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LAW-ABIDING IMMIGRANTS:  
THE INCARCERATION GAP BETWEEN IMMIGRANTS AND THE US-BORN, 1850–2020

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## **ABSTRACT**

We combine full-count Census data (1850–1940) with Census/ACS samples (1950–2020) to provide the first nationally representative long-run series (1850–2020) of incarceration rates for immigrants and the US-born. As a group, immigrants had higher incarceration rates than US-born white men before 1870, similar rates between 1880–1950, and lower rates since 1960. Although there are substantial differences in incarceration by origin country, the relative decline in incarceration since 1960 occurred among immigrants from all sending regions. This decline cannot be explained by changes in immigrants' observable characteristics or immigration policy, but may reflect immigrants' resilience to economic shocks.

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Anti-immigrant politicians have associated immigrants with criminality throughout US history. In 1891, Senator Henry Cabot Lodge, one of the main architects of historical immigration restrictions, warned that some Italian immigrants were “members of the Mafia, a secret society... using murder as a means of maintaining its discipline” (Lodge 1891). More recently, Donald Trump said in the 2015 speech launching his presidential campaign that Mexican immigrants are “bringing drugs, they’re bringing crime, they’re rapists” (Gamboa 2015).

What does the data say? Have immigrants ever been more likely to commit crime than the US-born? Are immigrants today relatively more likely to commit crime than immigrants in the past? Answering these questions is challenging because it requires consistent data on proxies of criminality – like arrests or incarceration – that both span US history and contain information about an offender’s country of birth.

This paper provides the first nationally representative series of incarceration rates for immigrants and the US-born between 1850 and the present day. For the 1850–1940 period, we use newly assembled data on the *universe* of incarcerated men in the United States from the full-count population Censuses.<sup>1</sup> Using the full-count Census is crucial for studying incarceration during the historical period, particularly for subpopulations such as the foreign-born, given the relatively low incarceration rates in the past and the small sizes of the Census subsamples that were available prior to the release of the full-count data.<sup>2</sup> For the 1950–2020 period, during which incarceration has become significantly more common, we use nationally representative samples of the decennial Census and the American Community Survey (ACS).<sup>3</sup>

Contrary to the anti-immigrant rhetoric, we find that, as a group, immigrants have had similar or lower incarceration rates than white US-born men for the last 140 years of American history. Immigrants’ incarceration rates were higher than those of US-born white men only from 1850–1870, a period *before* the arrival of “new” immigrant groups from Southern and Eastern Europe.

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<sup>1</sup> We focus on men because men constitute the vast majority of the incarcerated population both today and in the past (Freeman 1999). Our takeaways are unchanged if we include women in the analysis (Figure A8).

<sup>2</sup> For instance, the 1% sample of the 1880 Census only contains 76 incarcerated immigrants.

<sup>3</sup> Starting in 1990, these data sources measure institutionalization (in any type of facility), not just incarceration. However, almost all men ages 18–40 – our sample of interest – who are institutionalized are living in a correctional facility (see Section 1).

In the 1880 to 1960 period, immigrants' incarceration rates were virtually identical to the incarceration rates of white US-born men. However, starting in 1960, immigrants have become *less* likely to be incarcerated than white US-born men, with immigrants being 30% less likely to be incarcerated today. If we compare immigrants to the broader US-born population (including non-white individuals), then immigrants are 60% less likely to be incarcerated in recent years.

We find this substantial relative decline in incarceration rates among immigrants from all major sending regions. European immigrants historically had similar incarceration rates to white US-born men, and, in recent years, experience far lower incarceration rates. Chinese immigrants had higher incarceration rates than white US-born men in the past but have significantly lower incarceration rates today. Mexican and Central American immigrants had particularly high incarceration rates in the past before completely converging with white US-born men in 1980 and 1990. From 2005 on, Mexican and Central American immigrants have been more likely to be incarcerated again, but the relative gap with the US-born is much smaller than in the past. We note that a large portion of the gap after 2005 is likely driven by detentions in federal immigration facilities, often for immigration-related offenses; when we drop the 17 areas home to the largest Immigration and Customs Enforcement (ICE) facilities, the gap moderates or disappears in most years. We also note that although Mexican and Central American immigrants remain slightly more likely to be incarcerated than white US-born men today, they are less likely to be incarcerated relative to US-born men of all races and they have *far lower* incarceration rates than similarly educated US-born white men.

We next explore the reasons behind the relative decline in immigrant incarceration rates since 1960. We begin by ruling out three potential explanations. First, the relative decline is not driven by changes in migrants' observable characteristics, namely, their countries of origin, age distribution, marital status, or educational attainment. If anything, immigrants' lower educational attainment in recent decades would predict that they should have higher incarceration rates than they do. Second, it is not driven by changes in the states in which immigrants reside; we find similar results when comparing immigrants and US-born men who live in the same state. Third, it is not mechanically driven by immigrant offenders being more likely to be deported in the more recent period (and thus not being present in the incarceration data): the relative decline in

incarceration is present even among immigrants who are US *citizens* and thus cannot be deported. Moreover, non-citizen immigrants who have been convicted of a crime are typically deported only *after* serving their sentence.<sup>4</sup>

After ruling out changes in immigrant characteristics and immigration policy as explanations for immigrants' relative decline in incarceration, we turn our attention to structural changes in the economy that may have affected less-educated US-born men (the group that accounts for the vast majority of incarcerated individuals) more than similarly educated immigrants. Numerous studies have documented that in recent decades, less-educated men in the US have experienced worsening outcomes along several dimensions including incarceration, employment, family formation, and health. The causes of this deterioration are still the subject of intense debate, but factors such as globalization and skill-biased technological change, among others, have been identified as important culprits for the losses in employment and earnings.

In light of these trends, a potential explanation for the relative decline in immigrants' incarceration may be that, despite their relatively low levels of education, immigrants have remained relatively shielded from the social and economic forces that negatively affected less-educated US-born men. In this case, immigrants would be expected to enjoy better outcomes along several dimensions, including but not limited to incarceration rates. Indeed, consistent with this hypothesis, we document that lower-educated immigrants and white US-born men have *not only* diverged in their incarceration propensities in recent decades, but also along other dimensions including their labor force participation, likelihood of marriage, and overall health.

Although our data do not enable us to pinpoint *why* less-educated immigrants were able to better weather these shocks, we conclude by discussing potential explanations. First, immigrants may have been less exposed to recent economic shocks due to their concentration in non-routine manual tasks and services, which did not experience large wage or employment declines in recent decades (Peri and Sparber 2009). Furthermore, immigrants may be more resilient in the face of shocks, given that they are a self-selected group of individuals possessing certain traits, such as a greater

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<sup>4</sup> The timing of the changes is also inconsistent with this explanation; whereas the relative decline in immigrant incarceration emerges in the 1960s, the sharp rise in deportations took place around the year 2000.

willingness to move long distances (Cadena and Kovak 2016), less risk aversion (Jaeger et al. 2010), higher adaptability and cognitive ability (Bütikofer and Peri 2021), and higher levels of entrepreneurship (Azoulay et al. 2022).

**Related literature.** Our paper contributes to the literature on immigration and crime by constructing the first nationally representative long-run series of incarceration rates for immigrants and the US-born. Our work is most closely related to a set of papers that document immigrant-US-born incarceration gaps for particular states and time periods. Moehling and Piehl (2009, 2014) study historical incarceration rates using state prison records from 1904, 1910, 1923, and 1930, as well as full-count Census samples of individuals in eight US states between 1900 and 1930. Consistent with our series, these papers find that immigrant incarceration rates were similar, if not slightly lower, than those of the US-born.<sup>5</sup> Butcher and Piehl (1998b, 2007) uses Census subsamples between 1980 and 2000 to compare the incarceration propensities of immigrants to those of all US-born men. That study finds that immigrants are less likely to be incarcerated than US-born men and that this difference widened between 1980 and 2000. (For ease of comparison, we plot the incarceration rates of immigrants and of US-born men from Moehling and Piehl (2014) and Butcher and Piehl (2007) in Figure A1.) For the modern period, Light et al. (2020) uses arrest records from Texas between 2012–2018 and finds that both unauthorized and legal immigrants are less likely to be arrested than US-born citizens.<sup>6</sup> Relative to these papers, our data provides a century-and-a-half long perspective, allowing us to illustrate the evolution of immigration gaps by country of origin and to make progress on the question of why immigrants' relative incarceration rates have declined in recent years.

Our study also contributes to the broader literature studying long-term changes in immigrant assimilation in the US. This literature has focused on labor market outcomes, intergenerational mobility, and cultural assimilation (Abramitzky et al. 2014, 2017, 2020, 2021, Collins and Zimran

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<sup>5</sup> Moehling and Piehl (2009) find that immigrants are more likely to be incarcerated for minor offenses, but the gap narrows significantly once they focus on serious crimes. We use our methodology to compute incarceration rates in the states included in their study and find higher levels, although similar trends, of incarceration rates for immigrants and US-born men, presumably because our data include federal prisons and local jails.

<sup>6</sup> Other related work in criminology and sociology confirms that immigrants in the U.S. in recent decades are less crime-prone than their US-born counterparts (see, e.g., Bersani 2014, Bucerius 2011, and Sampson et al. 2005).

Forthcoming, Escamilla-Guerrero et al. 2021).<sup>7</sup> We contribute to this literature by providing a past-present comparison on an as-yet unexplored dimension of immigrant assimilation: criminal behavior.<sup>8</sup>

## 1. Data and Methods

In this section, we briefly detail the data sources, samples, and variables utilized throughout the paper. We include further details in the Online Appendix.

**Sources.** For the 1850 to 1940 period, we use the full-count Census (Ruggles et al. 2021) to observe the universe of prisoners in the US every ten years (the exception is 1890, for which individual-level records did not survive).<sup>9</sup> Incarceration is a relatively rare occurrence (particularly in this earlier time period), so access to the full-count Census allows us to more accurately estimate incarceration rates for all immigrants as well as for immigrant subgroups. The 1940 Census is the last Census for which the full-count data are currently available in digitized form. Hence, for the 1950 to 1990 period, we use the largest available sample in each decade accessed via IPUMS (Ruggles et al. 2022).<sup>10</sup> Finally, for the most recent years, we use data from the American

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<sup>7</sup> This paper is also related to studies that consider how changes in the number of immigrants in a local area affect crime rates (see, e.g., Akbulut-Yuksel et al. 2022, Bell et al. 2013, Bianchi et al. 2012, Butcher and Piehl 1998a, Chalfin 2014, as well as Buonanno et al. 2022 and cites therein); immigrant criminality (Amuedo-Dorantes and Deza 2022, Churchill et al. 2021, Freedman et al. 2018, Pinotti 2017, as well as National Academies of Sciences, Engineering, and Medicine, & Committee on Population (2016) and cites therein); as well as perceptions of crime (Ajzenman et al. Forthcoming, Couttenier et al. 2021). Fasani et al. (2019) provide an account of policies that bar immigrants with a criminal record from entering the US as well as policies that deter immigrants from committing crimes upon arrival.

<sup>8</sup> We cannot consider long-term changes in the criminality of immigrants' *children* because the Census and ACS in more recent decades do not provide information on parental birthplace. For studies focusing on the criminal behavior of the children of immigrants historically and today, we refer the reader to Moehling and Piehl (2009, 2014), Berardi and Bucerius (2014), and Bersani (2014).

<sup>9</sup> Figure A2 shows an example record of incarcerated individuals in the 1930 Census.

<sup>10</sup> Given that data availability requires that we switch from full-count data to sub-samples for 1950–1970 when incarceration was still relatively rare, we focus on incarceration trends, rather than exact levels. Nevertheless, we validate the incarceration rates against auxiliary data sources: between 1950 and 1980, the overall incarceration rate using the Census falls between 200 and 300 per 100,000 residents in the population, which is very close to measures of the incarceration rate from the Bureau of Justice Statistics (Kearney et al. 2014). When considering sub-samples of immigrants, we do not include the 1950 Census given its smaller size. Finally, we do not include the 2000 Census in our main analysis due to potential mismeasurement of incarceration rates for immigrants (i.e., the difference in incarceration rates between immigrants and white US-born men in 2000 is significantly larger than in any adjacent data sources, namely, the 1990 Census or the 2005–2010 ACS). Including the 2000 Census would only reinforce our main takeaways (see Figure A4).

Community Survey (either the annual versions or the 2008–2012 and 2015–2019 five-year samples to represent 2010 and 2020, respectively).

**Sample Selection.** Our baseline sample focuses on men ages 18–40 and compares immigrants (i.e., those born outside of the US) to *white* US-born men. We focus on white men because of the well-documented racial differences in incarceration (Neal and Rick 2016; Western and Pettit 2010). Including Black Americans in the sample leads to larger immigrant-US-born incarceration gaps, which only reinforces our main takeaways (Figure A5). We do not restrict the sample to non-Hispanic white men, as Hispanic ethnicity cannot be measured consistently over time.<sup>11</sup>

**Measuring Incarceration.** For data spanning 1850 to 1980, we classify individuals as being incarcerated if the group quarters type variable coded by IPUMS indicates that they live in a “correctional institution.” For the 1850–1940 full-count data, we refine this classification using the original strings of the “group quarters,” “occupation,” and “relationship to household head” variables (for instance, using the fact that someone’s occupation or relation is listed as “prisoner”).<sup>12</sup> This refinement addresses potential misclassification of prisoners; for instance, some individuals whose occupation is listed as “prisoner” are not classified as living in a correctional institution and a small share of individuals living in correctional institutions might be wardens or guards (see Eriksson 2020 for a discussion).<sup>13</sup> We include more detail on these refinements in the Online Appendix but we emphasize that our takeaways are similar if we simply use IPUMS’ group quarters type variable. Indeed, Table A1 shows that between 1850–1930, more than three-fourths of individuals that we classify as incarcerated are coded as living in a correctional institution, and this share is comparable across immigrants and the US-born.

Starting in 1990, IPUMS data report whether individuals are institutionalized, but not the type of institution in which they reside (for instance, we do not know if someone is in a correctional institution or a nursing facility). However, among men aged 18–40, institutionalization is a very close proxy of incarceration (among those institutionalized in 2000 and 2019, 90% and 96% were

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<sup>11</sup> The 1970 Census was the first to ask respondents whether they were of “Mexican, Puerto Rican, Cuban, Central or South American, Other Spanish” descent.

<sup>12</sup> These string variables are not available for later Censuses, preventing us from implementing these adjustments in the post-1940 data.

<sup>13</sup> As described on the IPUMS website, in the 1850–1930 and the 1960–1970 samples, non-inmates living in institutions are assigned an institutional group quarter type.

incarcerated, respectively).<sup>14</sup> Our results are similar if we focus on other age groups (i.e., ages 18–30 or 18–50; Figure A7). Table A2 shows the sample sizes and the share incarcerated in each of our samples, by nativity status.

