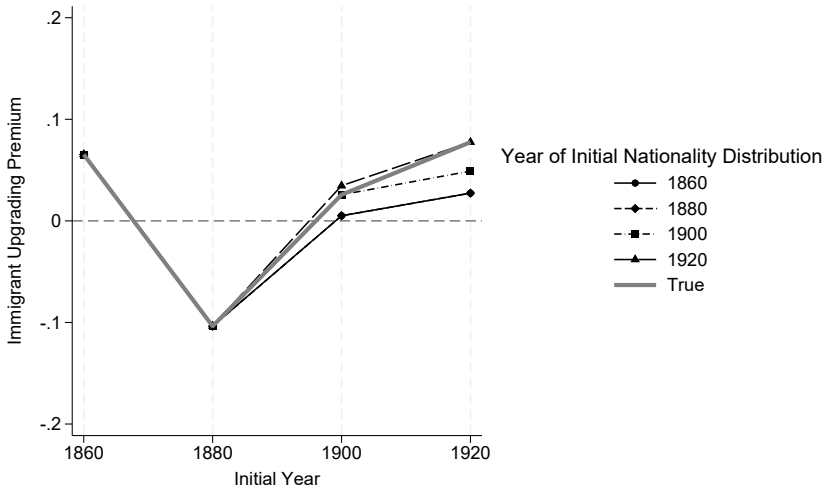



(a) Midpoint

(b) Farmer

Figure 24: White Immigrant Occupational Upgrading Conditional on Occupational Distribution

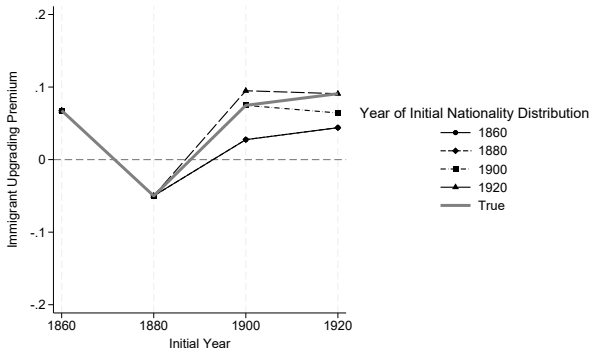
*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package; Collins and Zimran (2023) data package. See Figure A.4 in Collins and Zimran (2023).



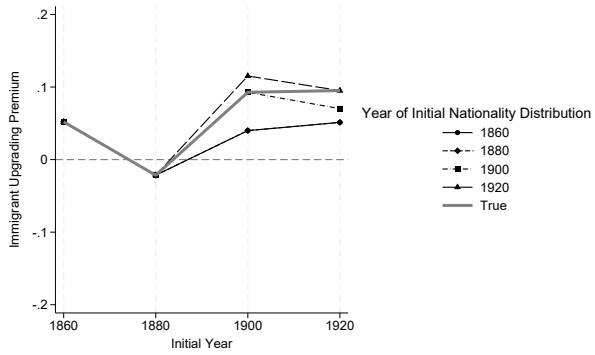

(a) Farm Labor

Figure 25: Asian Immigrant Occupational Upgrading Conditional on Nationality Distribution

*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package; Collins and Zimran (2023) data package.



