

Anti-Miscegenation Laws, Chinese Exclusion Acts and Interracial Marriage among Chinese Americans between 1880 and 1940

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1. Introduction

Anti-miscegenation laws existed at the state level and were declared unconstitutional nationwide by *Loving v. Virginia*, 388 U.S. 1 (1967), a landmark decision of the U.S. Supreme Court. *Loving v. Virginia* struck down all state laws banning interracial marriage (Pascoe, 2009) as “violations of the Equal Protection and Due Process Clauses of the Fourteenth Amendment to the U.S. Constitution” (Nowak & Rotunda, 2012). Not every state had an anti-miscegenation law, and the majority of states had already legalized interracial marriage prior to the *Loving* decision (Menchaca, 2008), which produced various outcomes and trends in marriage for Chinese immigrants and Chinese American citizens. A relatively large body of research has broadly examined trends and outcomes in interracial marriage since the 1970s (Qian, 1997; Fu, 2001; Qian & Lichter, 2007), and many qualitative designs (Hsu, 2000; Lee, 2003) provide a rich and nuanced understanding of the experiences of Chinese Americans but are less generalizable. Nevertheless, little quantitative research has directly examined the historical effects or outcomes of anti-miscegenation laws in different states and their impact on interracial marriage for Chinese people, based on the years the laws took effect.

Existing research on the effects or outcomes of anti-miscegenation laws on interracial marriage has yielded mixed findings. Digging into the texts of the historical anti-miscegenation legislation, Sohoni (2007) showed that states used anti-miscegenation laws to restrict the marriage rights of U.S.-born Chinese and other Asians by linking them with their foreign-born co-ethnics. These laws justified the differential treatment of Chinese and other racial and ethnic immigrant groups. Using historical marriage licenses, Lo and Ng (2013) documented 76 Chinese-white marriages in Massachusetts and concluded that the Chinese American community in Massachusetts in the early to mid-twentieth century included many mixed marriages and families, and actually developed from a more heterogeneous community to a more homogeneous one during this period. When Chinese are grouped with other Asians, drawing a one percent sample from the Integrated Public Use Microdata Series (IPUMS) rather than monotonically increasing over time, the share of Asians intermarrying outside their ethnic group remains below five percent until 1940. After adjusting for relative supply and population share, Fryer (2007) concluded that the proclivity of Asians to marry outside their ethnicity increased significantly in the twentieth century.

Conventional wisdom also suggests that higher educational attainment increases the probability of marrying outside one's racial group. Studies show that compared to people with low educational attainment, people with high attainment have a higher likelihood of marrying partners of different races or religions (Qian, 1997; Kalmijn, 1993 and 1998; Gullickson, 2006). Qian, Blair, and Ruf (2001) analyzed Asian-American interracial and interethnic marriage patterns from an education and country of origin perspective. Given the strong endogamy marriage preference among Asian Americans, only those who

achieved socioeconomic success had a higher probability of intermarrying. However, achieving socioeconomic success does not guarantee a stable marital relationship. Bratter and King (2008) compared marriage cohorts and revealed that overall, interracial couples have a higher rate of divorce than same-race couples, particularly for those marrying during the late 1980s¹. Later, using the Survey of Income and Program Participation (SIPP), Zhang and Hook (2009) found a similar less stable pattern for interracial marriages. With regards to wages, using a five percent sample of the 2000 U.S. Census, Basu (2015) found a more negative wage premium for interracially married Asian women than for non-interracially married Asian women.

In addition, the study of the effects of anti-miscegenation laws on Chinese American intermarriages is complicated by the history of Chinese discrimination. The Page Act of 1875 started a series of Chinese exclusion acts that discriminated against all Chinese immigrants. The prevalent view of Chinese as "unassimilable" helped condone racial discrimination against Chinese and added layers to the adversity they and their descendants faced in the U.S. (Chin, 1996). Although the Chinese Exclusion Act was repealed in 1943 (57 Stat. 600), as Erika Lee (2005) describes, it produced and reinforced a system of racial hierarchies, including immigrants and residents who were supposed to be exempt from the exclusionary laws. Moreover, the racial hierarchies produced economic inequality between Chinese Americans who married whites and those who married blacks.

This paper examines the impact that Chinese Anti-Miscegenation laws passed from the late nineteenth century to mid twentieth century had on the interracial married

¹ Bratter and King's (2008) study shows that along with some couple combinations by race and gender, white female/Asian male marriages were more likely to end in divorce.

status of Chinese in the US. It attempts to isolate the causal effect that relies on the timing of the state laws that prohibited Chinese intermarriage with whites and applies difference-in-difference (DID) methods. Rather than take the state enacted Chinese anti-miscegenation law exogenously, I also use an instrumental variable strategy as one of the robustness checks. My results indicate that the passage of Chinese anti-miscegenation laws had no significant effect on Chinese intermarried status. The results also illustrate a potential differential enforcement or differential impact of the laws.

In the following sections, section 2 provides a brief historical background of anti-miscegenation laws and the Chinese exclusion acts. Section 3 describes data and methods. Section 4 provides empirical results and specification tests, and section 5 concludes the paper with possible explanations for the findings as well as future extensions of this research.

2. Historical Context

- **Anti-Miscegenation Laws and Chinese Anti-Miscegenation Laws**

While there were no federal anti-miscegenation laws in the United States, individual state laws, particularly in Southern states and Plains states, proscribed inter-racial marriage (American Civil Liberties Union). *Figure 1* illustrates which states had anti-miscegenation laws. Only nine states never enacted anti-miscegenation laws: New Jersey, New York, New Hampshire, Connecticut, Vermont, Wisconsin, Minnesota, Alaska, and Hawaii. Eleven states passed anti-miscegenation laws but repealed them prior to 1887: Pennsylvania (1780), Massachusetts (1843), Iowa (1851), Kansas (1859), New Mexico (1866), Washington (1868), Illinois (1874), Rhode Island (1881), Maine (1883),

Michigan (1883), and Ohio (1887). Kansas, New Mexico, and Washington repealed their laws before achieving statehood². Fourteen more states rescinded their anti-miscegenation statutes between 1887 and 1967: California (1948), Oregon (1951), Montana (1953), North Dakota (1955), Colorado (1957), South Dakota (1957), Idaho (1959), Nevada (1959), Arizona (1962), Nebraska (1963), Utah (1963), Indiana (1965), Wyoming (1965), and Maryland (1967).

[insert figures 1 here]

The U.S. Supreme Court's decision in *Loving v. Virginia* (1967) made anti-miscegenation laws unconstitutional nationwide. At the time, sixteen states still had such statutes in effect, and it was not until 2000 that all sixteen states formally repealed their anti-miscegenation laws, despite not being enforceable or valid since 1967. Six states legalized interracial marriage right after *Loving v. Virginia*: Virginia (1968), Florida (1969), Missouri (1969), Oklahoma (1969), Texas (1969), and West Virginia (1969). The remaining ten states amended their state constitutions to legalize interracial marriage: Georgia (1972), Louisiana (1972), Arkansas (1973), North Carolina (1972), Kentucky (1974), Tennessee (1978), Delaware (1986), Mississippi (1987), South Carolina (1998), and Alabama (2000). Alabama was the last state to legalize interracial marriage when voters approved the Alabama Interracial Marriage Amendment (also known as 2000 Alabama Amendment 2) with 59.49 percent (Alabama.gov, 2000) of the vote.

While every anti-miscegenation law prohibited interracial marriage between blacks and whites, not every law clarified whether interracial marriage with Asians was unlawful. For the statutes that banned marriage with Asians, the specific language in

² Kansas gained its statehood in 1861, Washington in 1889, and New Mexico in 1912.

these statutes that referred to Asian people varied from state to state. Table 1 lists the year each state enacted its first Asian anti-miscegenation law and summarizes all the statutes that prohibited Asians or any subgroup of Asians from marrying whites. Figure 2 then illustrates all the states that ever passed an Asian anti-miscegenation law. Fifteen out of 41 states with anti-miscegenation laws prohibited Asians or some subgroups of Asians from marrying whites; fourteen³ out of fifteen included Chinese in their intermarriage legislation⁴.

[insert figures 2 here]

Even before it was admitted to the United States in 1864, Nevada enacted Asian anti-miscegenation laws in 1861. The “An Act to Prohibit Marriages and Cohabitation of Whites with Indians, Chinese, Mulattoes and Negroes, Assembly of the Territory of Nevada, 1861” marked the first American jurisdiction to specifically prohibit marriage between whites and Asians.

“ If any white man or woman intermarry with any black person, mulatto, Indian, or Chinese, the parties to such marriage shall be deemed guilty of a misdemeanor, and, on conviction thereof, be imprisoned in the territorial prison for a term not less than one year, nor more than two years”.

In 1864, the same year Nevada was admitted to the Union, the Idaho Territory prohibited intermarriage between whites and Indians⁵, Chinese, and persons of African

³ The statutes of Arizona, California, Mississippi, Missouri, South Dakota, Utah, and Wyoming all referred to "Mongolians."

Idaho, Nevada, and Oregon first used “Chinese”, and later broadened their laws to “Mongolians.” Virginia used the term “colored” person or “people of color”.

Montana and Nebraska specified both "Chinese" and "Japanese" persons.

⁴ Maryland only banned intermarriage with Malays.

⁵ Indian in this context denotes American Indian.

descent (Idaho Terr. Gen. Laws 1864). However, in 1887, it added a provision to its statutes recognizing interracial marriages performed in other territories

“...All marriages contracted without this Territory, which would be valid by the laws of the country in which the same were contracted, in this Territory. ...”

In addition, Martin (1980) reported that the Idaho legislature relaxed the prohibition on intermarriage between whites and Mongolians. The state statute approved whites to marry Mongolians from 1887 to 1921⁶.