**Advantages and Disadvantages of Using Incarceration to Compare the Criminality of Immigrants and the US-Born.** Ideally, to compare the criminality of immigrants and the US-born, we would want to measure whether individuals actually committed a crime. However, such data are not available because many crimes are not reported and many offenders are not arrested. As a result, two proxies for crime commonly used in social science research are arrests and incarceration. We rely on incarceration as our proxy for criminal activity.

The main advantage of using incarceration as a proxy is that it can be measured in the Census, a large survey that also contains information on nativity and citizenship. Thus, we can build nationally representative series on incarceration *by birthplace* starting in 1850. An alternative approach would be to use arrest data, but these data typically do not include any information on immigrant status or birthplace. Moreover, these data are collected at the local level, thus making it impossible to build long-run, nationally representative series. Finally, arrest data typically include relatively minor offenses (e.g., parole violations), which may be more subject to the bias of law enforcement officials (see, e.g., Lang and Spitzer 2020). Because incarceration typically relies on obtaining a criminal conviction, it is a better proxy for serious criminal offending.<sup>15</sup>

The main concern with using incarceration rates to study immigrant-US-born differences in criminal activity is that, for a given level of underlying offending, immigrants' incarceration probabilities might differ from those of the US-born. For example, some immigrants who commit crimes may be deported right away and thus might not be present in Census data, thereby understating immigrants' true level of criminality (especially in the more recent period). However, this explanation is unlikely to be driving the relative decline in immigrants' incarceration that we

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<sup>14</sup> Authors' calculations using the 2000 Census Summary File 1 API and the 2019 ACS Table S2603. For the 2000 data, we calculate the number of men aged 18–64 who are in a correctional institution as a share of the institutionalized population. For the 2019 data, we calculate the share of men and women aged 18–44 in a correctional institution as a share of the institutionalized population (which includes adult correctional, nursing, and juvenile facilities).

<sup>15</sup> 70% of incarcerated individuals are in state or federal prisons, both of which require a criminal conviction, and among state prisoners, 70% are sentenced for violent or property crimes (Beck and Harrison 2001). In contrast, only 16% of arrests are for violent or property crimes (Federal Bureau of Investigation Crime in the U.S. trends).

document. We find similar patterns when we restrict the comparison to *citizen* immigrants (who cannot be deported). The relative decline in immigrants' incarceration also appears decades before the recent rise in deportations.<sup>16</sup> If anything, we show below that the rise in immigrant detentions in federal immigration facilities, often for low-level or civil offenses, may be *overstating* immigrants' incarceration rates.

Additionally, incarceration rates may not reflect true differences in criminal behavior if aspects of the criminal justice system are biased toward or against immigrants. These biases are unlikely to explain immigrants' relative decline in incarceration. First, prior work shows that noncitizens tend to receive *longer* prison sentences than citizens for comparable crimes (Light et al. Forthcoming). Furthermore, existing evidence shows that the modern criminal justice system is biased against Hispanics (see, e.g., Goncalves and Mello 2021, Tuttle 2023), which would also tend to inflate immigrants' incarceration rates. Thus, unless the criminal justice system has become substantially *less* biased toward immigrants, and indeed now favors immigrants over US-born *white* individuals (our main point of reference), it is unlikely that such biases can explain the relative decline in immigrants' incarceration rates.

## 2. The Evolution of the Immigrant-US-Born Incarceration Gap from 1850 through 2020

We start by plotting the incarceration rates of immigrants and white US-born men from 1850 through 2020. Panel (a) of Figure 1 shows that immigrants as a group had higher incarceration rates in the 1850–1870 period, similar incarceration rates from 1880 to 1960, and are *less* likely to be incarcerated today. Taken together, these trends suggest that immigrants have had similar or lower incarceration rates than white US-born men for the last 140 years of American history. Before 1920, both immigrants and the US-born had incarceration rates between 200 and 400 per 100,000 individuals. In the first part of the period (1850–1870), immigrants had higher rates of incarceration than US-born white men, but this initial difference was mostly erased by 1880. Between 1920 and 1930, the incarceration rates for both groups nearly doubled, but rose more

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<sup>16</sup> A related concern is that incarceration rates might understate immigrants' criminality in recent decades if unauthorized immigrants are less likely to report crimes due to fear of deportation (Comino et al. 2020, Jácome 2022). Yet, we see the relative decline among immigrants from all sending regions (with significantly different shares of unauthorized populations), among citizen migrants (who cannot be deported), and many decades prior to the rise in deportations.

rapidly for the US-born, so that for the first time, immigrants began to have significantly lower likelihoods of being incarcerated. The immigrant-US-born gap then began to widen in 1960, as immigrants' incarceration rate dipped to around 300 per 100,000, whereas the incarceration rate of the US-born remained around 500. After 1980, incarceration rates rose dramatically for both immigrants and the US-born, but the gap between the two groups remained relatively constant (with a difference in the incarceration rate of around 200, indicating that immigrants were between 15 and 30% less likely to be incarcerated). Figure A5 shows that this difference is even larger when we compare immigrants to all US-born men (immigrants are 50–60% less likely to be incarcerated), but the overall trends in the immigrant-US-born incarceration gap are unchanged.

The remaining panels of Figure 1 compare the incarceration rates of white US-born men to those of immigrants from different country-of-origin groups. We split immigrants into five mutually exclusive groups with large enough numbers in the population to be followed both historically and today: immigrants hailing from Northern and Western Europe (considered to be the “old immigrant stock” historically), those coming from Southern or Eastern Europe (the “new” immigrants historically), immigrants from China, immigrants from Mexico and Central America, and immigrants from the “rest of the world” (i.e., those not included in the previous four groups).<sup>17</sup> Figure A3 displays the share of immigrants in each of these five groups by Census decade.

Figure 1 shows that the relative decline in immigrants' incarceration rates starting in the 1960s has occurred among immigrants from all country-of-origin groups. Immigrants from groups with historically similar incarceration rates (the “old” and “new” Europeans and those from the “rest of the world”) have become less likely to be incarcerated relative to white US-born men. Immigrants from countries with historically higher incarceration than the US-born have either fully reversed the gap (Chinese immigrants) or significantly reduced the gap (Mexican and Central American immigrants). Figure A4 shows a similar pattern when comparing immigrants to all US-born men rather than just white men. In that case, all immigrant groups, including Mexican and Central American immigrants, are less likely to be incarcerated today.

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<sup>17</sup> Prior to 1950, immigrants from the “rest of the world” constituted 10–13% of all immigrants and came primarily from Canada, Japan, and the Caribbean. In the modern period, immigrants in this group constitute 40–45% of all immigrants and come from the Caribbean, from other countries in South America and Asia, and from Africa and the Middle East.

In the Online Appendix, we show that the decline in immigrants' relative incarceration rates is robust to: (1) alternative measures of incarceration in the historical period (Figure A6)<sup>18</sup> and (2) alternative sample definitions (i.e., changing the age restrictions, including women or Black Americans in the analysis; Figures A7, A8, and A9). Figure A10 illustrates the importance of using *full-count* data in the historical period: incarceration gaps can be noisy or even be the wrong sign in certain years for immigrant subgroups when using only sub-samples of the Census.

### **3. Explanations for the Relative Decline in Immigrants' Incarceration**

#### **a. Changes in Immigrant Characteristics**

A first potential explanation for the decline in immigrants' relative incarceration rates is that their observable characteristics (such as their age distribution) might have changed in ways that make them less likely to be incarcerated than the US-born.

Figure 2 compares the incarceration propensities of immigrants to observationally similar white US-born men. The goal of this exercise is simply to assess the extent to which the differences in incarceration between immigrants and the US-born can be “accounted for” by differences in observable characteristics. Specifically, we use regressions to estimate the immigrant-US-born incarceration gap and we quantify how this gap changes once we add observable characteristics to the regression. To do so, we estimate (separately for each census year):

$$\text{Incarcerated}_{it} = \alpha + \beta_t \text{Immigrant}_{it} + X_{it} + \epsilon_{it}$$

where  $\text{Incarcerated}_{it}$  is an indicator variable that takes a value of one if individual  $i$  was incarcerated at the time of the Census  $t$ , and  $\text{Immigrant}_{it}$  is an indicator variable equal to one for foreign-born individuals. The term  $X_{it}$  reflects a set of individual-level controls: age fixed effects, marital status fixed effects, and education fixed effects (literacy prior to 1940 and educational

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<sup>18</sup> Figure A11 compares our Census-based incarceration measures to prison admissions data from Missouri for the late 19th and early 20th centuries; the figure shows that although the levels do not correspond (one measure is a stock and the other is a flow), the two data sources tend to agree on the direction of the immigrant-US-born incarceration gap for the 1860–1920 period. Figure A12 shows that immigrants' lower rates of admission to prison in Missouri is present for all types of crimes.

attainment from 1940 onward using three mutually exclusive categories: less than high school, high school completion, and any college or more).

Panel (a) in Figure 2 plots the incarceration gap in every year and shows how this gap changes as we account for differences in individual-level characteristics between immigrants and white US-born men. Here, a negative estimate implies that immigrants are *less* likely to be incarcerated than observationally similar US-born men. This figure shows that adjusting for the age distribution or marital status of individuals leaves estimated gaps mostly unchanged. However, accounting for differences in educational attainment significantly widens the incarceration gap, so that immigrants are even *less* likely to be incarcerated relative to white US-born men (a fact also noted by Butcher and Piehl (2007) for the 1980–2000 period). Put differently, immigrants today have lower incarceration rates than would be predicted given their education. Figure A13 shows very similar patterns when comparing immigrants to all US-born men regardless of race.

Panels (b)-(f) display analogous estimates for the five previously defined immigrant groups. For all groups except for Mexicans and Central Americans, accounting for individual-level characteristics tends to shrink the immigrant-US-born incarceration gap (although immigrants remain less likely to be incarcerated). This reduction in the incarceration gap is driven by accounting for educational differences: immigrants from these groups are on average more educated than the US-born in recent decades (and there is a negative association between education and incarceration). By contrast, adjusting for differences in education reverses the sign of the incarceration gap between immigrants from Mexico and Central America and the US-born. Once we compare Mexican and Central American immigrants (a group with relatively low levels of education) to white US-born men with similar levels of education, they are significantly *less* likely to be incarcerated in recent decades. Figure A14 shows that the gap is mainly driven by large differences in incarceration propensities among high school dropouts. Of course, immigrants and white US-born men who are high school dropouts may be quite different in terms of unobservable traits; however, insofar as criminal behavior is a function of labor market opportunities (Becker

1968), then this figure indicates that Mexican and Central American immigrants are significantly less likely to be incarcerated than men with comparable labor market prospects.<sup>19</sup>

Next, we consider whether migrants' location choices can help explain the modern immigrant-US-born incarceration gap. Immigrants tend to be more responsive to economic shocks in their migration decisions (see, e.g., Cadena and Kovak 2016; Basso and Peri 2020), and hence might have decided to reside in states with better economic opportunities or lower incarceration rates. Alternatively, immigrants may have concentrated in border states that faced more active policing or higher rates of criminal activity. Figure A16 shows limited support for this explanation: immigrants are still less likely to be incarcerated compared to white US-born men in their same state of residence. One caveat to this finding is that there may be differences in location choices *within* states between immigrants and white US-born men, which the inclusion of state-of-residence fixed effects would not capture. Although the vast majority of individuals convicted of crimes are incarcerated in their state of residence, we cannot control for geography below the state level because inmates can be incarcerated in correctional facilities far from their initial residential location.<sup>20</sup>

Finally, we rule out that the relative decline in immigrant incarceration is driven by changes in the country-of-origin mix of immigrants (Figure A17) or increases in the share of immigrants that are recent arrivals (who may not have had sufficient time to commit a crime or be incarcerated; Figure A18).

Taking stock, we conclude that changes in migrants' observable characteristics cannot explain the modern-day differences in incarceration rates between immigrants and US-born white men. If anything, once we account for these characteristics, the difference between immigrants and the US-born becomes even more stark.

## b. Changes in Immigration Policies: Deportations and Detentions

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<sup>19</sup> Figure A15 plots the average immigrant-US-born income gap by educational group starting in 1940, showing that low-educated immigrants tend to have lower incomes than low-educated white US-born men.

<sup>20</sup> This assumption may not be true for those incarcerated for federal offenses because individuals might be sent to federal prisons outside of their state of residence. Nevertheless, the share of inmates in federal prisons is generally small (5–7% of incarcerated individuals in 1990 and 2000; Beck and Harrison 2001).

The number of immigrant deportations from the US began rising in the 1990s and reached record-high numbers around 2010 (Figure A19 displays the number of removals between 1892 and 2018 using statistics from the Department of Homeland Security [DHS]). This increase was largely the result of partnerships between local and federal law enforcement officials (the 287(g) and Secure Communities programs) and the creation of the Immigration and Customs Enforcement (ICE) agency.<sup>21</sup>

Increased deportations may have affected immigrants' incarceration rates in two main ways. First, surges in deportations increase the expected cost of committing a crime for non-citizens: these migrants can expect to serve a period of incarceration in the US *and* then may face deportation to their country of origin after serving their sentence (the so-called "double penalty"). In this case, rising deportation risk would lower rates of criminal activity in immigrant communities. Second, if immigrants who commit crimes are simply deported without serving their sentence, then we might (erroneously) find in the US data that immigrants are less likely to be incarcerated — because immigrant offenders are removed from the data via deportation — even if they committed as many or more crimes than the US-born prior to deportation. We discuss and rule out each of these possibilities in turn.

First, if the relative decline in immigrants' incarceration rates was driven by fears of facing the "double penalty," we would not expect to see this decline for immigrants who hold US citizenship and thus cannot be deported. Figure 3 (panel (a)) shows that if anything, the relative decline in immigrants' incarceration rates is *more pronounced* when we focus on immigrants who are US citizens.<sup>22</sup> Moreover, panel (b) shows that non-citizen immigrants are *more* likely to be

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<sup>21</sup> In recent decades, policies have been introduced to increase the enforcement of federal immigration law at the state and local levels (Watson and Thompson 2022). 287(g) agreements trained local law enforcement officials to serve as immigration agents. The Secure Communities program increased information sharing between local and federal law enforcement: when individuals are arrested, their fingerprints are forwarded to DHS, so that this agency can determine if an individual is in violation of immigration laws. By enforcing federal immigration laws at the local level, these programs have increased the number of immigrant detentions and deportations nationwide.

<sup>22</sup> Citizen immigrants could also be affected by the "double penalty" if they have relatives or friends who are subject to deportation risk, thus making them hesitant to interact with law enforcement to protect their loved ones (roughly 18% of low-educated Hispanic citizens live in households that have members with different citizenship statuses; Alsan and Yang 2019). Nevertheless, most citizen immigrants do not live in mixed-status households, making it unlikely that the "double penalty" can explain the relative decline in citizen immigrants' incarceration.

incarcerated than observably similar citizen migrants from their same country-of-origin group, which is again not consistent with the “double penalty” story.