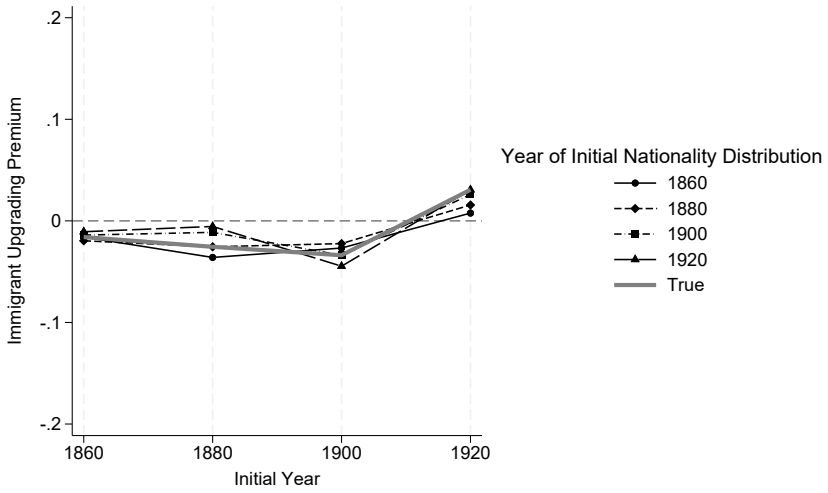

(a) Midpoint




(b) Farmer

Figure 26: Asian Immigrant Occupational Upgrading Conditional on Nationality Distribution

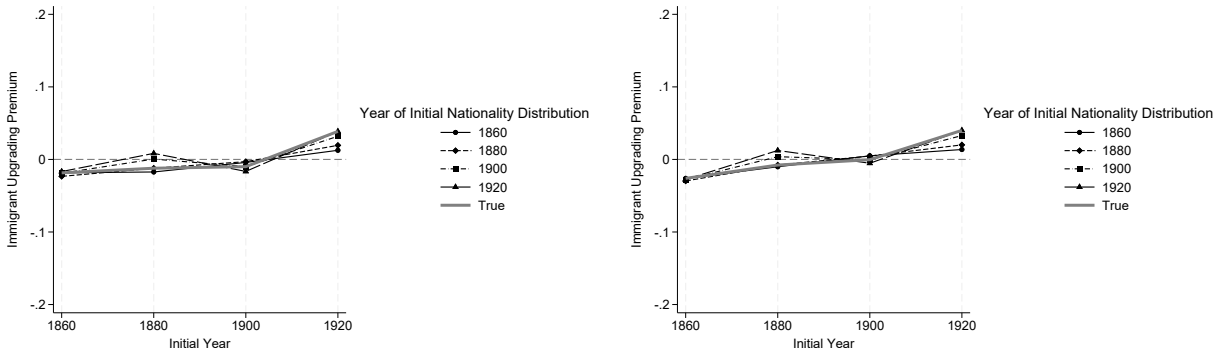
*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package; Collins and Zimran (2023) data package.




(a) Farm Labor

Figure 27: White Immigrant Occupational Upgrading Conditional on Nationality Distribution

*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package; Collins and Zimran (2023) data package. See Figure A.5 in Collins and Zimran (2023).




(a) Midpoint

(b) Farmer

Figure 28: White Immigrant Occupational Upgrading Conditional on Nationality Distribution

*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package; Collins and Zimran (2023) data package. See Figure A.5 in Collins and Zimran (2023).

# Appendix B: ABE Exact-Standard Linkage

Table 8: Linkage Matches, ABE Exact-Standard

| | (1) 1860–1880 | (2) 1880–1900 | (3) 1900–1920 | (4) 1920–1940 |
|---|---|---|---|---|
| Asian Native | 0 | 1 | 136 | 340 |
| Asian Immigrant | 385 | 689 | 686 | 1,340 |
| White Native | 499,397 | 1,005,388 | 1,576,395 | 2,783,357 |
| White Immigrant | 110,004 | 179,824 | 243,785 | 376,690 |

*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package. Corresponds to Figure 4.

*Notes:* Cohorts are linked using the ABE exact-standard method. Asian cohorts are also supplemented using the links generated from the Postel (2023) technique, which uses the ABE exact-standard method. Cohorts are restricted to non-southern males aged 18–63. The Asian immigrant cohort is defined as non-southern males aged 18–63 of Chinese, Japanese, or Filipino national origin.

Table 9: Linked Asian Immigrants by Country of Origin, ABE Exact-Standard

| | (1) 1860–1880 | (2) 1880–1900 | (3) 1900–1920 | (4) 1920–1940 |
|---|---|---|---|---|
| China | 385 | 689 | 298 | 353 |
| Japan | 0 | 0 | 388 | 921 |
| Philippines | 0 | 0 | 0 | 66 |

*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package. Corresponds to Figure 2.