A couple of months later in 1865, the Arizona Territory became the first American jurisdiction to pass an anti-miscegenation law that banned interracial marriage between whites and “Mongolians”, 25 years earlier than California. While California became the first western state to pass an anti-miscegenation law in 1850, it was not until 1880 that California prohibited whites from marrying Mongolians. The Amendments of Codes of California 1880 states that the issuance of marriage licenses to Caucasian and Chinese couples was prohibited. Later, the 1905 California Statutes 554 declares that “Mongolian” marriage with a white was void. Although the term “Mongolians” occasionally generated controversy over who was to be included in this group, marriage clerks and judges often interpreted “Mongolians” as encompassing both “Chinese” and “Japanese” (Kwon, 2011; Martin, 1980). It was not until the 1920s that county clerks began to encounter marriage license applications for marriages between Filipinos and whites. Though the California courts forced the issuance of marriage licenses to some Filipino and white couples, in 1933, the statute was amended once again to include

⁶Beginning in 1887, the Revised Statutes eliminated Indians and Chinese from the taboo categories.

“members of the Malay race” (which included Filipinos) as part of those ineligible to marry whites (Volpp, 1999; Cal. Stat. 1933).

Unlike the western states, the racial implication of Mississippi’s first anti-miscegenation law (1822 Mississippi Code ch.102, sec.1) was unclear. It only indicates that marriages between whites are legally valid. Nevertheless, in 1865 after the Civil War ended, Mississippi passed the most severe penalty for intermarriage in American history, specifically, life imprisonment in the state penitentiary:

...That it shall not be lawful for any freedman, free negro or mulatto to intermarry with any white person; nor for any white person to intermarry with any freedman, free negro or mulatto; and any person who shall so intermarry shall be deemed guilty of felony, and on conviction thereof, shall be confined in the State Penitentiary for life; ...

Although the law was suspended during Reconstruction, it was reinstated in 1880. Then, in the Code of 1892, Mississippi broadened the ban on whites intermarrying to include Mongolians.

Montana passed its first anti-miscegenation law in 1909, much later than other states, to reinforce the taboo. Like other western states, the law primarily targeted marriages between whites and Chinese and Japanese. Of course, the law could not omit the one-drop rule to ban white-black marriages. In the same year, South Dakota passed its first anti-miscegenation law. Different from Montana, South Dakota’s first law was enacted without mentioning Asians. Later, in 1913, South Dakota repealed the 1909 statutes and put restrictions on marriages between whites and Asians.

In summary, forbidding whites to marry Asians was never the central point of American anti-miscegenation laws, but after the Civil War and with the growth in Asian immigrants, especially Chinese and Japanese, in the mid-nineteenth century, almost one-third of the states placed Asians into an excluded group. Four states (Arizona, Idaho, Nevada, and Utah) passed anti-Asian miscegenation statutes even before statehood. Since the laws were enacted in different states and in different years, these laws would affect interracial marriage rates for Chinese people across states and years. This interstate and intertemporal variability in the years Chinese anti-miscegenation laws were enacted allows me to perform multi-period, differences-in-differences analyses on the marriage outcomes for Chinese people.

- Page Act of 1875

Introduced and sponsored by Horace F. Page, a California Republican congressman, *the Page Act of 1875* (18 Stat. 477) was the first federal law to restrict immigration in the United States. It closed the borders to Chinese women entering the United States (Abrams, 2005). The Page Act has two main elements: (1) it banned entry for any involuntary labor into the United States from China, Japan, or any Asian country, and (2) it placed a harsher ban on Chinese women. The act forbids contracts, agreements, and importation of women for prostitution:

“... shall knowingly or willfully hold, or attempt to hold, any woman to such purposes, in pursuance of such illegal importation and contract or agreement, shall be deemed guilty of a felony, and, on conviction thereof, shall be imprisoned not exceeding five years and pay a fine not exceeding five thousand dollars”.

Even though the Page Act aimed to exclude Chinese women who would engage in prostitution, it virtually barred and excluded all Chinese women from the United States during its implementation (Luibhéid, 2002) and considered Chinese women undesirable (Abrams, 2005). Therefore, Chinese immigrants were unable to create families with each other or across races and ethnic groups within the United States due to the formidable barriers. According to Peffer (1986) "... before they set foot on a China steamer, [the Page Act] must have helped to discourage them from ever attempting the journey and, in so doing, contributed to the process that made Chinese families forbidden institutions in a land that did not want them...", which had a far-reaching influence on Chinese marriages even in states without anti-miscegenation laws and created massive numbers of Chinese bachelors who worked in the U.S. but had wives in China (Hsu, 2000).

- Chinese Exclusion Acts: Chinese Exclusion Act of 1882, Geary Act of 1892, and Immigration Act of 1924

As the first immigration law to exclude an entire ethnic group (Lee, 2003), the *Chinese Exclusion Act of 1882* (22 U.S. Stat. 60) started a series of laws passed in the United States to discriminate against Chinese immigrants, including but not limited to the Geary Act (27 Stat. 25), the Immigration Act of 1917 (39 Stat. 874), and the Immigration Act of 1924 (43 Stat. 153). The *Chinese Exclusion Act (1882)* banned both "skilled and unskilled laborers and Chinese employed in mining". Later, the Geary Act (1892) required "Chinese already in the U.S. to possess 'certificates of residence' that served as proof that they entered the U.S. legally and had the right to remain in the country (Salyer,

1995)." Therefore, very few Chinese immigrants could enter the country after 1882⁷. Even Supreme Court Justice John Marshall Harlan, a judge famous for his dissent in *Plessy v. Ferguson*, 163 U.S. 537 (1896), wrote:

“[t]here is a race [Chinese] so different from our own that we do not permit those belonging to it to become citizens of the United States. Persons belonging to it are, with few exceptions, absolutely **excluded** from our country. I allude to the Chinese race. But, by the statute in question, a Chinaman can ride in the same passenger coach with white citizens of the United States, while citizens of the black race in Louisiana, many of whom, perhaps, risked their lives for the preservation of the Union... and who have all the legal rights that belong to white citizens, are yet declared to be criminals, liable to imprisonment, if they ride in a public coach occupied by citizens of the white race.”

3. Data and Method

My analyses are based on complete-count microdata from the 1880-1940 US Censuses from the Integrated Public Use Microdata Series (IPUMS) (thereafter 1880—1940 USA data). Figure 3 shows the proportion of the Chinese population 20 and over that was subject to Asian anti-miscegenation laws in all the census years. In 1880, 53.87 percent of the Chinese population lived in states that had enacted Asian anti-miscegenation laws. The peak came in the 1920 census. More than sixty percent (60.23%) of the Chinese population lived in the states where they could not marry whites.

⁷ Diplomatic officials and other officers on business, along with their house servants, for the Chinese government were allowed entry as long as they had the proper certification verifying their credentials. Merchants, teachers, travelers, and students were exempted as well.

By 1960, the last census before *the Loving vs. Virginia* case, 58.3 percent of Chinese were still covered by Asian anti-miscegenation laws. A question on marital status was included starting with the 1880 census⁸, and IPUMS adds an additional marital status category for “married, spouse absent,” which helped construct my analytical sample. Appending 1880—1960 US data and the dates Chinese anti-miscegenation laws were enacted, I constructed repeated cross-sectional data of Chinese and their spouses. My primary dependent variable is an indicator of inter-racial married status, and the sample is restricted to adults at age of 20 and above. One non-trivial issue for Chinese in the historical census is that a large proportion of Chinese were married but with a spouse not in the household. This did not negatively affect my analysis of inter-racial married status, but I assumed that the individuals with an absent spouse were *intramarried* with a Chinese spouse for the intermarriage rate analysis. In addition, Hawaii and Alaska are excluded from the sample because even though there is a long history of Chinese and Chinese enclaves in Hawaii, Hawaii and Alaska achieved statehood much later than the main years of Chinese exclusion and the years anti-miscegenation laws were most vigorously enacted and enforced.

[insert figures 3 here]

I also include age, US-born, ability to read and write, occupation, and a skewed sex ratio indicator if the county-level male to female sex ratio is greater than 5⁹. To account for Chinese habitation within cities and ethnic enclaves, in particular, I generated an

⁸ J. David Hacker (1999) and Catherine A. Fitch (2005) used the surname, sex, age, and position in a household to create an “ever married” variable for the 1850-1870 censuses. Given the small Chinese population prior to the 1870 census, I did not construct the “ever married” variable myself and focus instead on the 1880 and later censuses.

⁹ The conventional skew sex ratio in the literature is 1.06 or 1.08. Given the context that early Chinese immigrants to the U.S. were dominantly male labor, I use 10 as the threshold of the unbalanced sex ratios.

indicator for Chinatown based on the historical records. Assembling information from different states' historical societies, urban renewal projects websites, and Chinatown association websites, Table 2 presents a list of the historical US Chinatowns. The very first Chinatowns formed during the gold rush years, followed by Chinatowns built in cities along Central Pacific and Union Pacific railroads (Kennedy et al., 2020).

Unfortunately, most of these early Chinatowns have vanished except for those in big cities. Due both to riots against Chinese communities and the Chinese Exclusion Acts, Chinese residents were pushed out of California and migrated to northern and central states where they were offered jobs or safety (Li, 2018; Pfaelzer, 2008). Therefore, in the early 1900s, Chinatowns spread to Oklahoma City and even to Detroit, Michigan.

To investigate the effect of Asian/Chinese anti-miscegenation laws on interracial marital status, I employed the standard difference-in-difference (DID) strategy that compares the inter-racial marital status of individuals who resided in states that had Chinese anti-miscegenation laws to that of individuals who lived in states that did not enact Chinese anti-miscegenation laws. I performed the analysis separately for men and women, given the extremely unbalanced sex ratio among Chinese prior to 1940. My main specification is:

$$Y_{ist} = \delta \text{antiCHNmar}_{st} + \beta X_{ist} + \text{age}_{ist} + \alpha_s + \gamma_t + \varepsilon_{ist} \quad (1)$$

where Y_{ist} is an indicator for individual i residing in state s and intermarried in census year t . My interested independent variable is $\delta \text{antiCHNmar}_{st}$, an indicator to 1 if state s implemented an Asian/Chinese anti-miscegenation law in census year t . It estimates the effect of Asian/Chinese anti-miscegenation laws on the probability that a Chinese

individual would be inter-married in state s at census year t . X_{ist} is a vector of characteristics that are suggested to influence the inter-married status discussed in the previous paragraphs. age_{ist} represents the age of individual i residing in state s in census year t . α_s and γ_t are state and census year fixed effects, respectively, and ε_{ist} is the conventional error term.