Second, the relative decline in immigrants’ incarceration rates is unlikely to be mechanically driven by deportations. First, immigrants who have been convicted of a crime are typically deported *after* serving their sentence and immigrants may not have access to benefits that tend to shorten incarceration spells for citizens (such as posting bail or participating in diversion programs; Watson and Thompson 2022).<sup>23</sup> Furthermore, the difference in incarceration rates between immigrants and US-born men emerged by 1960, before the rise in mass deportations in the 2000s (specific mass deportation events like the 1954 Operation Wetback were limited to particular years). Finally, more than 90% of individuals who are deported today are Mexican and Central American (Watson and Thompson 2022). Yet, the immigrant-US-born incarceration gap has widened for immigrants from all regions.

In addition to the large increase in immigrant deportations, there has also been a recent rise in immigrant detentions for immigration-related violations. This surge in detentions, however, would bias us *against* finding a decline in immigrants’ incarceration rates. Put differently, if immigrants are held in detention facilities due to immigration violations (e.g., overstaying their visa), they would likely be counted as “incarcerated” by our metric. Hence, the rise in detentions would tend to inflate immigrants’ (and especially Mexican and Central American immigrants’) incarceration rates.

Indeed, Figure A20 shows that if we exclude from the sample the 17 Public Use Microdata Areas (PUMAs) or county groups containing ICE contract detention facilities or service processing centers (out of more than 1,000 total areas), then the incarceration gap between Mexican and

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<sup>23</sup> Immigration law states that “the Attorney General may not remove an alien who is sentenced to imprisonment until the alien is released from imprisonment” (8 U.S.C. sec. 1231[a][4][A]). Even though non-citizen immigrants are expected to serve their full sentences in the US prior to being deported, a concern might be that some of them were deported earlier and thus would not be included in our incarceration data (making us underestimate immigrants’ crime rates). To assess this possibility, we use data from the Department of Homeland Security on the number of deported individuals who had a previous serious criminal conviction (that is, the group of individuals who could have plausibly remained incarcerated had they not been deported, representing around 15% of all deported individuals in recent years). Unfortunately, the data do not allow us to restrict this number to men ages 18-40, so we are likely overestimating the number of deported individuals in our target population. Yet, even under the extreme assumption that half of these individuals would have remained in prison rather than being deported, immigrants’ incarceration rates would still be lower than those of US-born white men.

Central American immigrants and white US-born men shrinks in magnitude, eliminating this group's higher rates of incarceration for most years between 2005 and 2019 (even before accounting for differences in education and other individual-level attributes).<sup>24</sup> These patterns suggest that, if anything, immigrant detentions are overstating the degree to which immigrants, especially Mexican and Central American immigrants, engage in serious criminal behavior.

### c. Structural Changes Disproportionately Affecting White US-born Men

After ruling out changes in immigrant characteristics or immigration policy as explanations for the immigrant-US-born incarceration gap, we turn to structural changes in the economy that have affected less-educated men (the group that accounts for most of the recent increase in incarceration). Numerous studies have shown that less-educated men have experienced a deterioration in outcomes including employment, family formation, incarceration, and health (Abraham and Kearney 2018, Binder and Bound 2019, Coile and Duggan 2019, Case and Deaton 2020). This deterioration has been attributed, in part, to declines in labor demand from globalization (see, e.g., Autor, Dorn, and Hanson 2013) and skill-biased technological change (see, e.g., Acemoglu and Autor 2011), among other forces.

In light of these trends, a potential explanation for the relative decline in immigrant incarceration may be that immigrants have remained relatively shielded from the structural forces that negatively affected their US-born counterparts, either because immigrants were not affected by these shocks or because they were better able to withstand them. If this were the case, then the divergence that we document with respect to incarceration among less-educated men should also be present when considering other outcomes.

Figure 4 confirms that low-educated immigrants and white US-born men have indeed diverged along several dimensions beyond incarceration since the 1960s, particularly for high school

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<sup>24</sup> Excluding these areas does not change the immigrant-US-born gap in the years prior to the creation of ICE, which suggests that the change in the immigrant-US-born gap starting in 2005 after excluding these areas stems from not counting immigrants in ICE facilities as incarcerated. Moreover, individuals detained for immigration violations can also be detained in other facilities, like local jails; excluding these 17 areas is thus a conservative approach for assessing the overall role of immigrant detentions. We refer the reader to the Data Appendix for further details on excluded detention facilities.

dropouts.<sup>25</sup> Panel (a) plots the incarceration rates for lower-educated groups, confirming large immigrant-US-born incarceration gaps starting in 1960, especially among men without a high school degree (a group in which immigrants are over-represented). Next, panels (b) and (c) show that there has also been a divergence since 1960 in the degree of attachment to the labor force: among men without a high school degree, immigrants are 25 percentage points more likely to be employed than their US-born counterparts today. Hence, the declining economic prospects of lower-educated men appear to be concentrated among the US-born and have not affected immigrants to the same extent.

Panels (d) and (e) show that low-educated immigrants and white US-born men have also diverged with respect to family formation, including the likelihood of being married and the likelihood of living with children. Again, we find that low-educated immigrants and white US-born men were comparable prior to 1960 and then began to diverge, with low-educated immigrants now being significantly more likely to be married and to be living with children. This divergence has been mostly driven by the US-born decreasing the probability of marriage and of living with children rather than by increases among immigrants, suggesting that the pattern is not being driven by family reunification rules in the immigration system.

Finally, panel (f) uses data from the General Social Survey (GSS) to plot differences in self-reported health status between low-educated white US-born men and immigrants. The figure shows that in 1980, the proportion of white US-born men without a high school degree who reported having “excellent” or “good” health (as opposed to “fair” or “poor”) was about 65%, 6 percentage points below the corresponding proportion among immigrants. Today, the gap is closer to 20 percentage points.

Of course, the outcomes in this subsection are correlated with each other and the direction of causality is not obvious. On the one hand, worse employment prospects (Gould et al. 2002, Britto et al. 2022), lower marriage rates (Dustmann and Ladersø 2021, Massenkoff and Rose 2022), and lower rates of parenthood (Sampson et al. 2006) may all contribute to a higher likelihood of

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<sup>25</sup> All of the figures in this section start in 1940 because this is the first Census that records an individual’s educational attainment. Appendix Figures A21 and A22 show analogous figures for men regardless of educational attainment and for low-educated women.

incarceration. On the other hand, higher incarceration rates among low-educated US-born men may have negatively impacted their labor market outcomes (Agan and Starr 2018, Dobbie et al. 2018) and their family formation (Charles and Luoh 2010). Regardless of the direction of causality, the patterns in this figure highlight that incarceration is part of a broader divergence of outcomes between less-educated immigrants and their US-born counterparts.

Why have less-educated immigrants remained relatively insulated from the structural forces that affected low-educated US-born men? Our data does not allow us to pinpoint precise reasons, but we offer two possible explanations. First, lower-educated immigrants have specialized in manual, non-routine occupations, which are often located at the bottom of the wage distribution (Peri and Sparber 2009). Hence, immigrants were relatively shielded from the “hollowing out” of the middle of the wage distribution that took place in recent decades (i.e., the polarization of the labor market; Autor et al. 2006, 2008).<sup>26</sup> Second, low-educated immigrants are a self-selected group of individuals that likely differs from their US-born counterparts in their unobservable characteristics such as their risk aversion (Jaeger et al. 2010) or their adaptability and cognitive ability (Bütikofer and Peri 2021). Immigrants have revealed that they are willing to travel long distances for economic opportunity, a trait which is consistent with recent work showing that immigrants are relatively more entrepreneurial than non-foreign-born individuals (Azoulay et al. 2022).<sup>27</sup> Such characteristics may have helped immigrants to weather the negative shocks that affected less-educated US-born men.<sup>28</sup>

#### 4. Conclusion

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<sup>26</sup> In contrast, consistent with Autor et al. (2023), Figure A23 shows that immigrants were equally likely to be concentrated in the declining manufacturing sector.

<sup>27</sup> Prior work (Amior 2020, Basso and Peri 2020, Cadena and Kovak 2016) has documented that immigrants have greater migration responsiveness to economic conditions. Nevertheless, we note that, as with incarceration, differences in residential locations cannot explain the gaps between lower-educated immigrants and their US-born counterparts. Figures A24 and A25 show that labor market and family formation gaps between low-educated immigrants and white US-born men are remarkably stable after accounting for granular geographic (i.e., county and PUMA) fixed effects.

<sup>28</sup> Additional appendix figures consider and rule out other reasons for immigrants being relatively less affected by these forces. Figure A26 shows that low-educated *citizen* immigrants also have significantly higher employment and labor force participation rates than white US-born men, making it unlikely that differences in the availability of social insurance (e.g., disability benefits) can explain the widening of the gap. We also do not find any evidence to suggest that differences in the likelihood of committing drug-related offenses can explain the immigrant-US-born incarceration gap (Figure A27).

We provide the first nationally representative series of immigrant-US-born incarceration gaps since 1850 until present day. We begin by documenting three main facts: First, as a group, immigrants had similar or lower incarceration rates than the US born in the past (1880–1940). Second, since 1960, there has been a widening in the immigrant-US-born incarceration gap in favor of immigrants, with recent waves of immigrants being 30% less likely to be incarcerated than white US-born men. The one exception is Mexican and Central American immigrants who remain more likely to be incarcerated relative to white US-born men today, but who have far lower incarceration rates than white US-born men with comparable educational attainment. Finally, the relative decline in incarceration for the foreign born has occurred among immigrants from all major countries of origin.

Why are immigrants less likely to be incarcerated than white US-born men today? We argue that the widening of the immigrant-US-born incarceration gap most likely cannot be explained via changes in criminal justice and immigration policies. Instead, it likely reflects deeper and more fundamental structural forces disproportionately affecting low-educated US-born men (and not their immigrant counterparts) in the past half century. Although this paper has briefly considered a few potential reasons for this difference, future work might further explore immigrants' abilities to insulate themselves from these forces since the 1960s, and how the relatively better outcomes among low-educated first-generation immigrants are connected to the higher levels of upward mobility that we see for the children of immigrants today (Abramitzky et al. 2021).

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## **Additional Detail on Data Sources**

### **Data Sources: Census and ACS**

We combine the full-count decennial Censuses between 1850 and 1940 (excluding 1890) with the largest available subsample of each Census between 1950 and 2000 and the American Community Survey for the more recent period. We recover the full-count decennial Censuses from the IPUMS datasets in the NBER server (Ruggles et al. 2021) and the Census subsamples and the ACS from the IPUMS website (Ruggles et al. 2022). In particular, we use the following:

- 1850, 1860, 1870, 1880, 1900, 1910, 1920, 1930, and 1940 full-count decennial Censuses.<sup>29</sup> The 1850 and 1860 Censuses only list the free (mostly white) population individually.
- 1950 1% weighted sample
- 1960 5% unweighted (flat) sample
- 1970 pooled 1% FORM 1 unweighted state, metro and neighborhood samples. Form 1 compiles a set of variables that were asked to 5% of the population, which is included in these samples
- 1980 5% unweighted (flat) state sample
- 1990 5% weighted state sample
- 2000 5% weighted state sample
- 2005–2019 annual ACS weighted sample corresponding to 1% of the population in each year
- 2008–2012 5-year ACS weighted sample corresponding to 5% of the population
- 2015–2019 5-year ACS weighted sample corresponding to 5% of the population

We also collect historical subsamples from IPUMS for robustness exercises:

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<sup>29</sup> For 1850–1940, we use the full-count Census files located in the following directory of the NBER server: /home/data/census-ipums/v2021/dta/. For 1940, we use the file located in /homes/data/cens1940/20180316/100files/ to produce alternative measures of incarceration (i.e., our “GQ” and “Relate” measures, as described in this appendix).

- 1850 1% unweighted (flat) sample of the free population
- 1860 1% unweighted (flat) sample of the free population
- 1870 1% unweighted (flat) sample
- 1880 10% weighted sample
- 1900 5% unweighted (flat) sample
- 1910 1% unweighted (flat) sample
- 1920 1% unweighted (flat) sample
- 1930 5% unweighted (flat) sample
- 1940 1% weighted sample

We use annual ACS samples to plot incarceration rates and five-year samples to estimate differences in incarceration between immigrants and the US-born. We do not pool annual and five-year samples for the same analysis.

Our baseline results restrict the sample to men ages 18–40. Given its small sample size, we exclude the 1950 Census from results that split immigrants by country-of-origin group. Throughout the analysis, we utilize person weights provided by IPUMS.

### **Defining US-born, immigrants, and country groups**

We define immigrants as individuals who were not born in any US state or outlying US area or territory. The US-born includes every individual not coded as an immigrant under this definition. Following Butcher and Piehl (2007), we exclude from the sample individuals born in outlying areas of the United States as well as those born abroad to US citizens.

We define the following five countries-of-origin groups for immigrants:

- “Old Europeans”: individuals born in the countries that belong to Northern and Western Europe including Germany (IPUMS codes 400–429 and 453).
- “New Europeans”: individuals born in the countries that belong to Southern Europe, Central/Eastern Europe, and the former USSR (IPUMS codes 430–499 excluding 453).
- Individuals born in China.

- Individuals born in Mexico and Central America.
- “Rest of the World”: individuals born in other countries in Asia, Africa, Oceania, the Caribbean, and South America. See Table A2 for the most common countries in the “rest of the world” group between 1880 and 2019.

## **Measuring Incarceration**

### *Full-count censuses*

Incarceration can in principle be measured in the full-count data using the “group quarters” and “group quarter type” variables available from the Census. Prisoners are defined as those who reside in institutional and other group quarters and whose group quarter type corresponds to correctional institutions. Correctional institutions include federal and state correctional facilities, prisons, penitentiaries, military prisons, local correctional facilities, jails, school juvenile delinquents, reformatory, camp or chain gangs, and houses of correction.

However, these variables were not consistently coded to identify prisoners in the full-count Census data (see Eriksson 2020 for a discussion). Common issues with these variables involve individuals who were not incarcerated but were counted as such, individuals that were actually incarcerated but appeared in households, and individuals that lived in prisons but were not incarcerated (such as prison guards). An additional issue is the classification of individuals defined solely as inmates, who may not be incarcerated in a correctional facility (e.g., inmates who frequent or live in mental and elderly institutions or those in non-institutional group quarters).