*Notes:* Cohorts are linked using the ABE exact-standard method. Asian cohorts are also supplemented using the links generated from the Postel (2023) technique, which uses the ABE exact-standard method. Cohorts are restricted to non-southern males aged 18–63. The Asian immigrant cohort is defined as non-southern males aged 18–63 of Chinese, Japanese, or Filipino national origin.

Table 10: Change in Rank, Asian Immigrants ABE Exact-Standard

| | (1) | (2) | (3) |
|---|---|---|---|
| | Farm Labor | Midpoint | Farmer |
| 1860–1880 Asian | 0.047* | 0.048* | 0.027 |
| | (0.026) | (0.027) | (0.028) |
| 1880–1900 Asian | -0.067*** | -0.030* | -0.009 |
| | (0.016) | (0.017) | (0.017) |
| 1900–1920 Asian | 0.003 | 0.030 | 0.041* |
| | (0.021) | (0.021) | (0.022) |
| 1920–1940 Asian | 0.030** | 0.038** | 0.041*** |
| | (0.015) | (0.015) | (0.016) |

*Significance levels:* *** p<0.01, ** p<0.05, * p<0.1

*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package; Collins and Zimran (2023) data package. Corresponds to Figure 33.

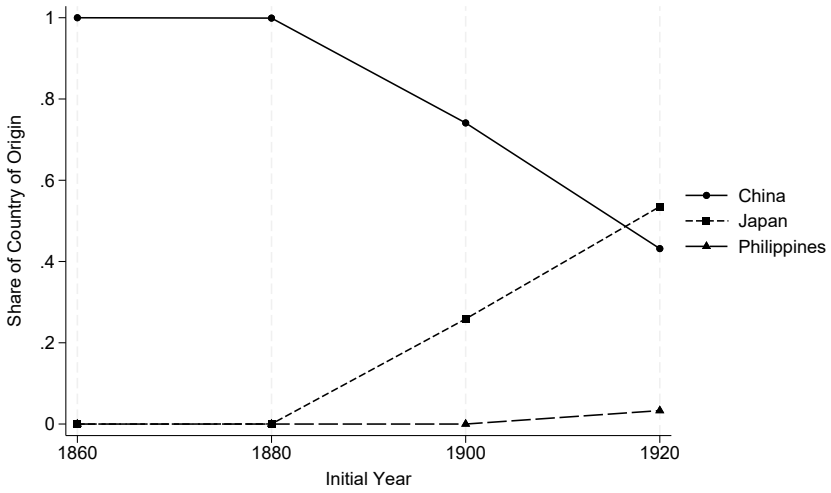



Figure 29: Linked Asian Immigrants by Country of Origin ABE Exact-Standard

*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package. Corresponds to Table 9.

*Notes:* Shares calculated as a fraction of the linked population of individuals from China, Japan, or the Philippines. Cohorts are linked using the ABE exact-standard method. Asian cohorts are also supplemented using the links generated from the Postel (2023) technique, which uses the ABE exact-standard method. Asian cohorts are restricted to non-southern males aged 18–63. The Asian immigrant cohort is defined as non-southern males aged 18–63 of Chinese, Japanese, or Filipino national origin.