Given the debate about the best way to correct serial correlation in DID models (Angrist and Pischke, 2008), equation (1) may have a potential problem estimating standard errors. The legislation (ever had a Chinese anti-miscegenation law) only varies at the state and year level, while I used individual-level data in my analysis. The most widely used approach is to calculate standard errors clustered at one level higher than the level of problematic serial correlation, which, in my case, is the state level. This clustering allows for unrestricted serial correlation of an individual's error term within state across time and is easily applied in most statistical software. Therefore, I also estimated equation (2):

$$Y_{ist} = \delta \text{antiCHNmar}_{st} + \beta X_{ist} + age_{ist} + \alpha_s + \gamma_t + \mu_{st} + \varepsilon_{ist} \quad (2)$$

The only difference between equations (1) and (2) is that equation (2) further decomposes the error term to μ_{st} , a state-year shock, and ε_{ist} , the conventional individual-state-year specific term. ε_{ist} is assumed to be mean zero and serially uncorrelated. Some scenarios for μ_{st} are job shortages and anti-Chinese riots or violence in a state. These events are likely to be correlated across years within the state. Meanwhile, not properly correcting the standard errors leads to a standard error that is too small.

To capture the time series patterns across censuses, following Fryer (2007), I assumed that between 1880 and 1940, race was the most important attribute in the American marriage market for all racial groups. This assumption is plausible given the Chinese anti-miscegenation laws, and the series of Chinese Exclusion Acts. Interracial marriage with Chinese during this time was illegal in fourteen states and possessed enormous social costs to non-Chinese spouses (Teng, 2013). Even in states without bans on interracial marriage with Chinese, marriages across racial lines were rare.

4. Results

- Descriptive Statistics

Figures 4A and *4B* present the percentage of interracially married persons in each census by age for Chinese men and women, respectively. In general, the proportion of intermarried Chinese men and women is lower than five percent. Moreover, Chinese men have a higher share of interracial marriage than do Chinese women in each age group and census. This pattern is comparable to Fryer's findings (2007) about Asian intermarriage. Historical events such as gold mining, transcontinental railroad construction, and the Page Act of 1875, produced massive gender imbalances in the Chinese community. It is not difficult to envision that a higher proportion of Chinese men had to marry outside their ethnicity or be left in an enormous unmarried or never married community of single Chinese men¹⁰.

[insert figures 4A and 4B here]

¹⁰ Appendix Figure 2A and Figure 2B present the percentage of never married men in each census by birth-cohort for Chinese men and women. By the age of 50, 76 percent of Chinese males were never-married, while the number was 95 percent for women.

Though Figures 4A and 4B shed light on a positive relationship between an unbalanced sex ratio and the probability of interracial marriage, they do not reveal the differences between states that enacted laws vs. states that did not. Figures 5A and 5B display the proportion of Chinese men and Chinese women who intermarried in states that passed Asian/Chinese anti-miscegenation laws and did not. States that never prohibited Chinese interracial marriages always had a higher share of residents that married outside the Chinese community. Meanwhile, men present a more stable trend than do women across census years. Table 3 shows the characteristics for individuals age 20 and over in states that did and did not Asian/Chinese anti-miscegenation laws, which are the individuals in the treatment and control groups. Women who resided in states with Asian/Chinese anti-miscegenation laws were on average younger and more able to read and write, but fewer of them were born in the U.S. In addition, more women in the treated states lived in a city with a Chinatown. What is more, residents who lived in states that banned Chinese interracial marriages had more skewed sex ratios. That is to say, women who resided in states that had Asian/Chinese anti-miscegenation laws had a greater ability to marry Chinese men, given the relatively high availability of potential Chinese partners. In contrast, men in states that had Asian/Chinese anti-miscegenation laws were slighter older and less likely to read and write. Furthermore, a smaller proportion of men lived in a city with a Chinese ethnic enclave.

[insert figures 5A and 5B here]

In addition, Table 4 displays the association between the *ever* passed an Asian/Chinese anti-miscegenation law and the inter-racial marriage outcomes for all Chinese men and women at age of 20 and above. The dependent variable is a dummy

variable indicator for the interracial married status in a specific census year. The OLS coefficients show the passage of an Asian/Chinese anti-miscegenation law negatively associates with the probability that a Chinese man entered an interracial marriage by 4 points. These effects are statistically significant for robust and state clustered standard errors at least at a 5 percent significance level. In contrast, the passage of an Asian/Chinese anti-miscegenation law does not have a statistically significant association with women's interracial married status after applying the state cluster standard error (column (10) – column (12)). The insignificant results are not surprising given the small population of Chinese women in the late nineteenth and early twentieth centuries. However, looking more closely at the positive coefficients for women and considering their spouses' racial heritage for all intermarried Chinese women (Appendix Table 1), white males are the dominant choice for Chinese women in interracial marriages. Given the historical racial hierarchy and racial inequity in the U.S., this may point to disparate treatment depending on whether a Chinese person chose to intermarry with a white or non-white.

- Main Specification Results

My main estimates are in *Table 5*. It includes all the individuals at age of 20 and above and separates males and females. The dependent variable is the same as Table 4, a dummy variable indicator for interracial married status in a specific census year.

Columns (1) – (3) are the estimates of equation (1) controlling only for age; controlling for age, supply in the marriage market; and controlling for age, marriage supply, and occupation scores, respectively. Surprisingly, the passage of an Asian/Chinese anti-miscegenation law increases the probability that a Chinese man entered an interracial

marriage by around 0.7 percentage points. These effects are small but statistically significant for heteroskedasticity-robust standard errors. As stated in the prior section, the Asian/ Chinese anti-miscegenation laws varied at the state level, whereas the unit of observation is the individual level. Thus, to properly address correlation within a state, I applied the state clustered standard errors to the estimator. Clustering increases the standard errors of states that enacted Asian/Chinese anti-miscegenation laws, yielding a statistically insignificant law passage effect for men. In addition, the passage of an Asian/ Chinese anti-miscegenation law has no statistically significant effect on women's interracial married status with and without the state cluster standard error (column (6) – column (12)).

Furthermore, other social and demographic controls in the specifications agree with the literature. In agreement with the literature on hostility toward Chinese in the late nineteenth and early twentieth centuries, an ethnic enclave, namely a Chinatown, gave Chinese an avenue for a social life and an important place to meet potential Chinese spouses, decreasing the probability of interracial marriage. The Chinatown effect is greater for women than for men. Meanwhile, being born in the U.S. and literate could expand one's social network in ways that increased the probability of interracial marriage.

- Testing Robustness of Main Specification

The main results indicate that implementing an Asian/Chinese anti-miscegenation law had no statistically significant effect on both Chinese men's and women's incidence of interracial marriage. These findings contradict the expected legislation effect. Therefore, I conducted the following analysis to check the robustness of the results. Due to the small

population size of Chinese females, the robustness analyses were only applied to Chinese males.

First, I defined the comparison group as narrower than the main specification. As noted in the historical context, some states never enacted anti-miscegenation laws, and some repealed their laws before 1887. Accordingly, my narrow definition of the comparison group only includes states that still had anti-miscegenation laws in 1887 but did not explicitly exclude Chinese from marrying whites (15 states). The differences between the treatment group and the more restrictive comparison group can be interpreted as the lower bound of the legislation effect. It compares states that completely banned interracial marriage with Chinese and states that did not explicitly include Chinese in their laws. Consistent with the main specification, columns (1) – (3) adopt heteroskedasticity-robust standard errors, and columns (4) – (6) cluster standard errors on the state. Like the main specification, the enactment of an Asian/Chinese anti-miscegenation law had no significant impact on Chinese male interracial marriage.

Second, I applied the event history analysis method (see, for example, MacKinlay, 1997; Heckman and Hotz, 1989) to test if the parallel assumption holds. The event history analysis requires all the year coefficients before the program, in this case the enactment of Asian/Chinese anti-miscegenation laws, to be non-statistically significant to exclude the anticipatory effect of the legislation. That is to say, if passage of Asian/Chinese anti-miscegenation laws impacted Chinese interracial marriage, we should not observe a significant correlation between the laws and Chinese interracial marriage before the laws were passed. Accordingly, I define the event window as the first census year after a specific state passed its first Asian/Chinese anti-miscegenation law

and constructed a pre- and post-event window for 3 and 5 census years. The specification is Equation (3):

$$Y_{ist} = \sum_{l=1}^3 \delta_l \text{antiCHNmar}_s * I_{[t^0-l]} + \sum_{k=0}^5 \delta_k \text{antiCHNmar}_s * I_{[t^0+k]} + \text{age}_{ist} + \alpha_s + \gamma_t + \varepsilon_{ist} \quad (3)$$

Specifically, $I_{[t^0-l]}$ denotes to the census year l before the t^0 , the first census year that states passed an Asian/Chinese anti-miscegenation law. $I_{[t^0+k]}$ represents the census year k after the t^0 . δ_{-l} should not be statistically significant if the parallel trends assumption holds, and we do not observe the anticipatory effect of the law before it is passed. Figure 6 plots the coefficient estimations and confidence intervals of the event dummy variables from specifications with and without covariates. All estimates account for the year and state fixed effects. As Figures 6 demonstrates, all the confidence intervals before passage cross 0, and p-values from jointly significance tests are over 0.1 (Appendix Table 2), suggesting statistically insignificant “pre-program” effects and little evidence of different pre-trends in states that did and did not pass Asian/Chinese anti-miscegenation laws. Although the years after passage do not check the parallel trend assumption, they help explain why the coefficient for Chinese males in Table 5 is positively small. The coefficients on the periods after passage vary, and at the fifth period after passage, the coefficients are close to zero (-0.0003) and above zero (0.0006) when controlling for other covariates. Rather, the positive and larger coefficient from the third period prior to passage drew my attention. One legitimate question to ask is why some states passed laws targeting Chinese intermarriage and other states did not. Next, I examine the potential endogeneity of the passage of an Asian/Chinese anti-miscegenation law.