To account for these issues, we construct our preferred incarceration measure for the full-count Census data using the following procedure:

1. For each individual in the data, we retrieve their “group quarters,” “group quarter type,” “relate,” and “occupation” variables (i.e., the code as well as the original strings as reported in the Census).
2. Next, we define individuals as incarcerated using information in the “relate” string variable if they meet *any* the following requirements:
  - a. *Explicit correctional string*: Individuals who have the following words and their spelling variations in the “relate” string variable: “Prisoner,” “Convict,” or “Jail.” At this step, we exclude individuals whose “relate” string variable conveys a relationship to “Prisoner,”

“Convict,” or “Jail,” such as “Daughter,” “Son,” “Wife,” “Head,” as well as “Guard,” “Jailer,” “Chief,” “Helper,” “Officer,” “Manager,” “Charge,” “Superintendent,” including their spelling variations. (i.e., we exclude an individual whose “relate” string variable is “Prisoner guard,” “Convict daughter,” etc.).

- b. *Inmate and explicit correctional institution string:* Individuals who have the following words and their spelling variations combined with the word “Inmate” in the “relate” string variable: “Prison,” “Jail,” “Penitentiary,” “Reformatory,” and “Correction.” We exclude individuals classified by the “group quarter type” variable as part of a mental institution, an institution for the elderly, handicapped, and poor, or a non-institutional group quarter. This avoids counting individuals who reside in these institutions as inmates, but for whom it is not clear that they are serving a criminal sentence.
  - c. *Inmate with missing information in the string variable:* Individuals who have the word “Inmate” (without any additional words) in the “relate” string variable or who have a missing value, an “X,” or a “\*” in the “relate” string variable. These individuals are classified as incarcerated if either:
    - i. their “group quarters” string variable contains the words “Prison,” “Jail,” “Penitentiary,” “Reformatory,” “Correction,” “Convict,” “Delinquent,” “Penal,” and other grammatical variations of these words; or
    - ii. their “group quarters type” variable code corresponds to a correctional institution when the relate string says “Inmate.” For individuals with missing values, “X,” or “\*” in the relate string variable, we additionally condition on whether the individual is an institutional inmate based on their “relate” variable code.
3. We follow the steps in (2) to classify individuals as incarcerated using the “occupation” string variable.
    - a. We follow the procedure in (2.a) (i.e., an individual is identified as incarcerated if their occupation includes “Prisoner,” “Convict,” or “Jail.”). Because the “occupation” string does not convey familial relationships, we do not exclude any individuals in this step based on their relationship to household. However, we do exclude individuals if their occupation

denotes a potential non-prisoner occupation (“Guard,” “Jailer,” “Chief,” “Helper,” “Officer,” “Manager,” “Charge,” and “Superintendent”).

- b. We replicate step (2.b) exactly.
- c. We replicate step (2.c), but in addition to “Inmate,” “X,” and “\*,” we also include individuals in this step whose occupation string variable says “No Occupation,” “No,” “None,” “Without Occupation,” “Nothing,” or has a missing value.<sup>30</sup>

In our preferred measure of incarceration, we define an individual as incarcerated if they are classified as such in steps one through three.<sup>31</sup>

The 1850, 1860, and 1870 Censuses do not include the “relate” string variable. We classify individuals as incarcerated in these years using the “occupational” string variable (step 3). In addition, we include individuals as incarcerated if their “relate” variable code is “institutional inmate” and their “group quarter type” variable code corresponds to correctional institutions.

The 1910 Census does not identify group quarter types. In this case, we rely on our preferred measure to classify prisoners based on strings of the “relate” and “occupation” variables that clearly identify individuals as prisoners (as in step 2.a). However, due to the lack of the “group quarter” string variable and the “group quarter type” variable, we are unable to implement steps 2.b, 2.c., 3.b, and 3.c.

For robustness checks, we also construct two alternative measures of incarceration, which we refer to as the “GQ measure” and the “relate measure.” The “GQ measure” refers to individuals who reside in institutional and other group quarters and whose group quarter type corresponds to correctional institutions (without any additional modifications). The “relate measure” refers to individuals who satisfy the “GQ measure” and either steps (2.a) or (2.b). In the “relate measure,”

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<sup>30</sup> To be conservative, when an individual is classified as incarcerated using missing information under the relate string (step 2c), but not under the occupation string (step 3c), we only identify an individual as incarcerated if they are classified as institutional inmates in their “relate” variable code or if their “relate” variable string is the word “Inmate.”

<sup>31</sup> The 1940 Census presents a comparability issue among large households. According to IPUMS: “Before 1940 and in 1980–1990, units with 10 or more individuals unrelated to the householder are considered group quarters.” We adjust our “preferred” measure in 1940 to include individuals whose “relate” variable string says “Inmate” (in cases where the “group quarters” variable code is “Other Group Quarters” and the “group quarter type” variable code indicates a “Non-group quarter household”). For more details, see [https://usa.ipums.org/usa-action/variables/GQ#comparability\\_section](https://usa.ipums.org/usa-action/variables/GQ#comparability_section).

we exclude individuals who appear to be incarcerated via the “GQ measure,” but who are coded as family members of the household head in their “relate” variable code.

#### *Census subsamples and ACS*

Between 1950 and 1980, we define prisoners as those who belong to institutional and other group quarters and whose group quarter type corresponds to correctional institutions (analogous to the GQ measure described above). For 1910, group quarter types were imputed by IPUMS. Between 1990 and 2019, the “group quarter” variables only allow us to identify institutionalized individuals, but not those who are institutionalized in adult correctional facilities. In this case, we identify incarcerated individuals as those who are classified as living in institutional group quarters.

### **Other variable definitions**

#### *Education*

We use the “education” variable in each sample to assign individuals into three educational groups: high school dropouts (i.e., those with no schooling up to those who completed grade 11), high school only (grade 12), and any college (1 or more years of college). These three groups comprise the educational fixed effects used in our analysis. This variable is defined starting with the 1940 Census.

#### *Marital status*

We use the “marital status” variable in each sample to assign individuals to three marital status groups: married (married, spouse present or absent); separated, divorced, or widowed; and never married/single. These three groups comprise the marital status fixed effects used in our analysis and we use the married category to construct marriage rates. This variable is defined for every year.

#### *Parenthood status*

We utilize the variable “NCHILD” available via IPUMS to calculate the share of men living with children of their own. This variable is defined for every year.

#### *Citizenship status*

This variable is not available in 1880 and 1960. In 1870, 1900, and 1910, citizenship status was defined for foreign-born men older than 20. From 1920 onwards, it was defined for all foreign-born individuals. Individuals born in any US state are classified as citizens in all of these samples.

### *ICE Facilities and Deportations Data*

We identify 18 Immigration and Customs Enforcement (ICE) contract detention facilities and service processing centers from the list provided in the 2022 ICE Detentions Statistics Appendix found in <https://www.ice.gov/detain/detention-management>. These are the detention facilities that are either owned by ICE or directly contracted with ICE.<sup>32</sup> In 2017, these type of facilities were 6% of the total number of facilities used for detention, and held approximately 28% of detainees.<sup>33</sup> We geolocate these facilities, identify their counties, and assign them to their corresponding time-varying PUMA in 1990 (1,726 total PUMAs), in 2006–2011 (2,069 total PUMAs), and 2012–2019 (2,351 total PUMAs) using the county-to-PUMA crosswalk geographic correspondence engine provided by the Missouri Census Data Center. For 1970 and 1980, we assign corresponding county groups by geolocating ICE facilities into shapefiles provided by IPUMS (309 and 1,154 county groups in 1970 and 1980, respectively). Two ICE facilities are located in the same area, so in practice, we exclude 17 areas in Figure A20.

To consider how the incarceration rate would change after including deportations, we use the 2006–2019 reports from the Department of Homeland Security on Immigration Enforcement Actions. We focus on removals of individuals with criminal histories for serious offenses (i.e., focusing on individuals convicted of serious crimes like assault and robbery, and excluding individuals with immigration-related offenses, traffic offenses, and unknown offenses).

### *Health*

We use data from the General Social Survey (GSS) to measure health outcomes. We focus on the 1977–2021 period, in which individuals can be classified as foreign-born. We group annual data into five-year bins (e.g., the 2000 point includes the 1998–2002 survey waves). We rely on the

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<sup>32</sup> See also <https://www.ice.gov/doclib/foia/media-requests/09foia5638detentionfacilitylist.xls>.

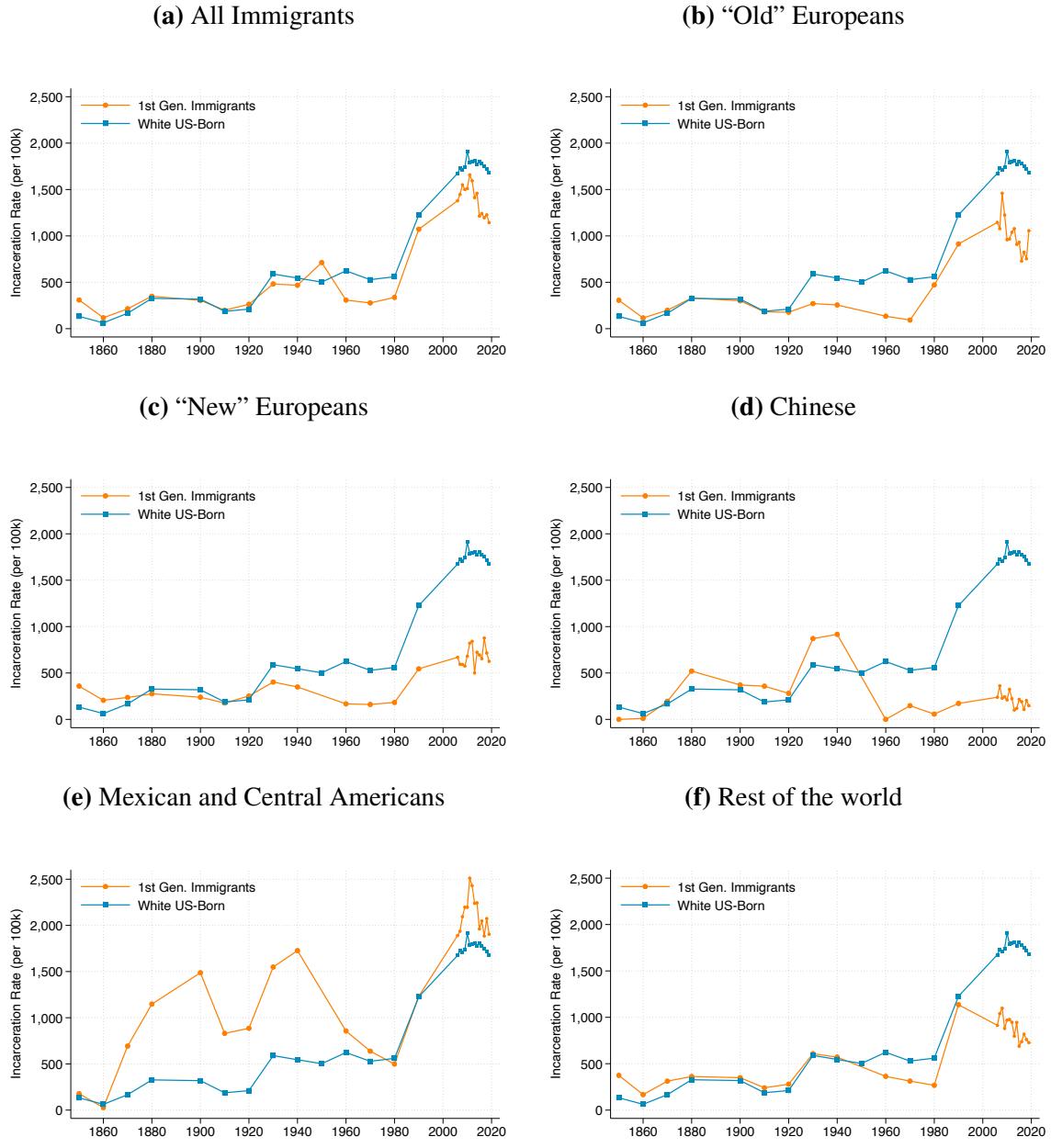
<sup>33</sup> “ICE Does Not Fully Use Contracting Tools to Hold Detention Facility Contractors Accountable for Failing to Meet Performance Standards.” Office of Inspector General, Department of Homeland Security. <https://www.oig.dhs.gov/sites/default/files/assets/2019-02/OIG-19-18-Jan19.pdf>.

“health” variable, identifying individuals who report an “excellent” or “good” health condition. Given small samples, we focus on men ages 18–65.

#### *Admissions for Drug-Related Offenses*

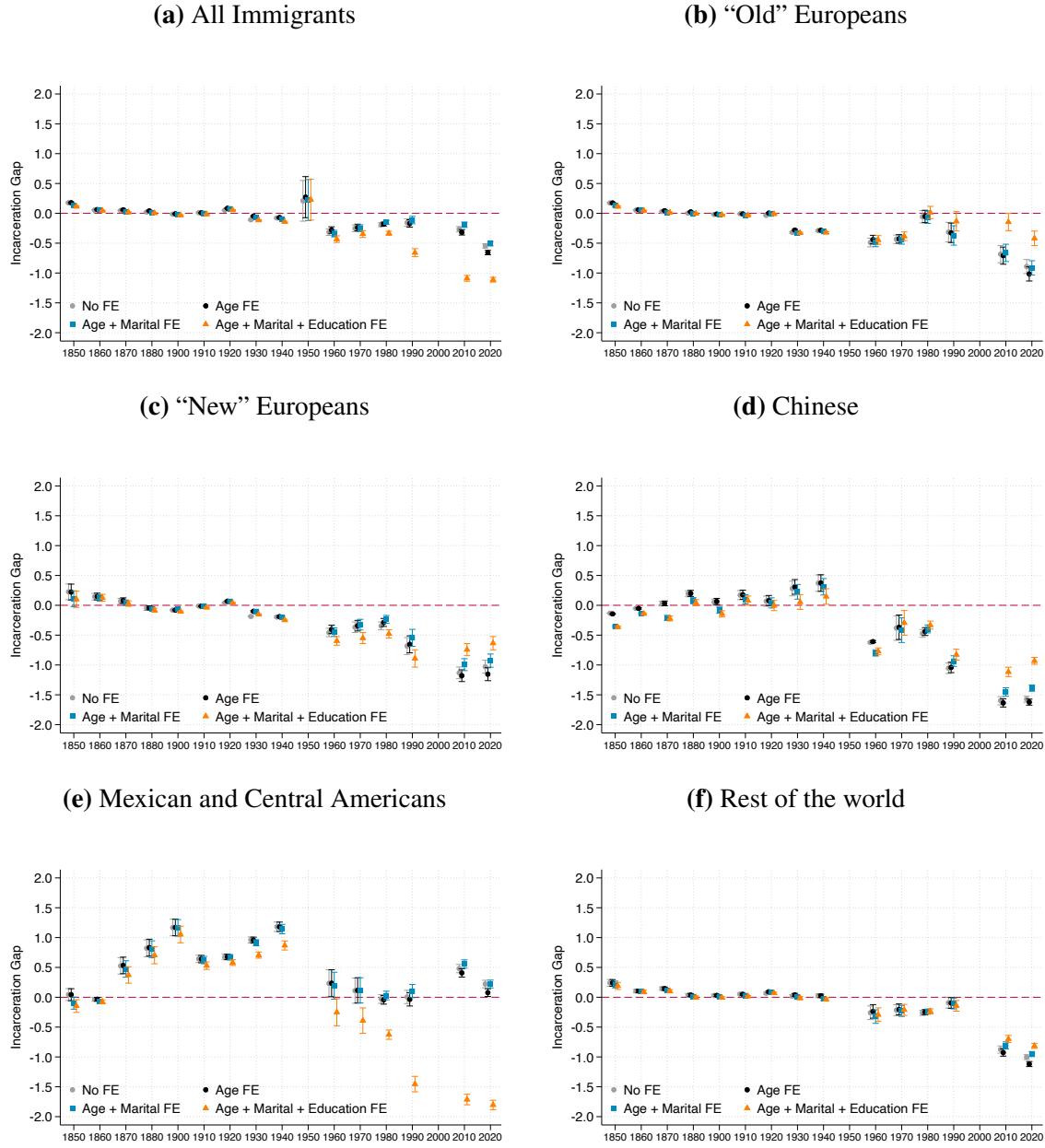
We use data from the National Corrections Reporting Program (NCRP; ICPSR 36404) between 1991 and 2010. We derive the stock of incarcerated individuals for each year by keeping all records of individuals admitted to prison before or during that calendar year who are released after that same year. We then sum the number of drug-related incarcerations in each state and year and compute average drug incarceration rates at the state level for the 1991–1993 and 2008–2010. To calculate incarceration rates, we use state population counts from the 1990 and 2010 Census.