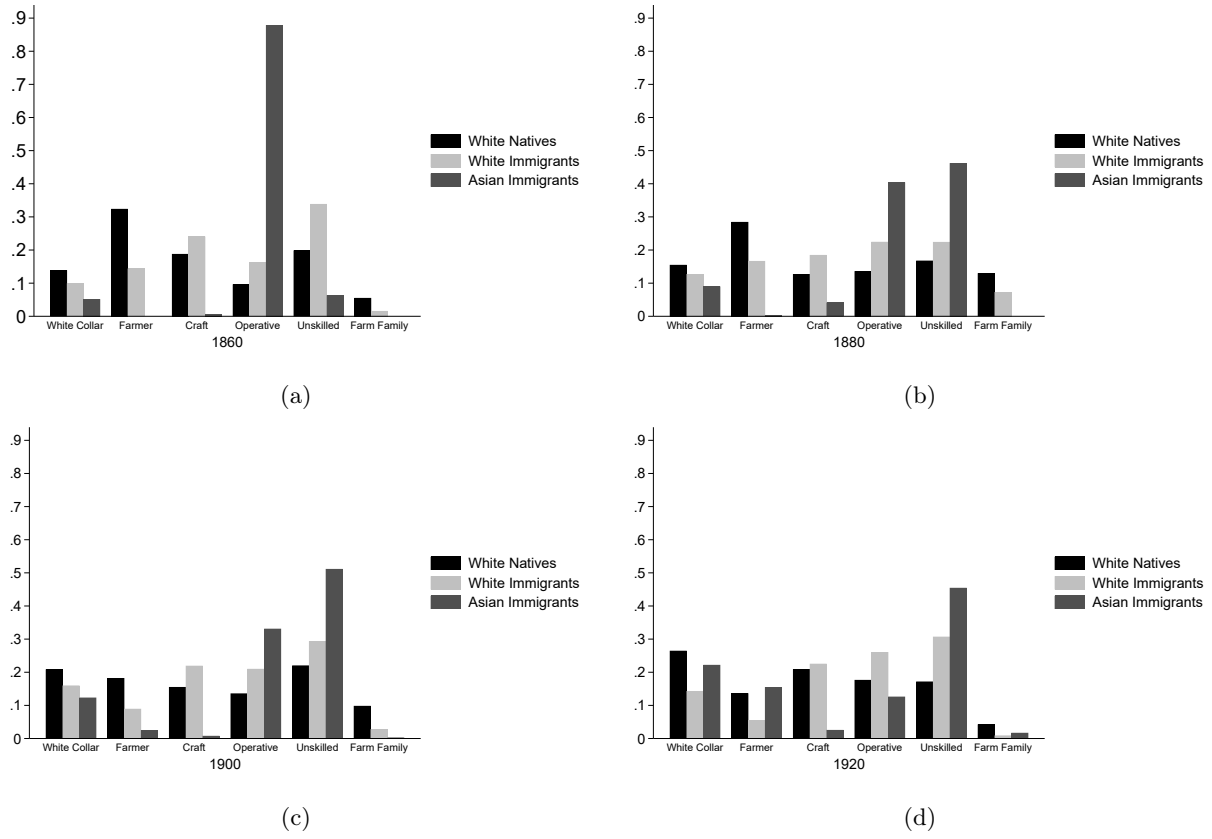



Figure 30: Occupational Distributions in Cohort Start Year ABE Exact-Standard

*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, and 1920; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package; Collins and Zimran (2023) data package. See Figure 4 in Collins and Zimran (2023).

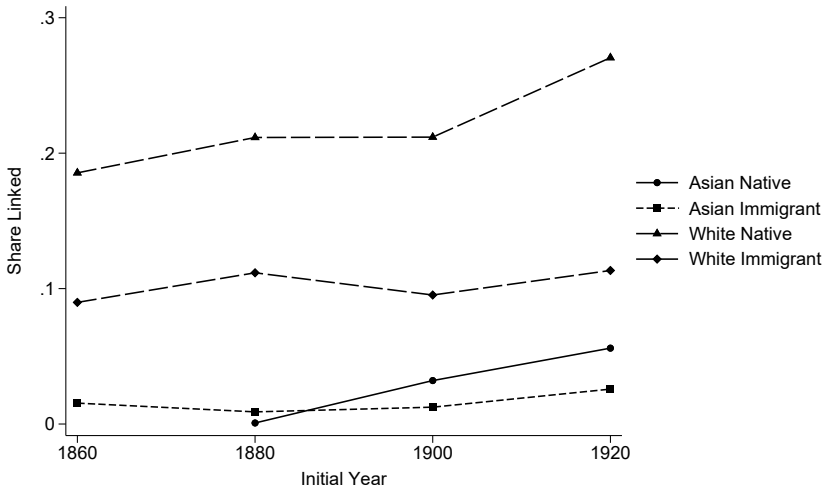



Figure 31: Linkage Match Rates

*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package. Corresponds to Table 8.