[insert Figure 6 here]

Assuming the enactment of an Asian/Chinese anti-miscegenation law is exogenous, the diff-in-diffs estimator does not exclude a potential endogenous relationship between a law and interracial marriages. Rooted in racist thinking that Chinese immigrants could not assimilate, Chinese men were first brought to the US to sweat but not to stay (Moran, 2003). Exacerbated by the Page Act of 1875, the United States government made it nearly impossible for Chinese women to put down roots, form families, and produce children who would be American by birth (Moran, 2003). Consequently, Chinese bachelor communities emerged in cities such as San Francisco. Meanwhile, the U.S. faced divergent sex ratios (Mullen, 2011; IPUMS-HGIS, 2011). Counties in western states experienced higher male-to-female sex ratios than east coast and some of central states. Relating an imbalanced white sex ratio to marriage means there is a shortage of white women but a surplus of white men. Among all the policies to increase the number of marriageable women, the prohibition of interracial marriages could be the most feasible. Thus, the passage of an Asian/Chinese anti-miscegenation law could be endogenous. To test the exogeneity of the legislation effect, I applied the by-county-age white male to white female sex ratio to the passage of an Asian/Chinese anti-miscegenation law and present the results in Table 7. Columns (1) and (2) report the results using the restricted comparison group as mentioned earlier, and Columns (3) and (4) report the results using the full comparison group. After taking into account the possible endogenous relationship between passage of an Asian/Chinese anti-miscegenation law and Chinese intermarried status, the enactment of a law decreases Chinese males' probability of intermarriage by 1 percentage point and the effect is

statistically significant at the 10 percent level. Rather than use the average treatment effect, it is important to know that the instrumental approach produces a local average treatment effect (LATE). It is the effect only for Chinese men whose interracial marriage decisions were affected by the passage of a law.

Lastly, I examined the legislation's impact on birth cohorts between 1876 and 1905. Although, as a snapshot, censuses do not track people over time, to understand if the average legislation effect differs in its impact on some cohorts, I restricted the following analysis to people born between 1876 and 1905. Inspired by Hacker (1999) and Fitch (2005), I constructed synthetic birth cohorts. People included in a synthetic cohort are from different censuses but are all treated as though they are in the same birth cohort and passing through over years¹¹. I constructed the 1876-1885, 1886 -1895, and 1896 - 1905 synthetic cohorts and present the results in Table 7. In addition to the covariates in equation (1), a series of dummy indicators for the synthetic cohorts are included as controls. With the clustered state standard errors (column (4) - column (6)), there is no statistically significant impact from enacting a law on the probability of being intermarried. However, the ones without clustered state standard errors (column (1)- column (3)), are negative and statistically significant. The average of individuals in the synthetic cohorts was around 35, and the censuses covered them from 5-years-old to 64-years-old, which is a complete life span to estimate marital status. They represent the “peak” impact period of the Asian/Chinese anti-miscegenation laws on intermarried status.

¹¹ Helgertz et al. (2020) introduced a new strategy to link historical U.S. censuses. However, as noted in their working paper, the link for Asians is not as accurate as whites and blacks. To avoid unnecessary mismatches for individuals, I adopted the synthetic cohort method to perform the robustness check of the legislation impact.

[insert Table 7 here]

In sum, contrary to the expected legislation effect of prohibiting interracial marriages for Asians/Chinese, enactment of an Asian/Chinese anti-miscegenation law had no statistically significant effect on the incidence of interracial marriage for both Chinese men and women at age 20 and above. This finding is robust for a restricted comparison group, event history analysis, and synthetic cohort analysis. Exploring the possible selection on the passage of an Asian/Chinese anti-miscegenation law, the local average treatment effect returns negative effects, but only apply to the compliers.

5. Discussion and Conclusion

Policy analysts and demographers have a deep understanding of marriage transitions and trends in the post-civil rights era or post *Loving v. Virginia*. Evaluating the impact of past laws on a small population, however, has been difficult. Restricted by the measurement of the small population, researchers have difficulties capturing most of the individuals in a small population and teasing out the effects of policies. Powered by the availability of the full count censuses, my study is able to answer the policy question: what was the effect of Asian/Chinese anti-miscegenation laws on Chinese interracial married status? While unlikely to inform the marriage patterns or family formation of Chinese Americans today, my results indicate no significant impact from Asian/Chinese anti-miscegenation legislation on Chinese interracial married status.

Despite assuming passage of an Asian/Chinese anti-miscegenation law as an external shock, a state that passed a law also faced a surplus of men. The animosity and sexual anxieties about Chinese men marrying white women (Leung, 2014), incarnated as “Yellow Peril” (Tchen and Yeats, 2014), was seen as a danger to society. Besides, as regulated by the Expatriation Act of 1907, American women who married Chinese men

would lose their American citizenship. The severe consequences of interracial marriage to Chinese males could lead one to conclude that white women did not marry Chinese men even if they wanted to.

In contrast, white men were not targeted by the Expatriation Act of 1907. To solve the shortage of marriageable women, a white man could marry a Chinese woman and migrate to states that did not ban Chinese interracial marriages, as documented by Wallenstein (1994). Even Richard and Mildred Loving (*Loving v. Virginia* (1967)) pled guilty and were sentenced to one year in jail, but the sentence would be commuted for twenty-five years, so long as the couple did not return to Virginia together during that period (Richter, 2015). In my future research, more detailed coding and classification of anti-miscegenation laws is needed, such as which states did not recognize Chinese interracial marriages performed in other states, and if any state also prohibited Chinese interracial marriage to non-whites (Loewen, 1988). Unfortunately, the historical census only provides marital status but not marital year. Without knowing the specific marital year, my estimates could be biased either way. As mentioned, if an intermarried Chinese moved to a different state because of his/her marital status, it underestimates the legislation effect.

According to the literature on immigrant assimilation, first-, second- and third-generation Americans are impacted differently by legislation (Borjas 1985; Zhou, 1997). First- and second-generation Americans are most likely to be affected by anti-miscegenation laws based on evidence from different processes and consequences of assimilation (Xie and Greenman, 2011) or segmented assimilation (Portes and Zhou, 1993). My current estimates only contain one covariate on nativity: whether born in the U.S. In my future research, I will perform separate analyses for first-, second- and third-generation Americans.

The evidence from my estimates is consistent with differential enforcement or differential impact of the laws. One example of differential enforcement is that white men who married Chinese women may have been subject to a misdemeanor crime and may have been arrested but they were not convicted. Therefore, further historical and documented studies are needed to establish which impacts were observed.

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Figure 1: US States by date that anti-miscegenation laws were repealed