**Figure 1: Incarceration Rates of Immigrants and White US-born Men, 1850–2019**



*Notes:* Each panel plots incarceration rates for immigrants and white US-born men between 1850 and 2019. Data are restricted to males aged 18–40. Data spanning 1850 to 1940 are from the full-count decennial Censuses. Data spanning 1950 to 1990 are from the largest available sub-sample from the corresponding decennial Censuses. Data from 2005 onward are from the annual American Community Surveys (ACS). Panel (a) compares white US-born men to all immigrants. Panels (b)–(f) compare white US-born men to immigrants from a particular country-of-origin group. “Old Europeans” are immigrants from countries in the North and West of Europe. “New Europeans” are immigrants from countries in Eastern and Southern Europe. The “Rest of the world” category includes immigrants from countries not included in panels (b)–(f). For more details, see the Online Appendix.

**Figure 2:** Difference in Incarceration Rates of Immigrants and White US-born Men, Adjusting for Individual-Level Characteristics, 1850–2019

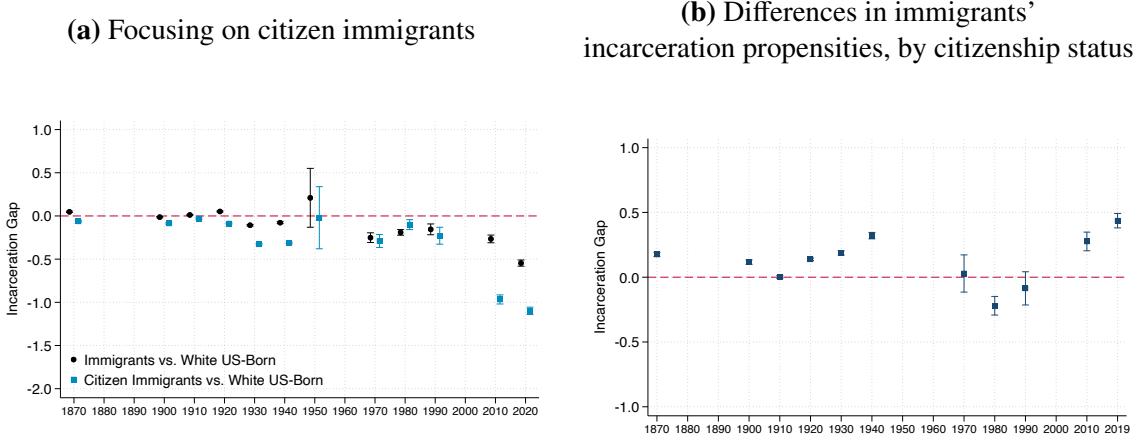


*Notes:* Each panel presents the estimated values of  $\beta_t$  from the following regression (estimated separately by Census year):

$$\text{Incarcerated}_{it} = \alpha + \beta_t \text{Immigrant}_{it} + \gamma X_{it} + \epsilon_{it}$$

where Incarcerated is an indicator that takes a value of one if individual  $i$  in year  $t$  is incarcerated and Immigrant is an indicator that takes a value of one if an individual is foreign-born. The vector  $X_{it}$  sequentially adds age, marital status, and education fixed effects. Education refers to literacy before 1940 and educational attainment starting in 1940 (HS dropout, HS graduate, any college). Data are restricted to males aged 18–40. Data spanning 1850 to 1940 are from the full-count decennial Censuses. Data spanning 1950 to 1990 are from the largest available sub-sample from the corresponding decennial Censuses. Data from 2005 onward are from the annual American Community Surveys (ACS). Panel (a) compares white US-born men to all immigrants. Panels (b)–(f) compare white US-born men to immigrants from a particular country-of-origin group. See Figure 1 and the Online Appendix for definitions of each country-of-origin group.

**Figure 3:** Differences in Incarceration Rates of Citizen and Non-Citizen Immigrants, 1870–2019

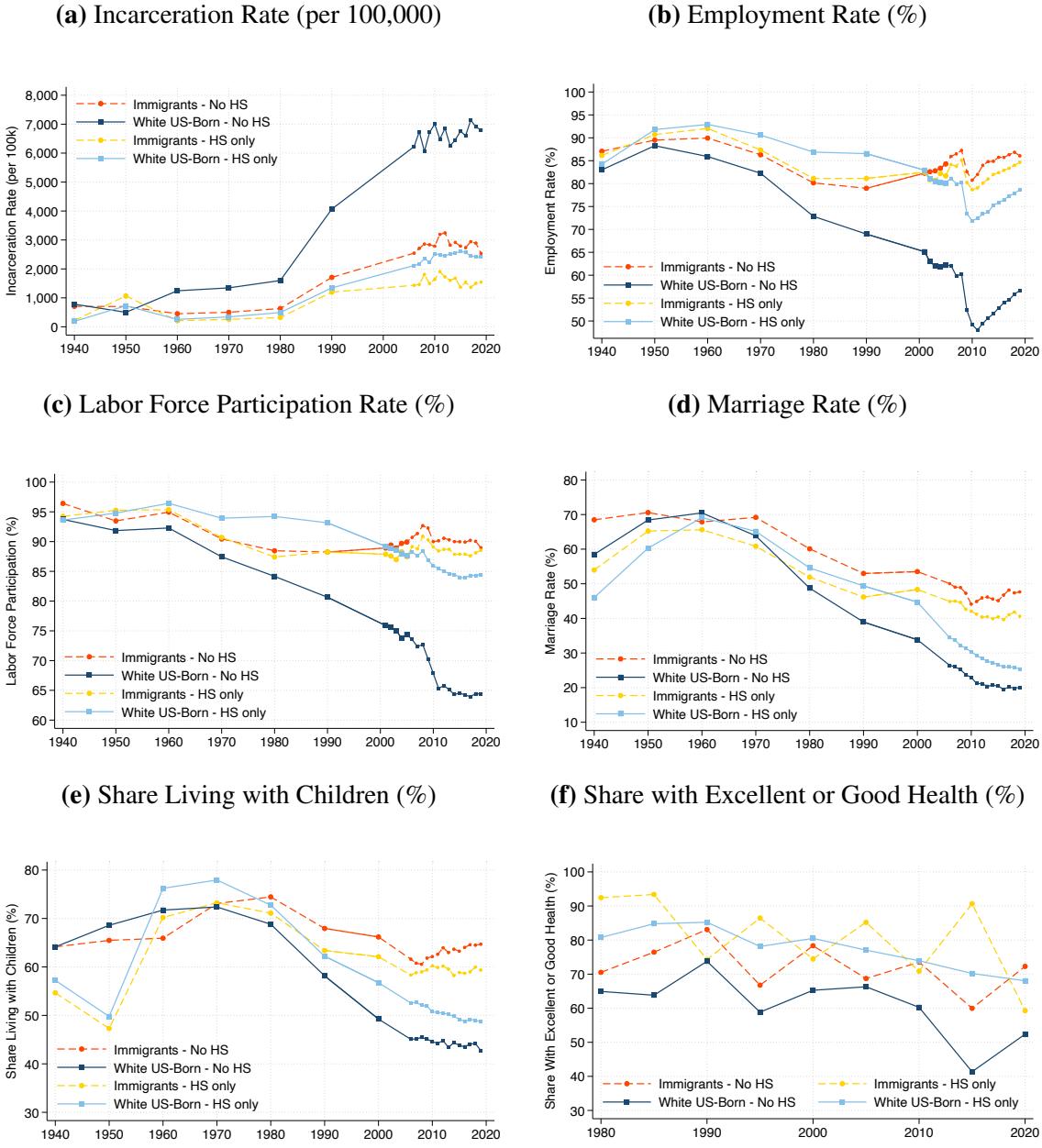


*Notes:* Panel (a) first reproduces the estimated incarceration gaps using the full sample (without any fixed effects, analogous to the first series in panel (a) of Figure 2), and then plots the incarceration gaps after restricting the sample of immigrants to those that are US citizens. Panel (b) plots the estimated values of  $\delta_t$  from the following regression (estimated separately by Census year) that only includes foreign-born individuals:

$$\text{Incarcerated}_{it} = \alpha + \delta_t \text{NonCitizen}_{it} + \gamma X_{it} + \epsilon_{it}$$

where  $\text{Incarcerated}_{it}$  is an indicator that takes a value of one if individual  $i$  in year  $t$  is incarcerated and  $\text{NonCitizen}_{it}$  is an indicator that takes a value of one if a foreign-born individual is not a citizen. The vector  $X_{it}$  includes age, marital status, education, and country-of-origin fixed effects. Data are restricted to males aged 18–40. Data spanning 1870 to 1940 are from the full-count decennial Censuses. Data spanning 1950 to 1990 are from the largest available sub-sample from the corresponding decennial Censuses. Data from 2005 onward are from the annual American Community Surveys (ACS). Data from 1880 and 1940–1960 are omitted because the Census did not include a citizenship question in those years.

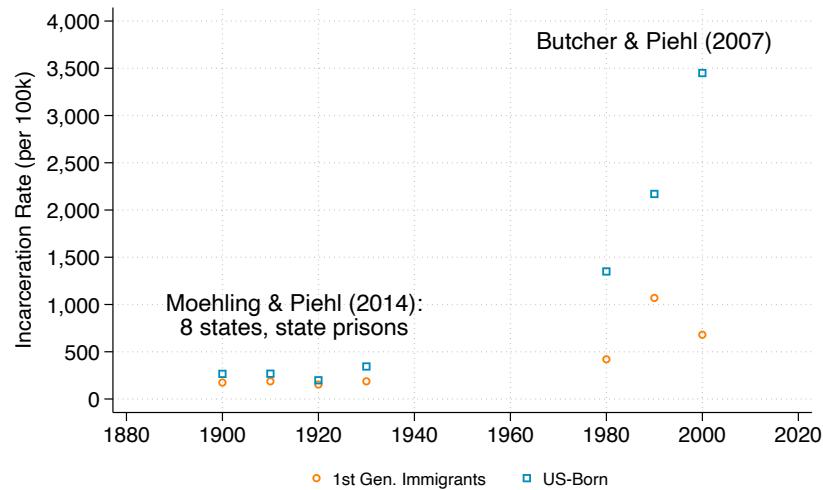
**Figure 4:** Incarceration, Labor Market, Family Formation, and Health Outcomes of Immigrants and White US-born Men Without Any College Education, 1940–2019



*Notes:* This figure plots the outcomes of immigrant and white US-born men by educational attainment between 1940 and 2019. Data in panels (a)-(d) are restricted to males aged 18–40. Data in panels (e) and (f) are restricted to males aged 30–50 and 18–65, respectively. Data in panels (a)–(e) spanning 1950 to 1990 are from the largest available sub-sample from the decennial Census. Data from 2000 onward are from the annual American Community Survey (ACS). Data in panel (f) come from the 1977–2020 General Social Survey (GSS) and plot the share of individuals who report being in excellent or good health. Each data point in this panel reflects information from various survey waves around that year. “No HS” refers to individuals with 11 or fewer years of schooling. “HS Only” refers to individuals with exactly 12 years of schooling. For more details, see the Online Appendix.

## A Appendix Figures and Tables

**Figure A1:** Existing Evidence on Immigrant and US-born Incarceration Rates



*Notes:* This figure plots historical incarceration rates of immigrants and US-born individuals from Moehling and Piehl (2014) as well as modern incarceration rates from Butcher and Piehl (2007). The historical incarceration rates are based on US-born and immigrant individuals aged 18-44 who were incarcerated in state correctional facilities in eight “high immigration states:” Massachusetts, Connecticut, New York, New Jersey, Pennsylvania, Illinois, Michigan, and California. The modern incarceration rates correspond to institutionalization rates among all US-born and immigrant men ages 18-40 from sub-samples of the decennial Censuses.