*Notes:* Cohorts are linked using the ABE exact-standard method. Asian cohorts are also supplemented using the links generated from the Postel (2023) technique, which uses the ABE exact-standard method. Linked cohorts are restricted to non-southern males aged 18–63. The Asian immigrant cohort is defined as non-southern males aged 18–63 of Chinese, Japanese, or Filipino national origin. The number of potential links available is calculated from the number of men aged 18–40 of the correct race and birthplace in the earlier year of the cohort.

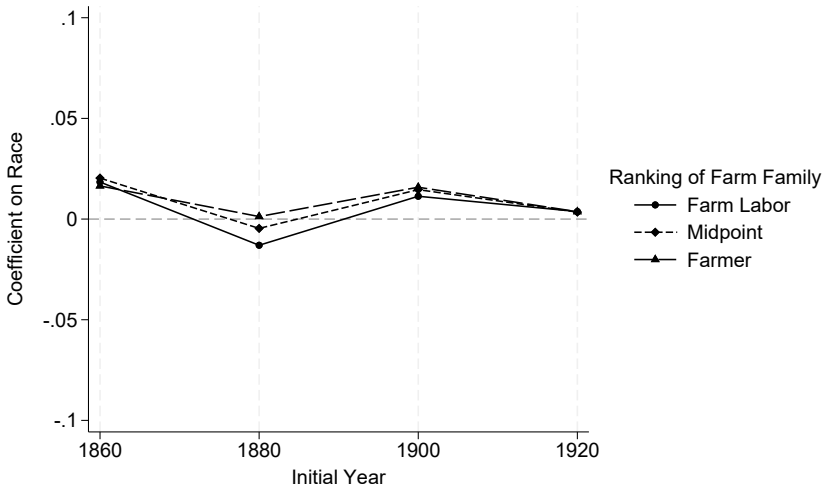
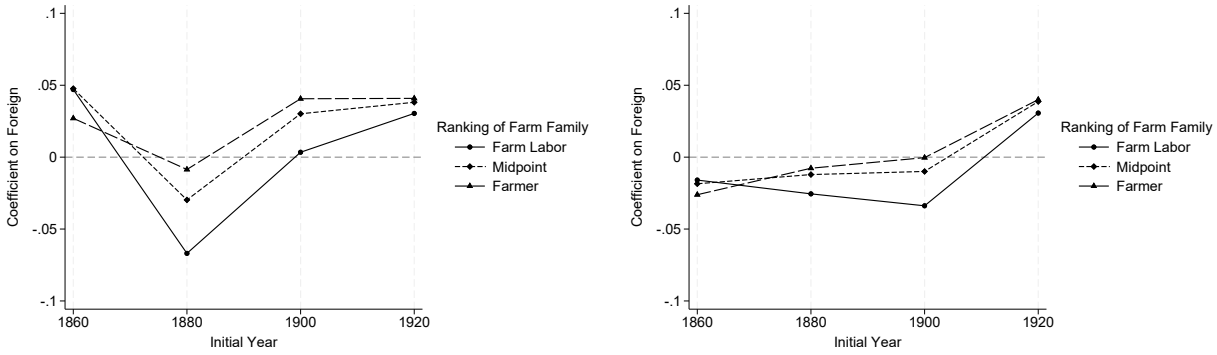



Figure 32: Change in Rank, Asian Immigrants to White Immigrants ABE Exact-Standard

*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package; Collins and Zimran (2023) data package.




(a) Asian Immigrants

(b) White Immigrants

Figure 33: Change in Rank, Relative to White Natives ABE Exact-Standard

*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package; Collins and Zimran (2023) data package. See Figure 7 in Collins and Zimran (2023). Corresponds to Table 10 and Table 5.