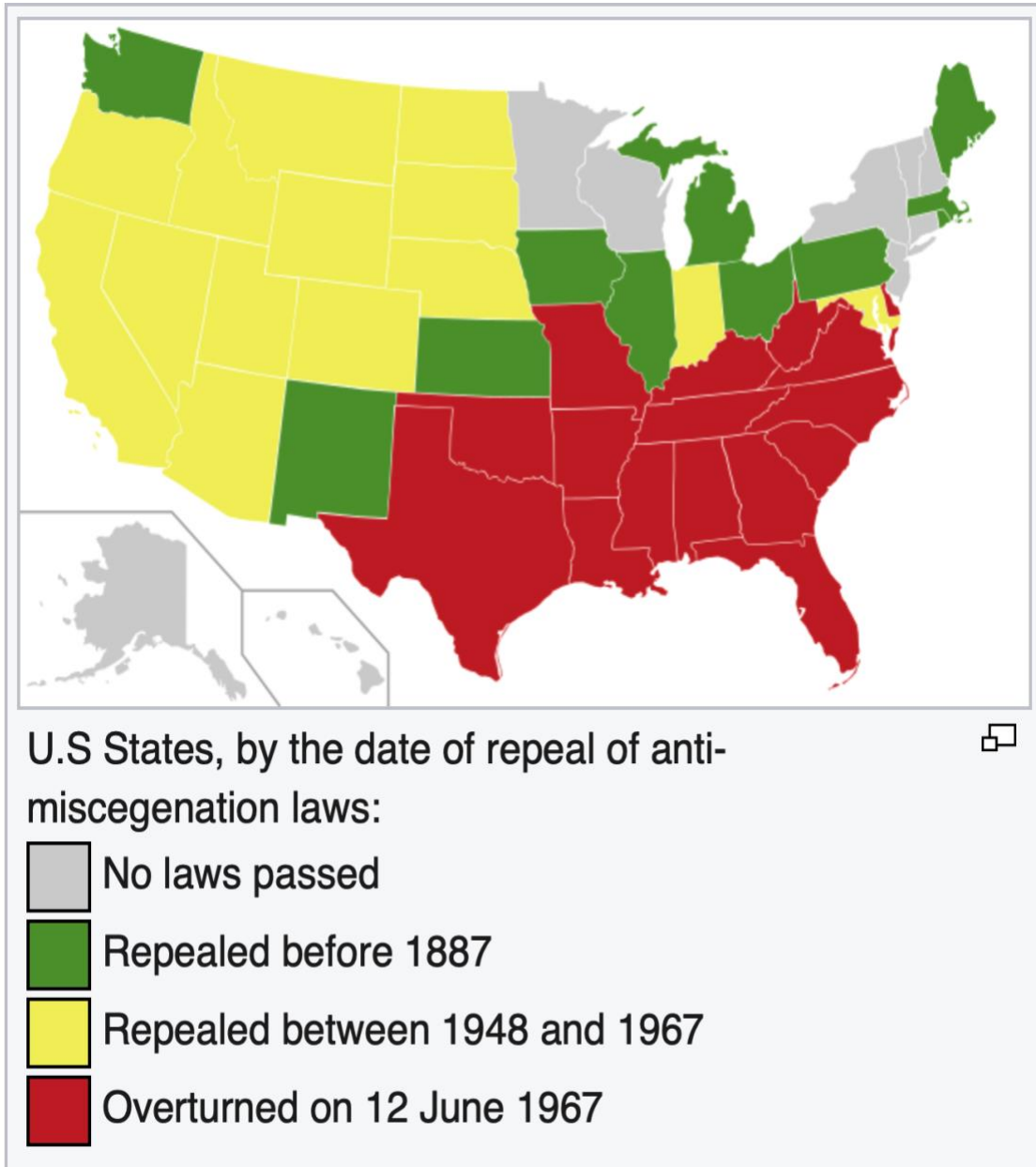
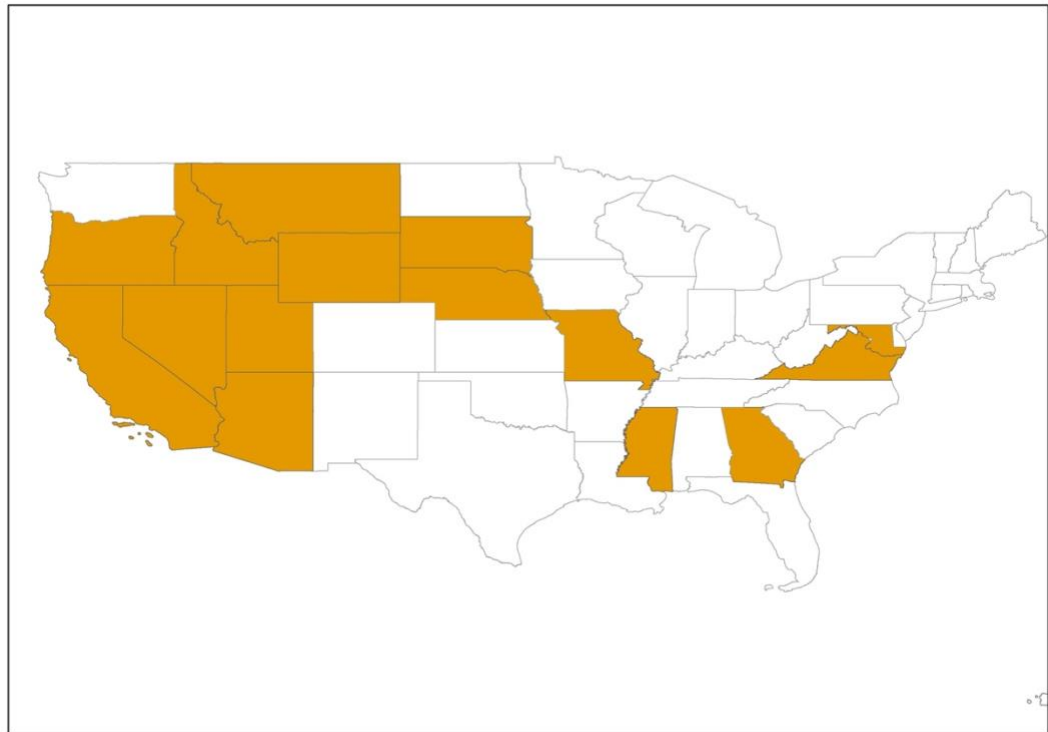
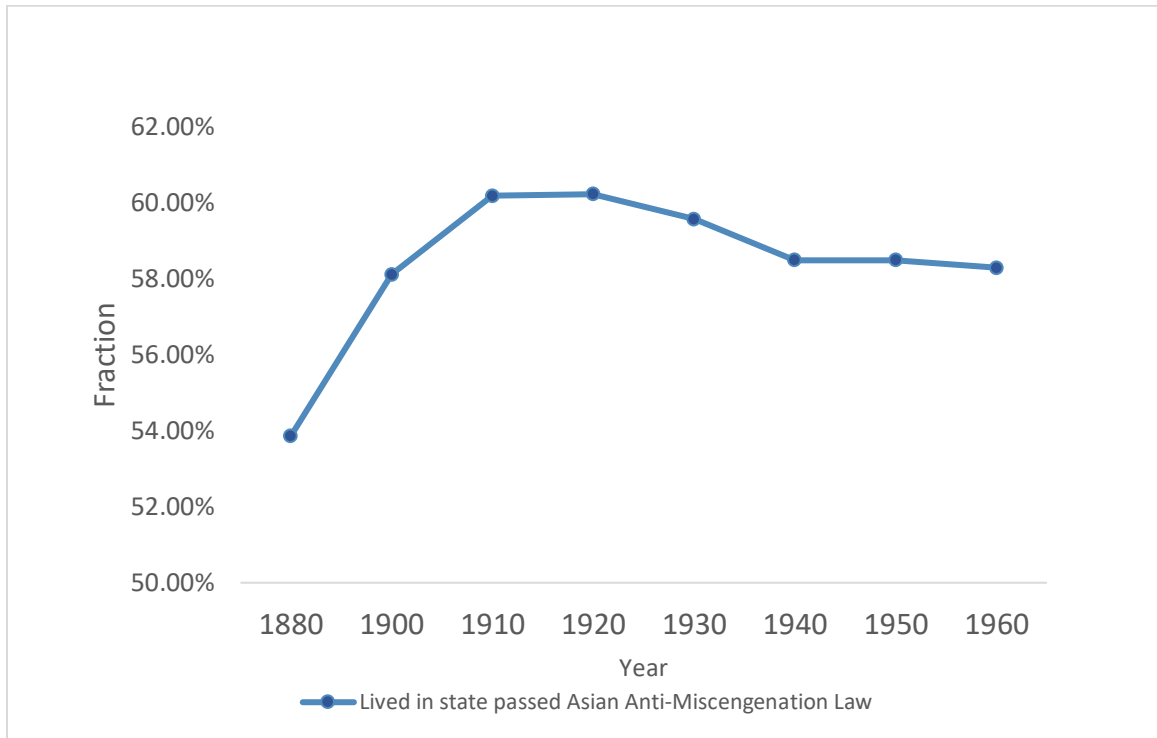


Figure 2: US States that Passed Asian/Chinese Anti-Miscegenation Laws between 1860 and 1930



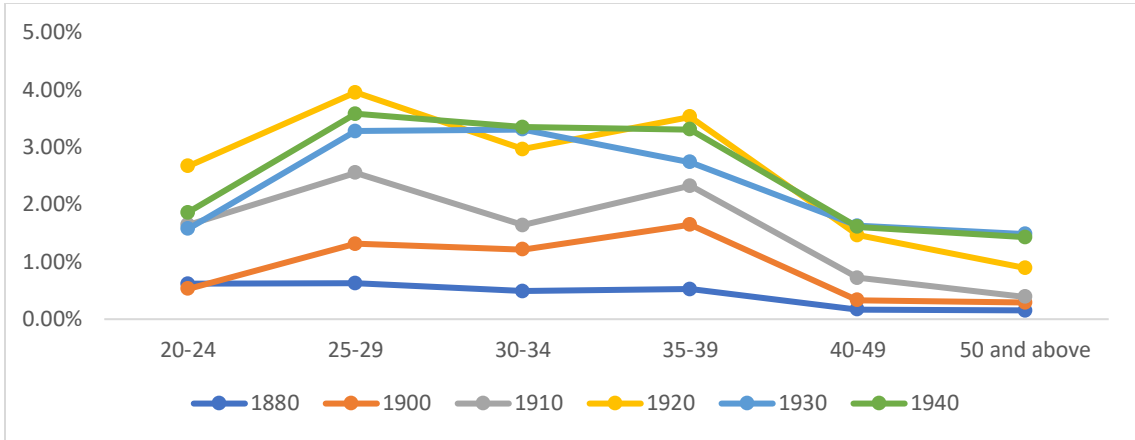
Note: States that passed Asian/Chinese Anti-Miscegenation Laws are in brown.

Figure 3: Percentage of US Chinese Population Subject to an Asian Anti-Miscegenation Law, 1880 to 1960



Notes: Percentages calculated using 1880–1840 US Censuses and for population 20 and above.

**Figure 4A: Percentage of persons in interracial marriages by age and US census:
Chinese Men (age 20 and above), 1880-1940 Censuses**



**Figure 4B: Percentage of persons in interracial marriages by age and US census:
Chinese Women (age 20 and above), 1880-1940 Censuses**

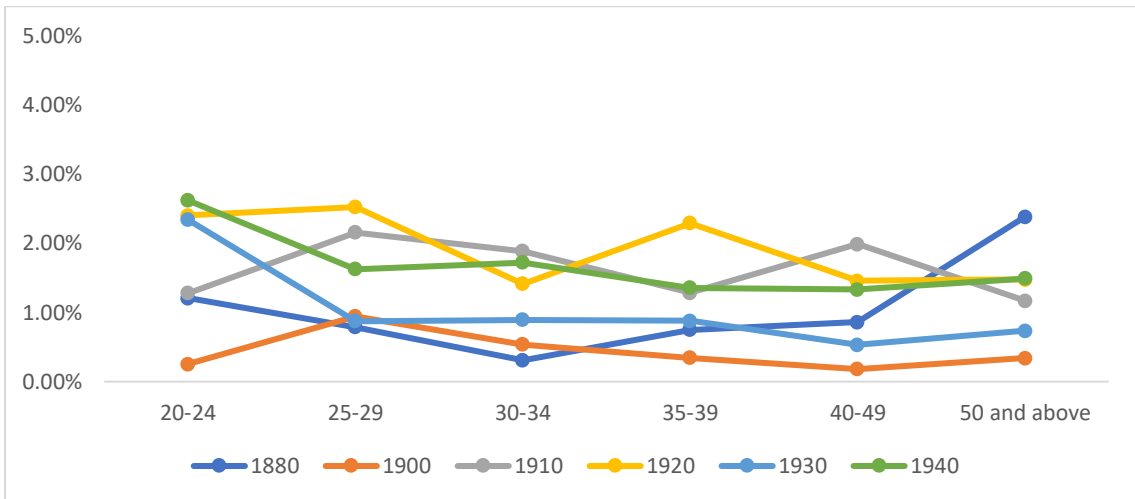


Figure 5A: Percentage of persons in interracial marriages in states that did and did not enact Asian/Chinese anti-miscegenation laws: Chinese Men age 20 and over, 1880-1940 Censuses