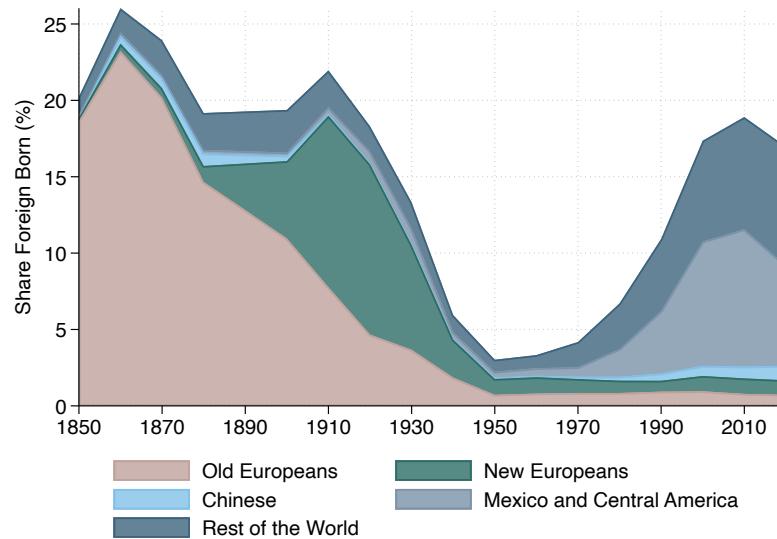
**Figure A2:** Example Record of Incarcerated Individuals in 1930 Census

m- of tily er is- ion	NAME  of each person whose <i>place of abode</i> on April 1, 1930, was in this family  Enter surname first, then the given name and middle initial, if any  Include every person living on April 1, 1930. Omit children born since April 1, 1930	RELATION  Relationship of this person to the head of the family		
			5	6
				7 Home owned or rented
	Hardy Frank W	inmate		
	Barrow Claude	inmate		
	Bowley Pat	inmate		
	Williams Travis	inmate		
	Cernett William L	inmate		

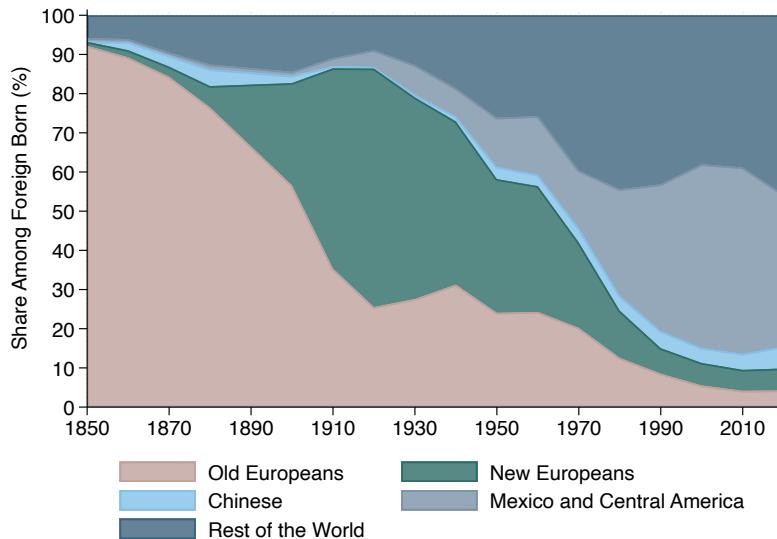
*Notes:* This figure shows an example record of incarcerated individuals in the 1930 population Census.

**Figure A3:** Immigrant Composition in the US, 1850-2019

(a) Within the US Population

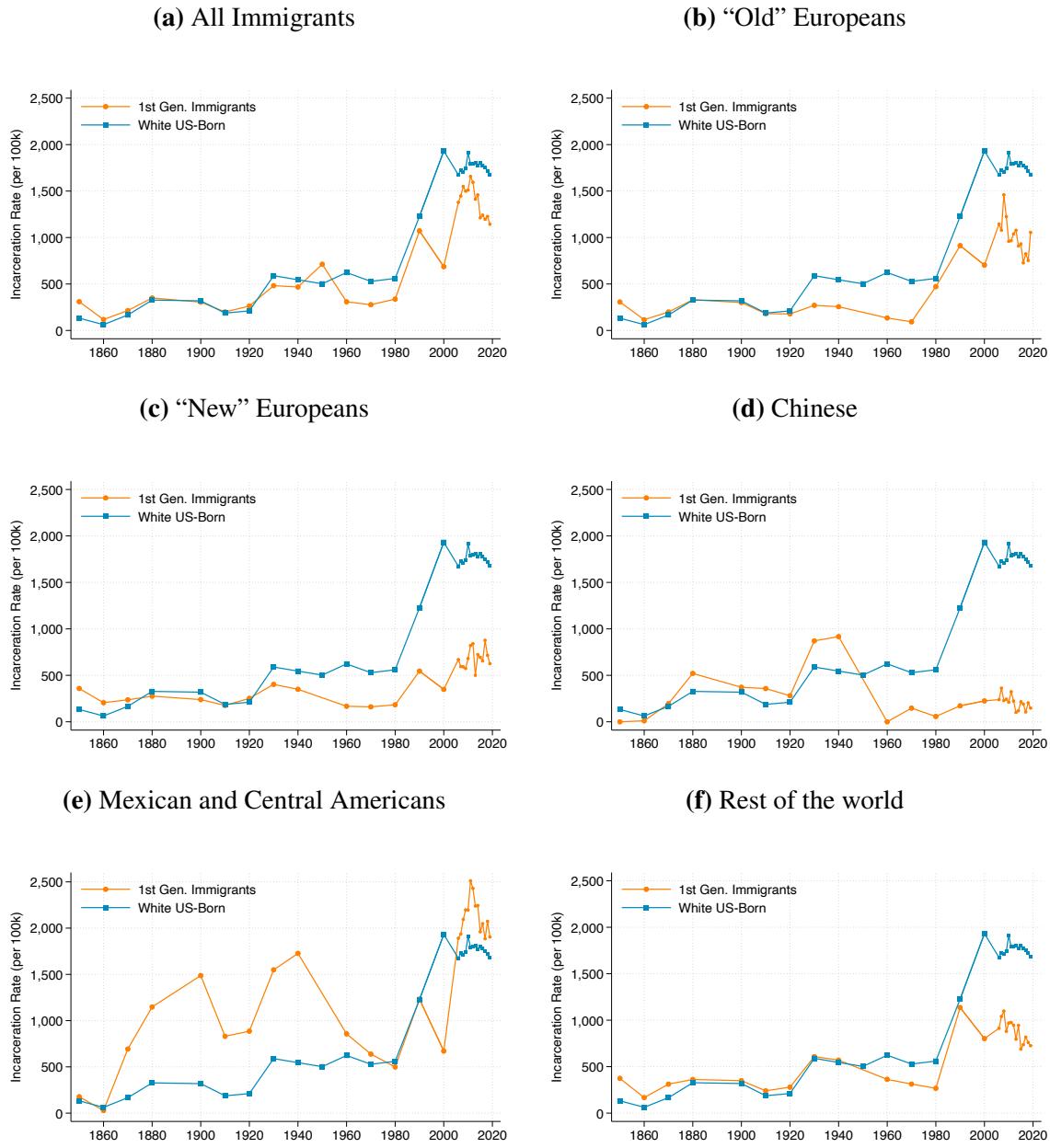


(b) Within the Immigrant Population



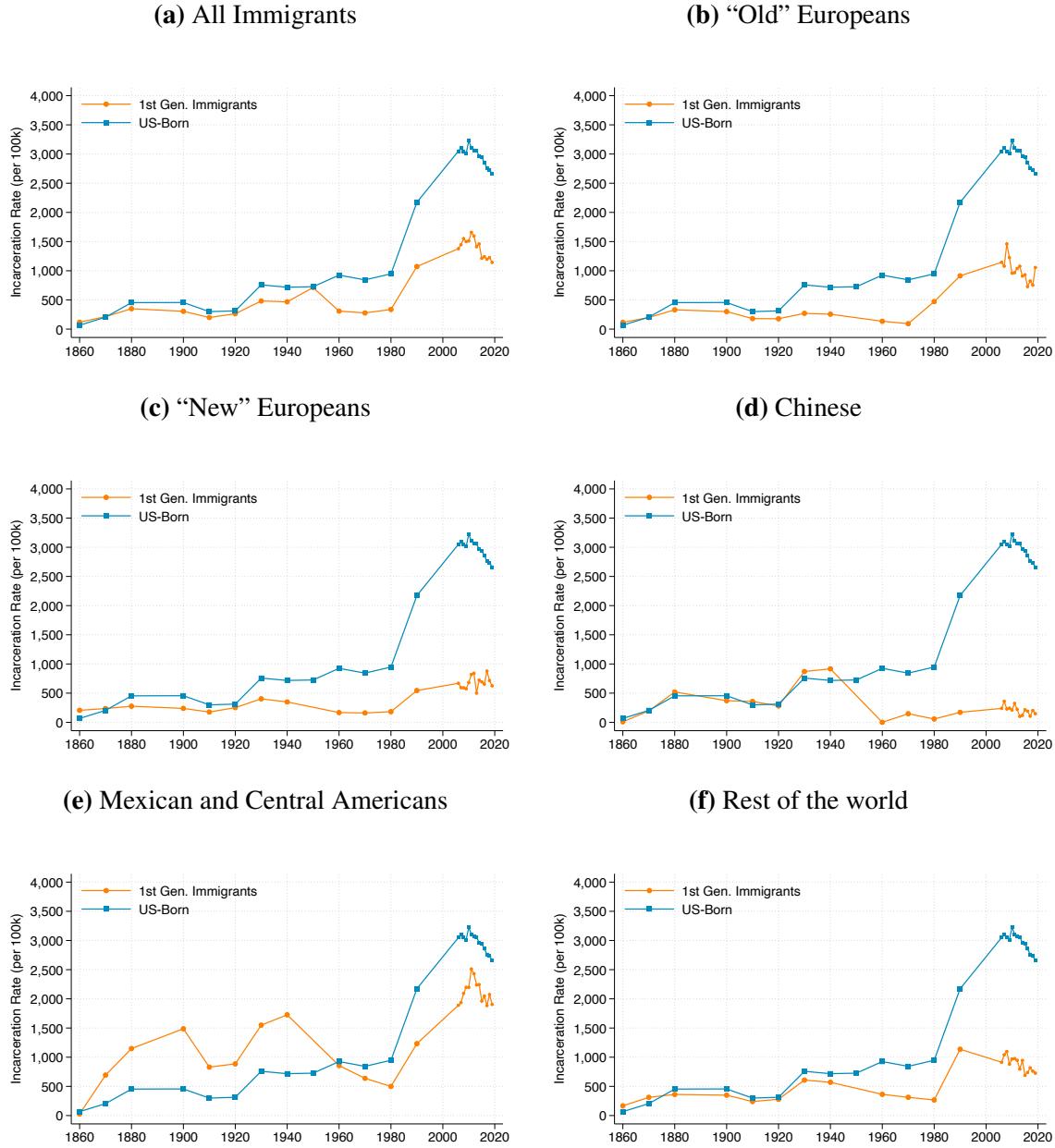
*Notes:* Panel (a) illustrates the share of men ages 18–40 that are foreign-born between 1850 and 2019. Panel (b) shows the composition of each immigrant group among foreign-born individuals. Each color depicts immigrants from a specific country-of-origin group, showing that immigrants today are more likely to come from Mexico and Central America as well as from the “rest of the world” group. For more details on the definition of each country-of-origin group, see the Online Appendix.

**Figure A4:** Incarceration Rates of Immigrants and White US-born Men, 1850–2019, Including 2000



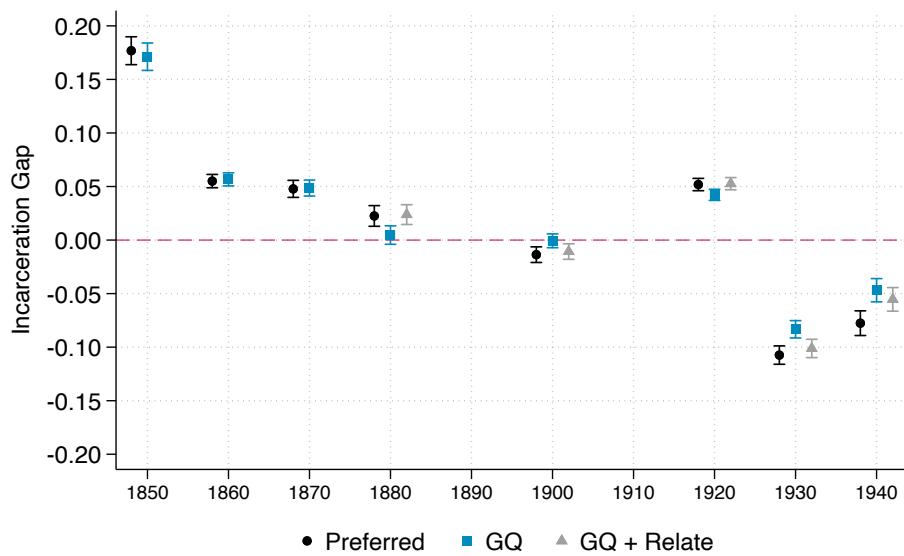
*Notes:* Each of the panels in this figure plots incarceration rates for immigrants and white US-born between 1850 and 2019 as in Figure 1, but including the corresponding points for the 2000 Census. For more details, see the note to Figure 1 and the Online Appendix.

**Figure A5:** Incarceration Rates of Immigrants and All US-born Men, 1860–2019



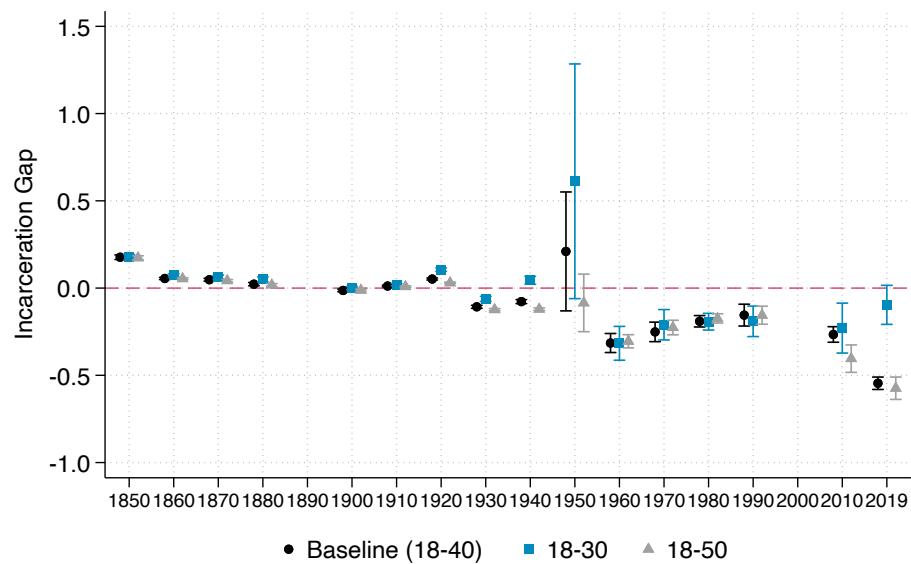
*Notes:* Each of the panels in this figure plots incarceration rates for immigrants and all US-born men (regardless of their race) between 1860 and 2019. For more details, see the note to Figure 1 and the Online Appendix.