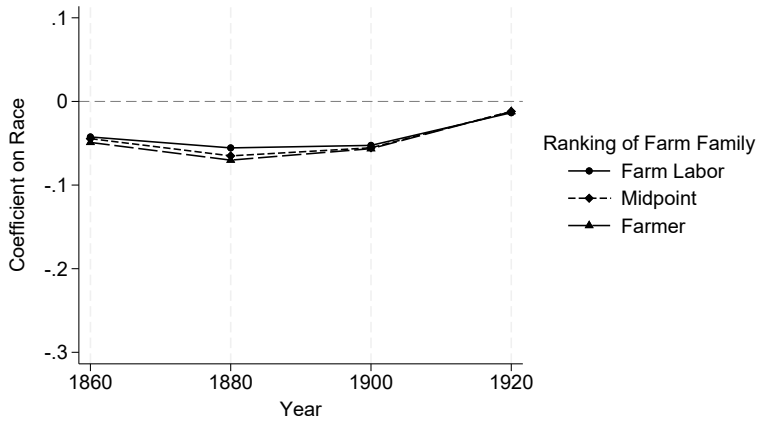



Figure 34: Initial Gap in Rank, Asian Immigrants to White Immigrants ABE Exact-Standard

*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package; Collins and Zimran (2023) data package.


(a) Asian Immigrants

(b) White Immigrants

Figure 35: Initial Gap in Rank, Relative to White Natives ABE Exact-Standard

*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package; Collins and Zimran (2023) data package. See Figure 5 in Collins and Zimran (2023).

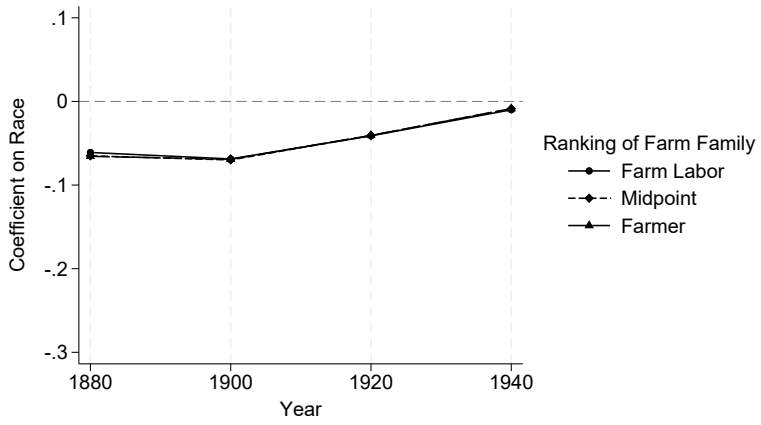
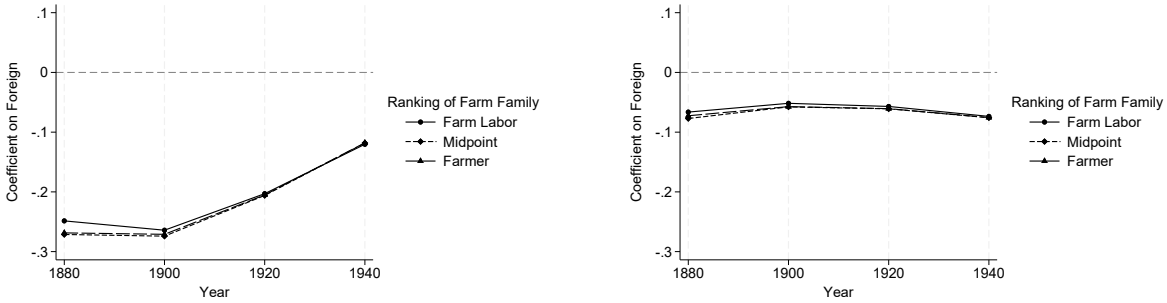



Figure 36: Final Gap in Rank, Asian Immigrants to White Immigrants ABE Exact-Standard

*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package; Collins and Zimran (2023) data package.




(a) Asian Immigrants

(b) White Immigrants

Figure 37: Final Gap in Rank, Relative to White Natives ABE Exact-Standard

*Sources:* IPUMS Full-Count Censuses, 1860, 1880, 1900, 1920, and 1940; Census Linking Project Crosswalks, 1860–1880, 1880–1900, 1900–1920, and 1920–1940; Postel (2023) data package; Collins and Zimran (2023) data package.