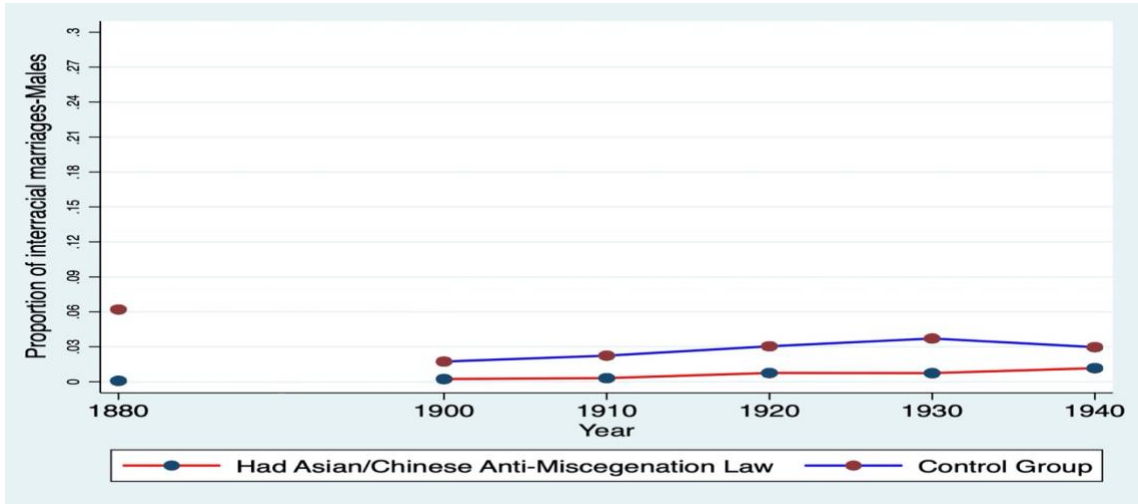


Figure 5B: Percentage of persons in interracial marriages in states that did and did not enact Asian/Chinese anti-miscegenation laws: Chinese Women, age 20 and over, 1880-1940

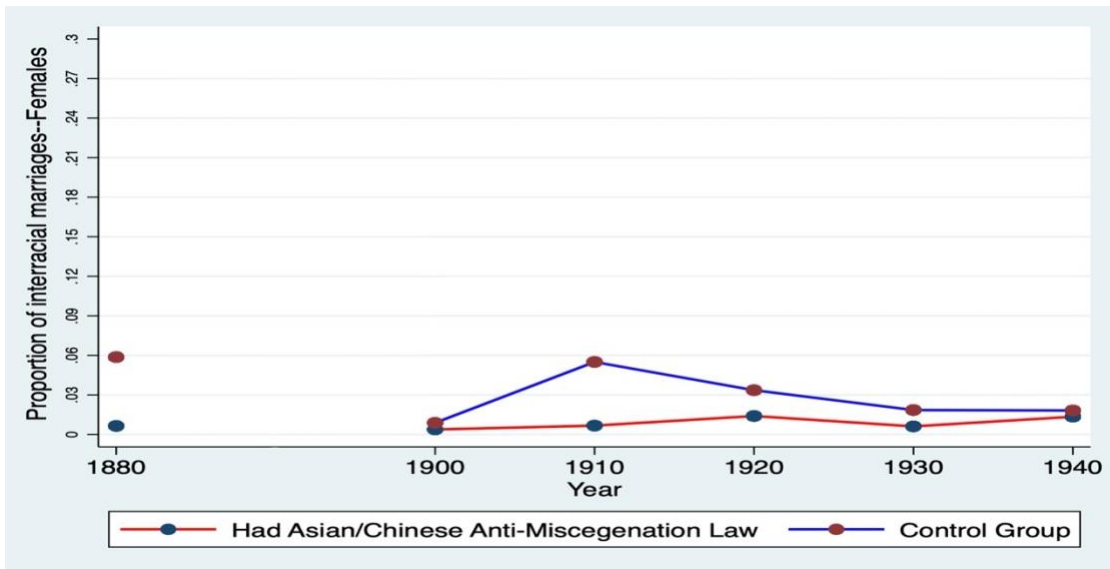


Figure 6: Event study of the effect of Asian/Chinese anti-miscegenation laws on Chinese males' interracial marriages, age 20 and above

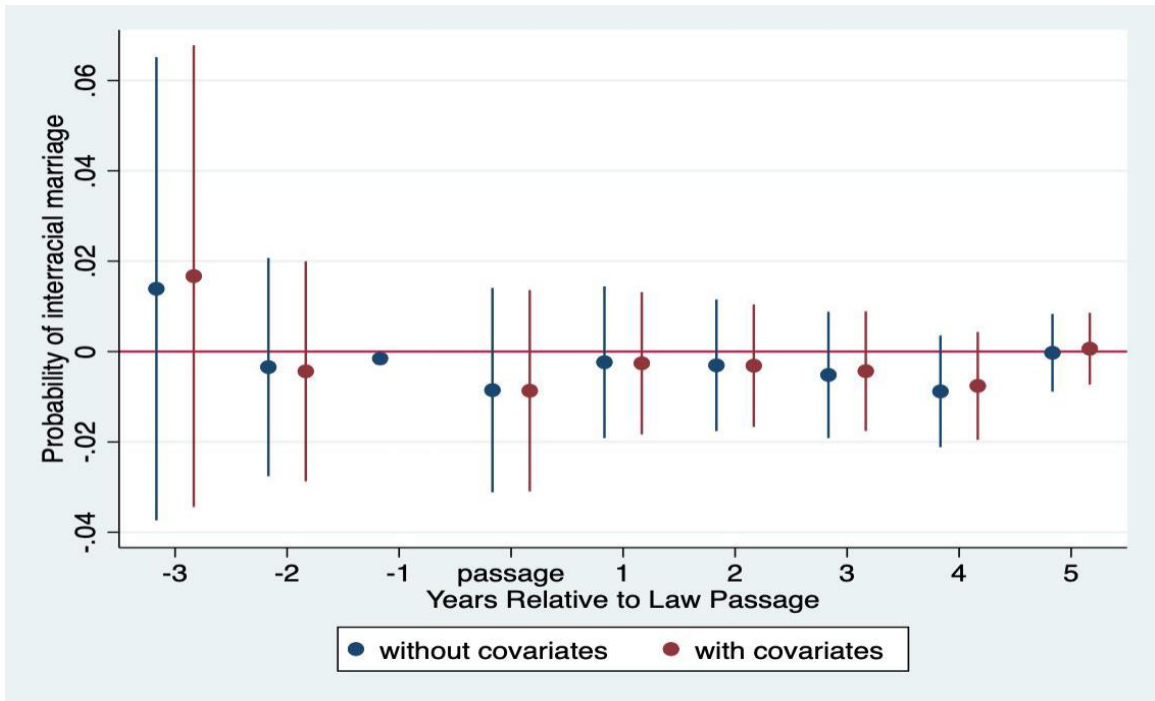


Table 1: Year Each State Enacted and Repealed Its First Asian Anti-Miscegenation Law*

State	Admission to the union	First anti-miscegenation law	First ASIAN anti-miscegenation law	Before statehood	Repealed	Races banned from marrying whites
Nevada	1864	1861	1861	Y	1959	Blacks, Native Americans, Asians, Filipinos
Idaho	1890	1864	1864	Y	1959	Blacks, Native Americans, Mongolians
Arizona	1912	1865	1865	Y	1962	Blacks, Native Americans, Asians
Oregon	1859	1862	1866		1951	Blacks, Native Americans, Asians, Native Hawaiians
California	1850	1850	1880		1948	Blacks, Asians
Utah	1896	1852	1888	Y	1963	Blacks, Mongolians, Filipinos (Malays)
Mississippi	1817	1822	1892		1987	Blacks, Mongolians
Missouri	1821	1835	1909		1969	Blacks, Mongolians
Montana	1889	1909	1909		1953	Blacks, Chinese, Japanese
Nebraska	1867	1855	1913		1963	Blacks, Chinese, Japanese, Filipinos
South Dakota	1889	1909	1913		1957	Blacks, Asians
Wyoming	1890	1869	1913		1965	Blacks, Mongolians, Filipinos (Malays)
Virginia	1788	1691	1924		1968	All non-whites (colored)
Georgia	1788	1750	1927		1972	Blacks, Native Americans, Asians
Maryland	1788	1692	1935		1967	Blacks, Malays

* States are ordered by date first Asian anti-miscegenation law enacted

Table 2: Historical Chinatowns in the U.S.