**Figure A6:** Incarceration Gap between Immigrants and White US-Born Men Using Alternative Incarceration Measures, 1850–1940



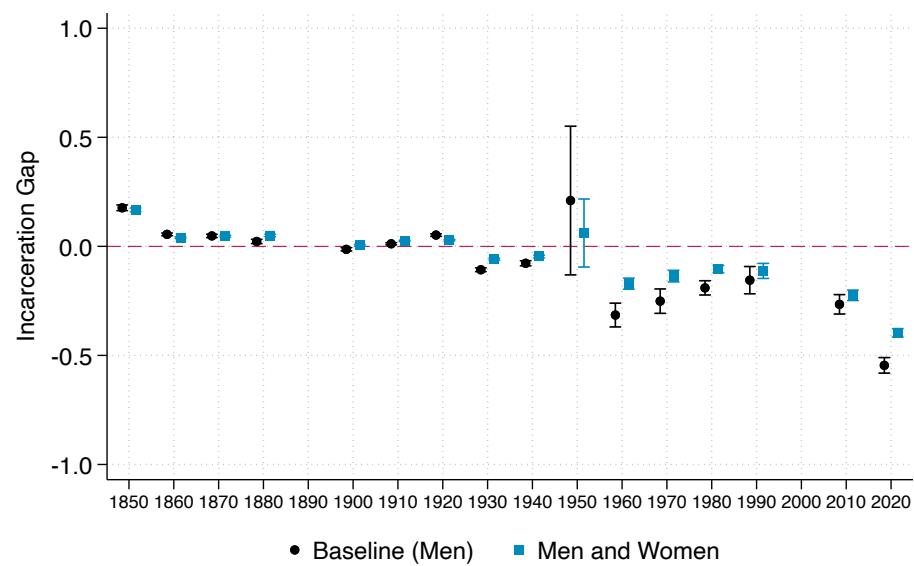
*Notes:* This figure plots the immigrant-US-born incarceration gap using the full-count decennial Censuses between 1850 and 1940. The baseline estimate utilizes the preferred measure of incarceration. The second series only uses the IPUMS group quarters variable to classify an individual as incarcerated. The third series uses the group quarters variable and the variable denoting the relationship to the household head to classify an individual as incarcerated. The 1910 Census does not identify group quarter types, so we omit this year in the comparison. The 1850, 1860, and 1870 Censuses do not include a question on relationship to household head. For more details on these measures, see the Online Appendix.

**Figure A7:** Incarceration Gap between Immigrants and White US-Born Men Varying the Age of the Sample



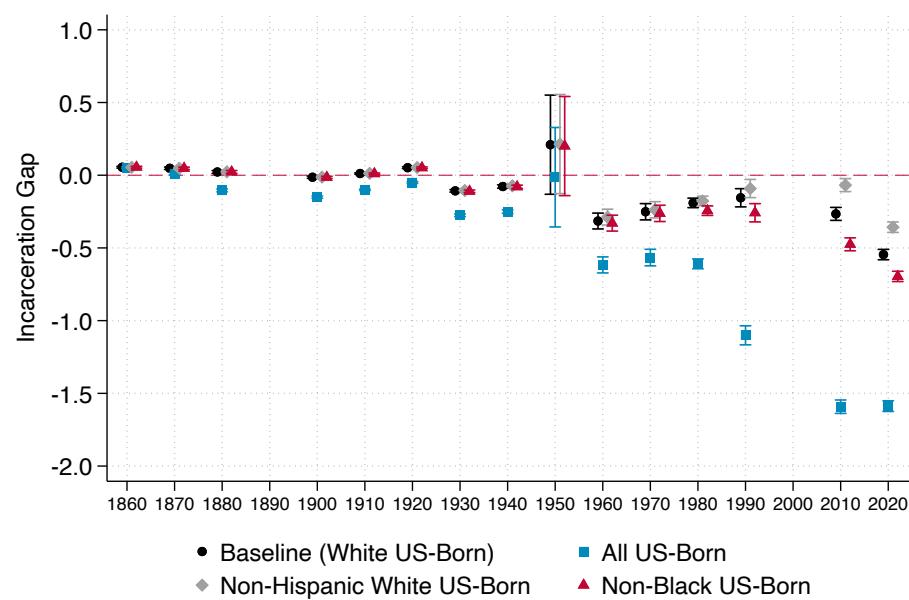
*Notes:* This figure plots the incarceration gap between immigrants and white US-born men varying the age of the individuals in the sample. The first series reproduces the baseline estimates using men ages 18–40. The second and third series consider men ages 18–30 and 18–50, respectively.

**Figure A8:** Incarceration Gap between Immigrants and White US-Born Individuals (Including Women)



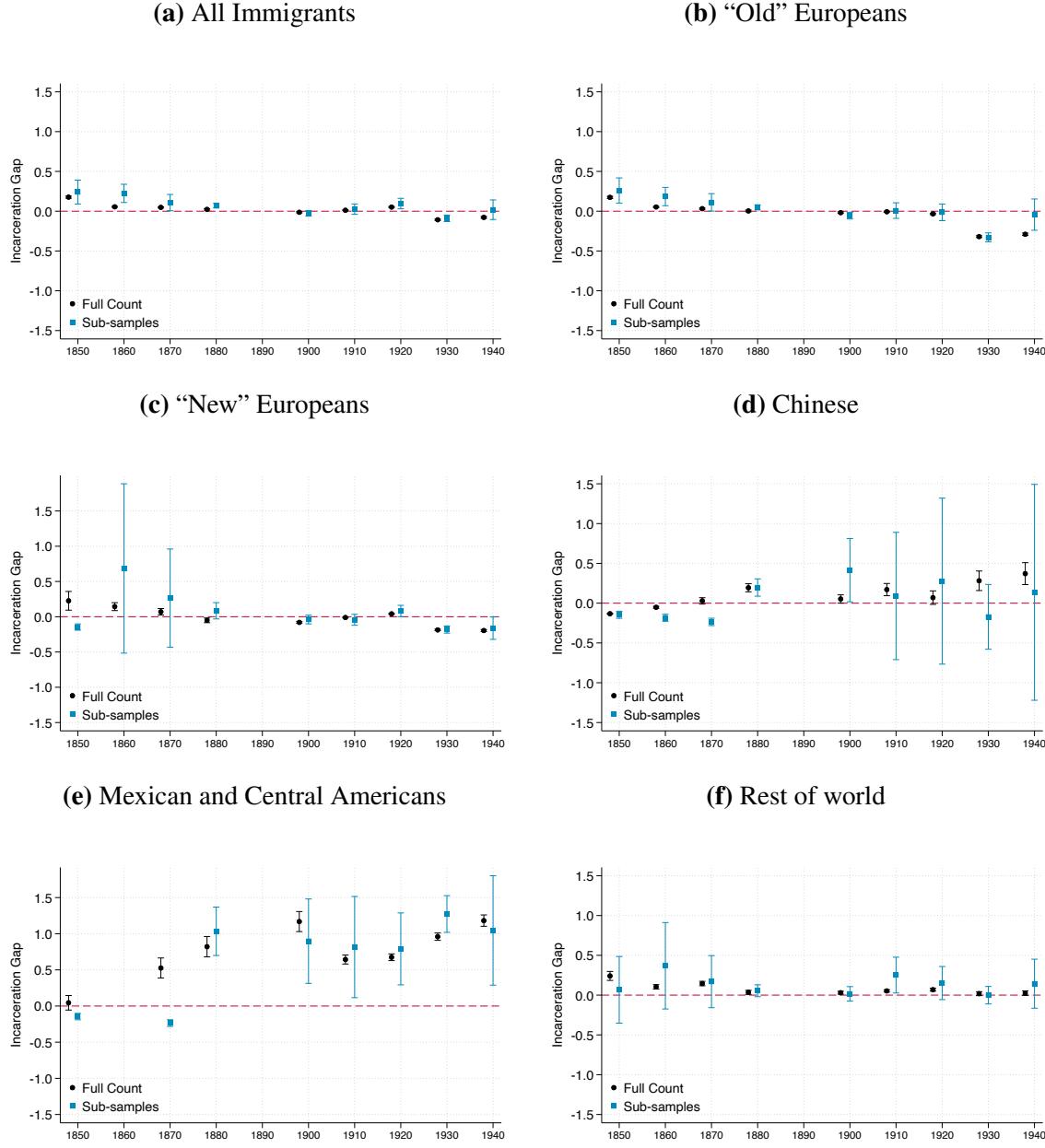
*Notes:* This figure plots the incarceration gap between immigrants and white US-born individuals ages 18–40. The first series reproduces the baseline estimates only including men. The second series includes women.

**Figure A9:** Incarceration Gaps between Immigrants and US-born Men, Using Alternative Groups of US-born Individuals



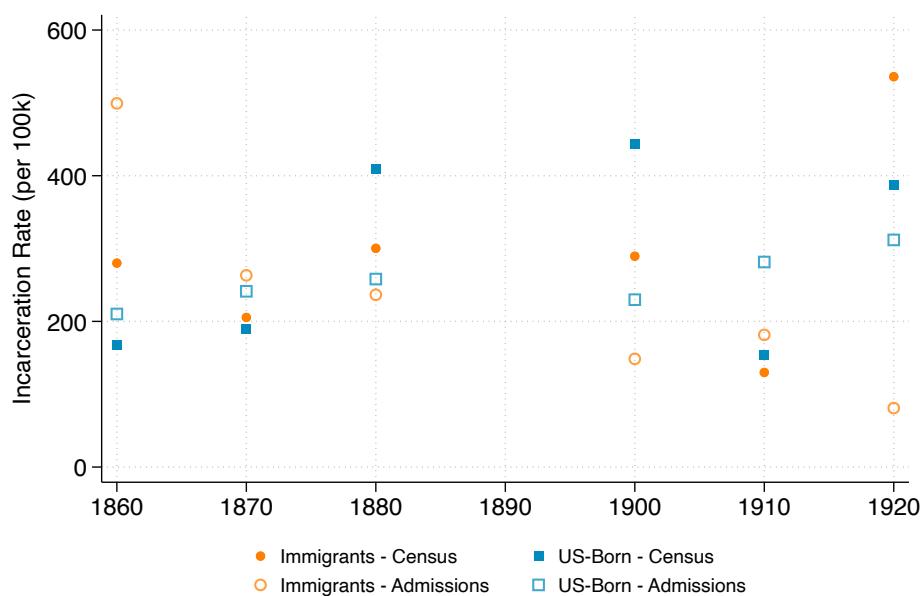
*Notes:* This figure plots the incarceration gap between immigrants and US-born men, varying the group of individuals used to estimate the incarceration rates of US-born individuals. The first series reproduces the baseline estimate only considering white US-born men. The second series considers all US-born men (regardless of race). The third series considers non-Hispanic white US-born men. Hispanic individuals are identified using the “Hispan” variable provided by IPUMS. Before 1980, individuals were classified as Hispanic based on their country of birth, parental country of birth, Spanish surname, or relationship to someone identified as Hispanic through these characteristics. The fourth series considers US-born men whose race is not classified as Black.

**Figure A10:** Incarceration Gaps between Immigrants and White US-born Men,  
Comparing Full Count Census with Sub-samples, 1850–1940



*Notes:* This figure plots the incarceration gap between immigrants and white US-born men. The first series reproduces the baseline estimates using the full-count Censuses. The second series utilizes the largest available sub-sample from each decennial Census. Panel (a) compares white US-born men to all immigrants. Panels (b)-(f) compare white US-born men to immigrants from a particular country-of-origin group. For more details, see the note to Figure 1 and the Online Appendix.

**Figure A11:** Comparison of Census-based Incarceration Rates in Missouri to Prison Admissions Rates from the Missouri State Penitentiary



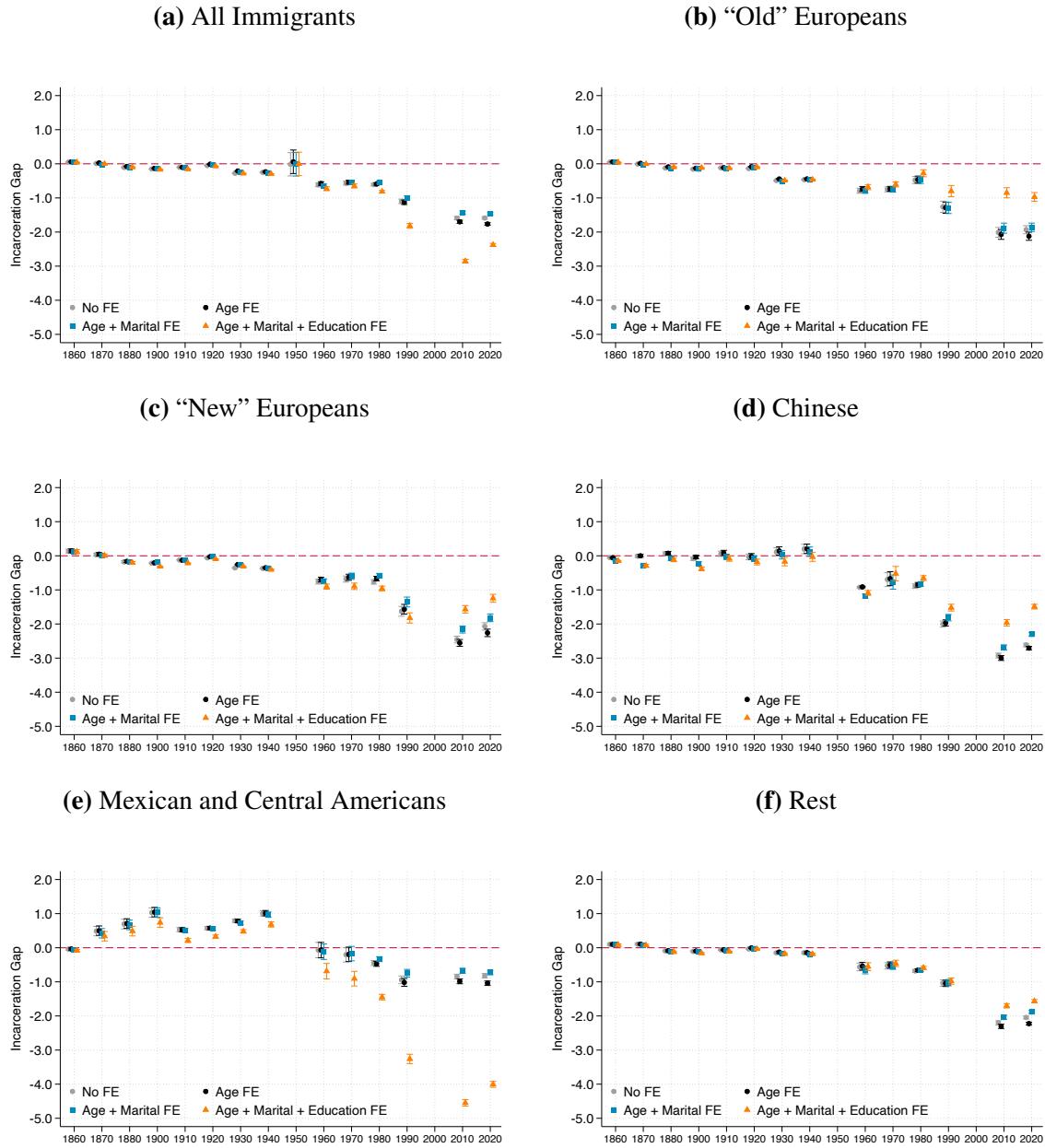
*Notes:* This figure compares the incarceration rates of immigrants and US-born men residing in Missouri (based on Census data) with prison admissions rates by nativity based on prison admission records from the Missouri State Penitentiary. The data on prison admissions come from digitized administrative records of the Missouri State Penitentiary, which covers the universe of prison inmates in Missouri. Population counts (for calculating rates) come from the full-count Census.