City, State	Year Founded	Year Closed	City, State	Year Founded	Year Closed
Almy, WY	1870	1927	Pittsburgh, PA	1900	1950
Baltimore, MD	1880	1920	Portland, ME	1890	1960
Big Timber, MT	1880	1930	Portland, OR	1850	/
Boston, MA	1875	/	Providence, RI	1890	1951
Butte, MT	1868	1940	Reno, NV	1855	1878
Cedar Creek, MT	1870	/	Rock Springs, WY	1870	1927
Chicago, IL	1880	/	Sacramento, CA	1850	1915
Cleveland, OH	1920	/	Saint Louis, MO	1869	1966
Deadwood, SD	1860	/	Salem, OR	1870	/
Denver, CO	1870	1940	Salinas, CA	1868	/
Detroit, MI	1917	2000	Salt Lake City, UT	1860	1952
Eureka, CA	1880	/	Ventura, CA	1866	1923
Evanston, WY	1870	1927	San Diego, CA	1870	/
Fresno, CA	1872	/	San Francisco, CA	1848	/
Helena, MT	1880	1970	San Jose, CA	1866	1931
Honolulu, HI		/	Santa Rosa, CA	1910	/
Houston, TX	1930	/	Seattle, WA	1880	1930
Los Angeles, CA	1880	/	Spokane, WA	1883	1940
New Orleans, LA	1860	1937	Stockton, CA	1850	1950
New York, NY	1870	/	Tacoma, WA	1880	1900
Newark, NJ	1875	1950	Tucson, AZ	1880	1960
Oakland, CA	1848	1940	Vallejo, CA	1880	/
Oklahoma City, OK	1900	1920	Walla Walla, WA	1880	1962
Omaha, NE	1860	1950	Washington, DC	1880	/
Philadelphia, PA	1870	/			

Table 3: Descriptive statistics for individuals age of 20 and above in states that did and did not enact Asian/Chinese Anti-Miscegenation Laws, 1880-1940 Censuses

	Enacted Asian/China Anti-Miscegenation Laws					
	Chinese Females			Chinese Males		
	Mean	SD.	N	Mean	SD.	N
Age	35.69	12.13	24,652	40.75	13.33	258,752
Illiteracy	0.38	0.49	24,652	0.2	0.4	258,752
US Born	0.38	0.48	24,652	0.11	0.31	258,752
Chinatown in City	0.65	0.48	24,652	0.44	0.5	258,752
Occupation score (highest 69)	4.86	9.66	24,652	17.29	11.44	258,752
Skewed sex ratio (=1, if sex ratio >= 10)	0.53	0.5	24,467	0.85	0.36	253,989

	Did Not Enact Asian/China Anti-Miscegenation Laws					
	Chinese Females			Chinese Males		
	Mean	SD	N	Mean	SD	N
Age	36.8	12.75	11,127	39.81	11.8	108,658
Illiteracy	0.18	0.38	11,127	0.22	0.41	108,658
US Born	0.6	0.49	11,127	0.2	0.4	108,658
Chinatown in City	0.52	0.5	11,127	0.57	0.49	108,658
Occupation score (highest 69)	4.19	9.01	11,127	17.03	12.62	108,658
Skewed sex ratio (=1, if sex ratio >= 10)	0.44	0.5	10,815	0.87	0.33	104,913

Table 4: OLS Estimates of an enacted Asian/Chinese anti-miscegenation law on interracial married status for individuals age 20 and above, 1880-1940 Censuses

	Chinese Males					
	No Clustering			Clustering		
	(1)	(2)	(3)	(4)	(5)	(6)
Ever passed Chinese Anti - Miscegenation Law	-0.0402*** (0.0004)	-0.0404*** (0.0010)	-0.0413*** (0.0014)	-0.0402** (0.0201)	-0.0404** (0.0205)	-0.0413** (0.0205)
Chinatown in city		-0.0016 (0.0010)	-0.0021** (0.0009)		-0.0016*** (0.0005)	-0.0021*** (0.0005)
US born		0.0130*** (0.0043)	0.0127*** (0.0040)		0.0130*** (0.0010)	0.0127*** (0.0010)
Illiteracy		-0.0054** (0.0026)	-0.0050** (0.0023)		-0.0054*** (0.0004)	-0.0050*** (0.0004)
Skewed Sex Ratio		0.0019 (0.0016)	0.0025 (0.0016)		0.0019 (0.002)	0.0025 (0.002)
Age control	Yes	Yes	Yes	Yes	Yes	Yes
Occupation control	No	No	Yes	No	No	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	241,463	239,074	239,074	241,463	239,074	239,074
	Chinese Females					
	No Clustering			Clustering		
	(7)	(8)	(9)	(10)	(11)	(12)
Ever passed Asian/Chinese Anti -Miscegenation Law	0.0244*** (0.0014)	0.0324*** (0.0018)	0.0322*** (0.0018)	0.0244 (0.0227)	0.0324 (0.0238)	0.0322 (0.0238)
Chinatown in city		-0.0074*** (0.0019)	-0.0075*** (0.0019)		-0.0074*** (0.0018)	-0.0075*** (0.0018)
US born		0.0116*** (0.0035)	0.0117*** (0.0035)		0.0116*** (0.0017)	0.0117*** (0.0017)
Illiteracy		-0.0039*** (0.0013)	-0.0040*** (0.0014)		-0.0039*** (0.0013)	-0.0040*** (0.0013)
Skewed Sex Ratio		-0.0003 (0.0030)	-0.0003 (0.0030)		-0.0003 (0.0024)	-0.0003 (0.0024)
Age control	Yes	Yes	Yes	Yes	Yes	Yes
Occupation control	No	No	Yes	No	No	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	26,591	26,227	26,227	26,591	26,227	26,227

Robust Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 5: Diff-in-diffs estimates of the impact of an enacted Asian/Chinese anti-miscegenation law on interracial married status for Chinese individuals age 20 and above, 1880-1940 Censuses

	Chinese Male					
	No Clustering			Clustering		
	(1)	(2)	(3)	(4)	(5)	(6)
Asian/Chinese Anti - Miscegenation Law	0.0069*** (0.0014)	0.0066*** (0.0014)	0.0069*** (0.0014)	0.0069 (0.0051)	0.0066 (0.0052)	0.0069 (0.0053)
Chinatown in city		-0.0014*** (0.0005)	-0.0019*** (0.0005)		-0.0014 (0.0011)	-0.0019* (0.0010)
US born		0.0130*** (0.0010)	0.0127*** (0.0010)		0.0130*** (0.0043)	0.0127*** (0.0040)
Illiteracy		-0.0054*** (0.0004)	-0.0050*** (0.0004)		-0.0054** (0.0026)	-0.0050** (0.0023)
Skewed Sex Ratio		0.0024*** (0.0007)	0.0029*** (0.0007)		0.0024 (0.0017)	0.0029 (0.0018)
Age control	Yes	Yes	Yes	Yes	Yes	Yes
Occupation control	No	No	Yes	No	No	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	241,463	239,074	239,074	241,463	239,074	239,074
	Chinese Female					
	No Clustering			Clustering		
	(7)	(8)	(9)	(10)	(11)	(12)
Asian/Chinese Anti - Miscegenation Law	0.0009 (0.0064)	-0.0044 (0.0058)	-0.0042 (0.0058)	0.0009 (0.0069)	-0.0044 (0.0056)	-0.0042 (0.0056)
Chinatown in city		-0.0075*** (0.0018)	-0.0076*** (0.0018)		-0.0075*** (0.0018)	-0.0076*** (0.0019)
US born		0.0116*** (0.0017)	0.0117*** (0.0017)		0.0116*** (0.0035)	0.0117*** (0.0036)
Illiteracy		-0.0038*** (0.0013)	-0.0039*** (0.0013)		-0.0038*** (0.0013)	-0.0039*** (0.0014)
Skewed Sex Ratio		-0.0005 (0.0024)	-0.0005 (0.0024)		-0.0005 (0.0030)	-0.0005 (0.0030)
Age control	Yes	Yes	Yes	Yes	Yes	Yes
Occupation control	No	No	Yes	No	No	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	26,591	26,227	26,227	26,591	26,227	26,227

Robust Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 6: Diff-in-diffs estimates of the impact of an enacted Asian/Chinese anti-miscegenation law on interracial married status for Chinese males at age 20 and above, restricted comparison group, 1880-1940 Censuses

	No Clustering			Clustering		
	(1)	(2)	(3)	(4)	(5)	(6)
Asian/Chinese Anti - Miscegenation Law	0.0026** (0.0013)	0.0021 (0.0013)	0.0020 (0.0013)	0.0026 (0.0034)	0.0021 (0.0033)	0.0020 (0.0033)
Chinatown in city		-0.0021*** -0.0004	-0.0022*** (0.0004)		-0.0021*** (0.0007)	-0.0022*** (0.0007)
US born		0.0074*** (0.0010)	0.0074*** (0.0010)		0.0074*** (0.0019)	0.0074*** (0.0019)
Illiteracy		-0.0017*** (0.0004)	-0.0016*** (0.0004)		-0.0017*** (0.0005)	-0.0016*** (0.0004)
Skewed Sex Ratio		0.0002 (0.0007)	0.0004 (0.0007)		0.0002 (0.0010)	0.0004 (0.0011)
Age control	Yes	Yes	Yes	Yes	Yes	Yes
Occupation control	No	No	Yes	No	No	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	180,235	178,642	178,642	180,235	178,642	178,642

Robust Standard errors in parentheses.

*** p<0.01, ** p<0.05, * p<0.1

Table 7: Two-Stage Least Square estimates of the impact of an enacted Asian/Chinese anti-miscegenation law on Chinese males' interracial married status, 1880-1940 Censuses

	Restricted Comparison Group		Broad Comparison Group	
	(1)	(2)	(3)	(4)
Asian/Chinese Anti -Miscegenation Law	-0.0106*		-0.0141*	
	(0.0059)		(0.0084)	
White male to female sex ratio		0.0299***		0.0290***
		(0.0054)		(0.0059)
Instrument F-statistic		30.44		24.19
Age control	Yes	Yes	Yes	Yes
Occupation control	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
State fixed effects	Yes	Yes	Yes	Yes
Observations	178,642	178,642	239,037	239,037
R2-adjusted	0.0307		0.0274	

Robust Standard errors in parentheses. Standard errors are cluster on state

*** p<0.01, ** p<0.05, * p<0.1

Table 8: Diff-in-diffs estimates of the impact of an enacted Asian/Chinese anti-miscegenation law on Chinese males' interracial married status, synthetic cohorts, 1880-1940 Censuses

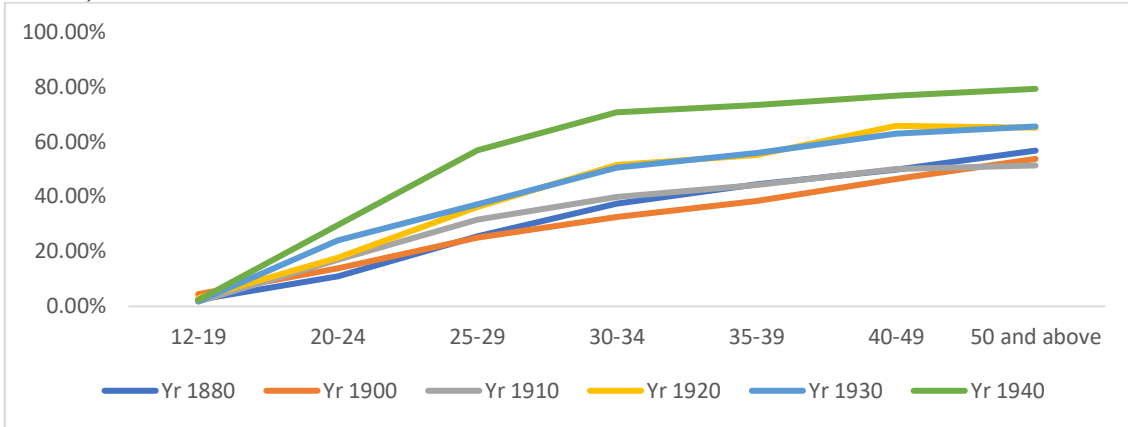
	No Clustering			Clustering		
	(1)	(2)	(3)	(4)	(5)	(6)
Asian/Chinese Anti - Miscegenation Law	-0.0184*** (0.0066)	-0.0209*** (0.0068)	-0.0220*** (0.0068)	-0.0184 (0.0135)	-0.0209 (0.0139)	-0.0220 (0.0141)
Chinatown in city		-0.0005 (0.0009)	-0.0015 (0.0009)		-0.0005 (0.0024)	-0.0015 (0.0024)
US born		0.0143*** (0.0012)	0.0141*** (0.0012)		0.0143*** (0.0051)	0.0141*** (0.0048)
Illiteracy		-0.0127*** (0.0009)	-0.0118*** (0.0009)		-0.0127*** (0.0043)	-0.0118*** (0.0040)
Skewed Sex Ratio		0.0054*** (0.0013)	0.0059*** (0.0013)		0.0054** (0.0026)	0.0059** (0.0027)
Age control	Yes	Yes	Yes	Yes	Yes	Yes
Occupation control	No	No	Yes	No	No	Yes
	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Synthetic cohort fix effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	103,135	101,819	101,819	103,135	101,819	101,819

Robust Standard errors in parentheses

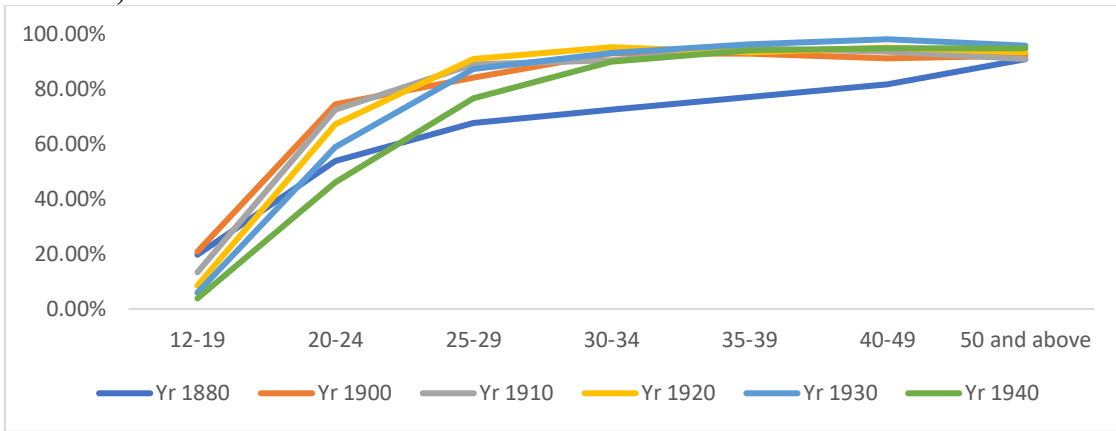
*** p<0.01, ** p<0.05, * p<0.1

Note: Only includes individuals born between 1865 and 1905.

Appendix Figure 1A. Percentage of persons ever married, by age and census: Chinese Males, 1880-1940 Censuses

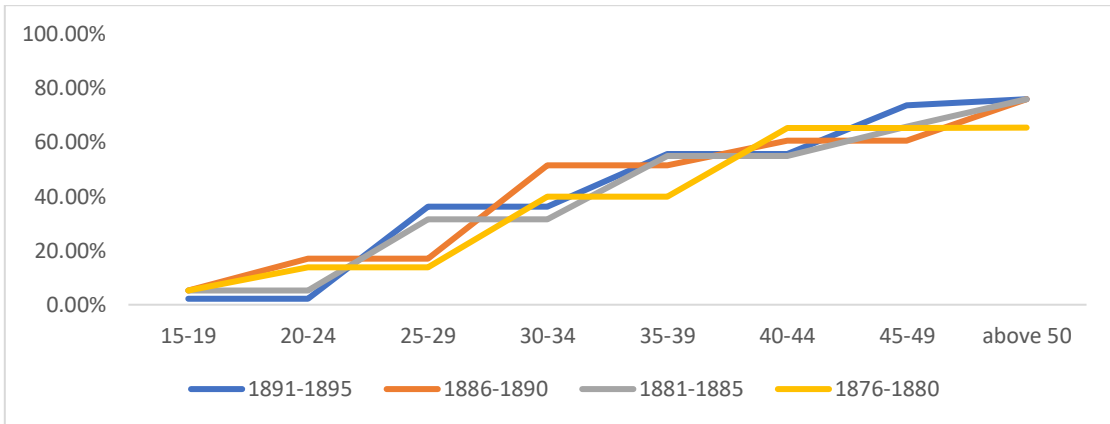


Appendix Figure 1B. Percentage of persons ever married, by age and census: Chinese Females, 1880-1940 Censuses



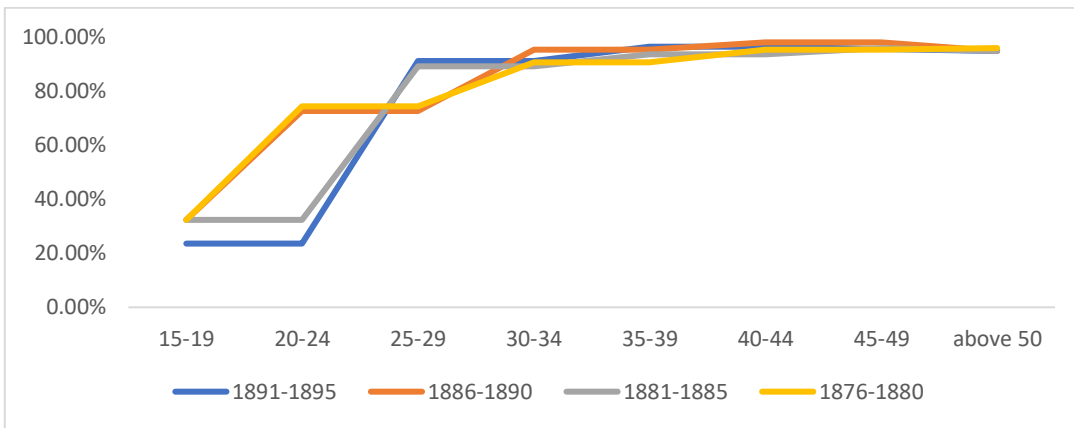
Appendix Figure 2A. Percentage of persons ever married, by age and by birth cohort:

Chinese Males, 1880-1940 Censuses



Appendix Figure 2B. Percentage of persons ever married, by age and by birth cohort:

Chinese Females, 1880-1940 Censuses



Appendix Table 1: Race of Spouse for Intermarried Chinses Females above the age of 20, 1880-1940 Censuses

	1880	1900	1910	1920	1930	1940
White Male	77.78%	85.19%	55.56%	66.67%	100.00%	85.71%
Black Male	11.11%	/	/	/	/	8.93%
Mulatto	11.11%	/	/	2.30%	/	/
Other Asians	/	14.81%	44.44%	20.00%	/	5.36%
Total	100%	100%	100%	100%	100%	100%

Appendix Table 2: Event History Analysis of Asian/Chinese anti-miscegenation laws, for Chinese males age of 20 and above, 1880-1940 Censuses

	(1)	(2)
Census before passage of Asian/Chines anti-miscegenation law		
-3	0.0139 (0.0255)	0.0167 (0.0254)
-2	-0.0034 (0.0120)	-0.0044 (0.0121)
-1	-0.0015 (0.0109)	-0.0021 (0.0109)
P-value test of joint significance	0.7998	0.7028
Law passage	-0.0085 (0.0113)	-0.0087 (0.0111)
Census after passage of Asian/Chines anti-miscegenation law		
1	-0.0024 (0.0084)	-0.0026 (0.0078)
2	-0.0030 (0.0072)	-0.0031 (0.0067)
3	-0.0052 (0.0070)	-0.0043 (0.0066)
4	-0.0088 (0.0062)	-0.0076 (0.0059)
5	-0.0003 (0.0043)	0.0006 (0.0040)
P-value test of joint significance - years 0-5	0.1232	0.4498
P-value test of joint significance - years 1-5	0.0778	0.3453
Chinatown in City		-0.0022** (0.0009)
US Born		0.0133*** (0.0042)
Illiteracy		-0.0048** (0.0023)
Skewed sex ratio (=1, if sex ratio>=10)		0.0029 (0.0019)
Constant	0.0574*** (0.0132)	0.0564*** (0.0139)
Observations	241,463	239,074

Standard errors clustered on state in parentheses

*** p<0.01, ** p<0.05, * p<0.1