**Figure A12:** Prison Admissions Rates of Immigrants and US-Born Individuals in Missouri by Type of Crime, 1860–1930



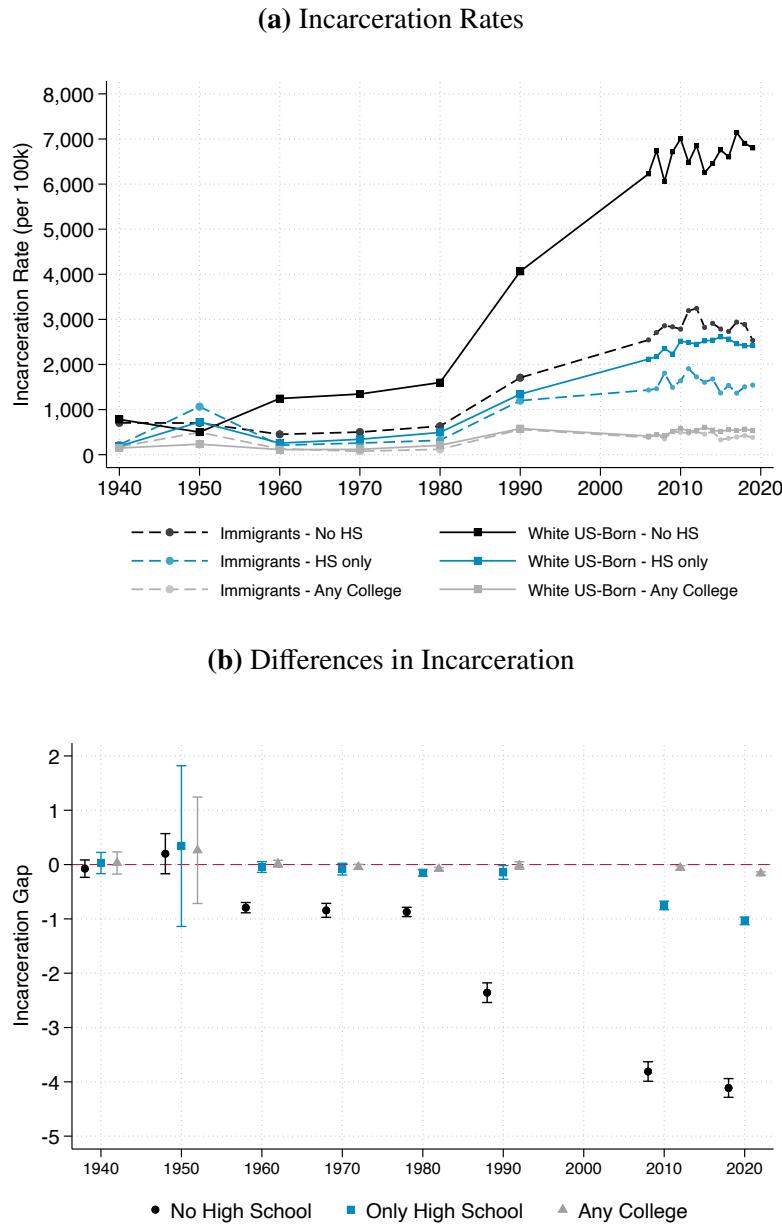
*Notes:* This figure plots prison admissions rates of immigrants and US-born individuals between 1860 and 1930 separately by crime type. Data are based on prison admission records from digitized administrative records of the Missouri State Penitentiary, which covers the universe of prison inmates in Missouri. Panels (a), (b), and (c) consider admissions for violent, property, and other crimes, respectively. Population counts (for calculating rates) come from the full-count Census and are interpolated between Census years.

**Figure A13:** Difference in Incarceration Rates of Immigrants and All US-born Men, Adjusting for Individual-Level Characteristics, 1870–2019



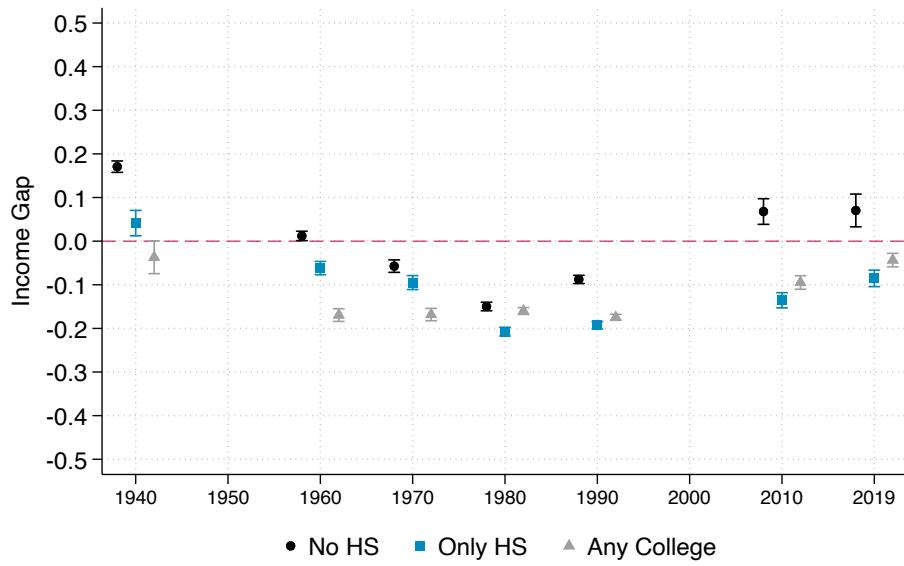
*Notes:* This figure is analogous to Figure 2 but considers all US-born individuals. For more details, see the note to Figure 2 and the Online Appendix.

**Figure A14:** Incarceration Gap Between Immigrants and White US-Born Men, by Educational Attainment, 1940–2019



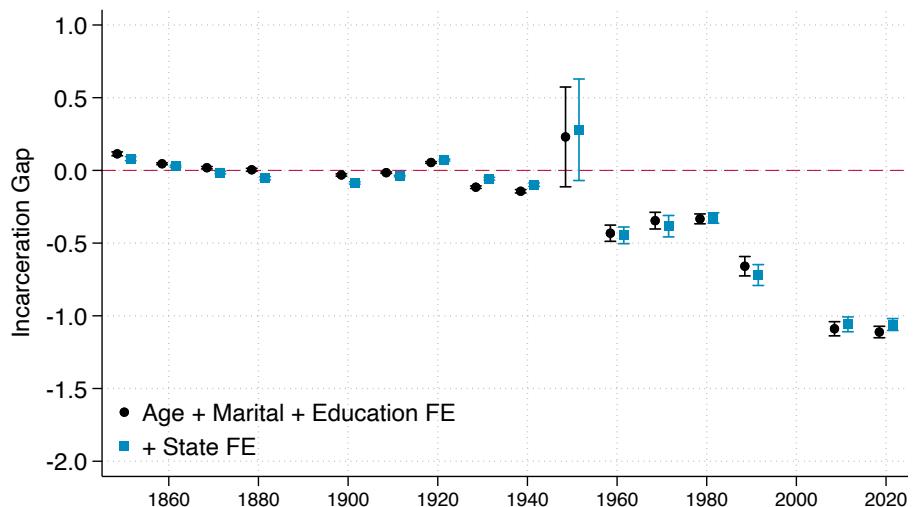
Notes: Panel (a) plots incarceration rates for immigrants and white US-born men between 1940 and 2019 separately by educational attainment. Panel (b) plots the corresponding immigrant-US-born incarceration gap by level of educational attainment. “No High School” refers to individuals with 11 or fewer years of schooling. “High School” refers to individuals with exactly 12 years of schooling. “Any College” refers to individuals with one or more years of college.

**Figure A15:** Income Differences Between Immigrants and White US-born Men, by Educational Attainment, 1940–2019



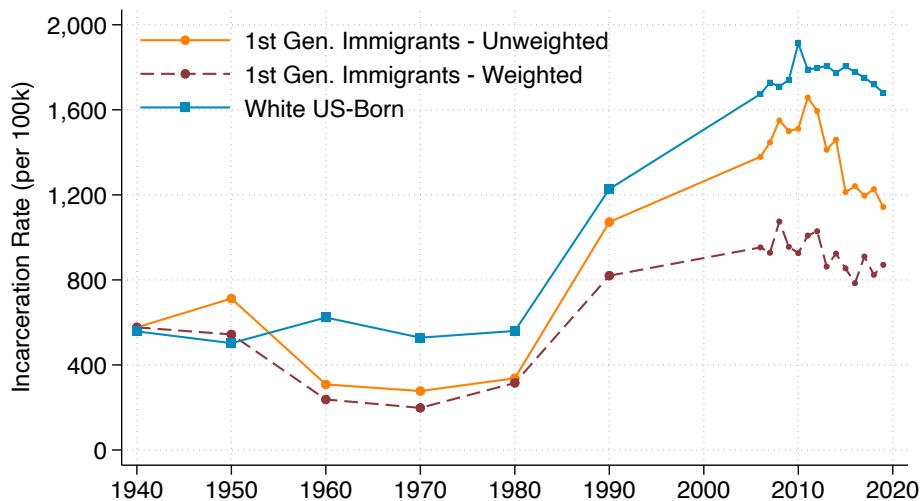
*Notes:* The figure plots the income gap between immigrants and white US-born men separately by educational attainment. “No High School” refers to individuals with 11 or fewer years of schooling. “High School” refers to individuals with exactly 12 years of schooling. “Any College” refers to individuals with one or more years of college. Individuals in the same age group are men ages 18–40 residing in households who are in the labor force and have positive income.

**Figure A16:** Incarceration Gaps between Immigrants and White US-born Men, Including State Fixed Effects



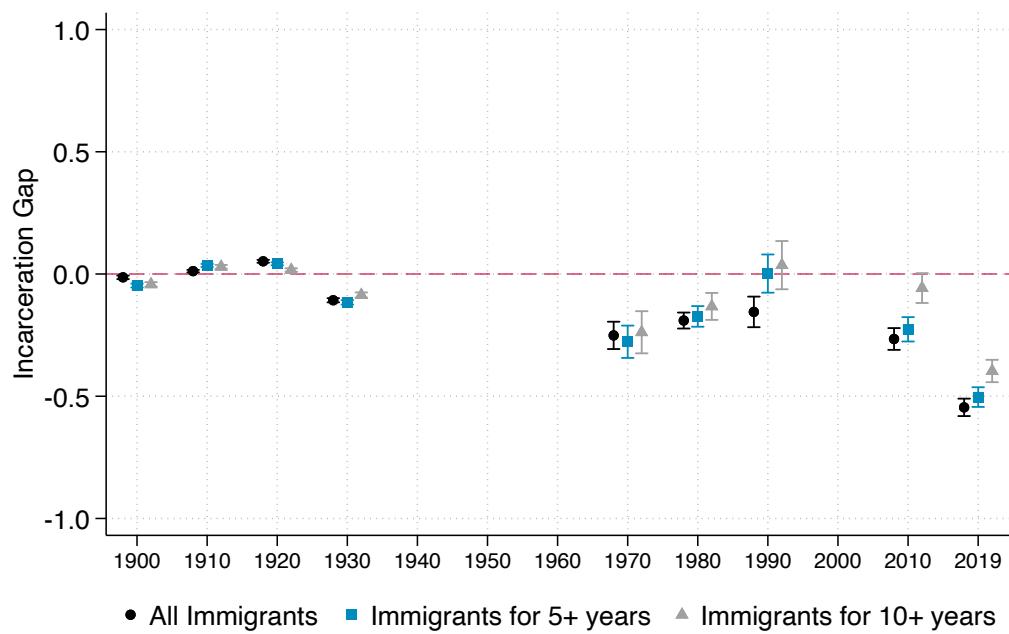
*Notes:* This figure plots the incarceration gap between immigrants and white US-born men ages 18–40. The first series includes age, marital status, and education fixed effects (analogous to the final series in panel (a) of Figure 2) The second series adds state-of-residence fixed effects.

**Figure A17:** Incarceration Rate of Immigrants and White US-Born Men, Fixing the Immigrant Composition at 1940 Levels



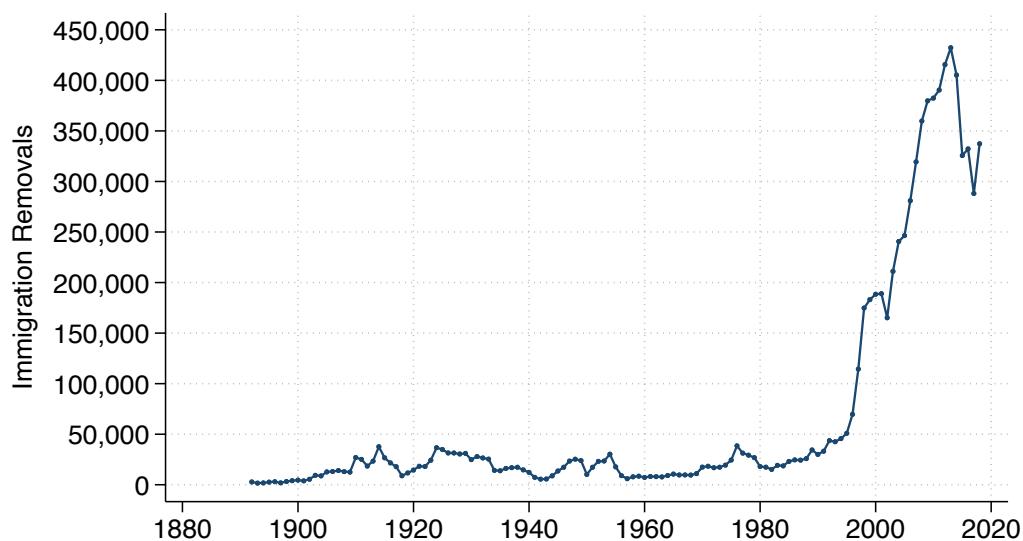
*Notes:* The first (orange) and third (blue) series plot the raw incarceration rates of immigrant men and white US-born men, analogous to those in Figure 1. The second series (dashed red) holds fixed the immigrant composition in 1940 using the five country-of-origin groups (“old” Europeans, “new” Europeans, Chinese immigrants, Mexican and Central American immigrants, and immigrants from the rest of the world) and calculates the counterfactual incarceration rate after 1940 if each group’s incarceration had evolved naturally but their proportion in 1940 (as a share of all immigrants) remained fixed. This figure makes clear that if the immigrant composition had not changed since 1940, the immigrant incarceration rate would be lower than it actually is, and thus the immigrant-US-born incarceration gap would be even larger today.

**Figure A18:** Incarceration Gaps between Immigrants and White US-born Men, Excluding Recent Immigrants



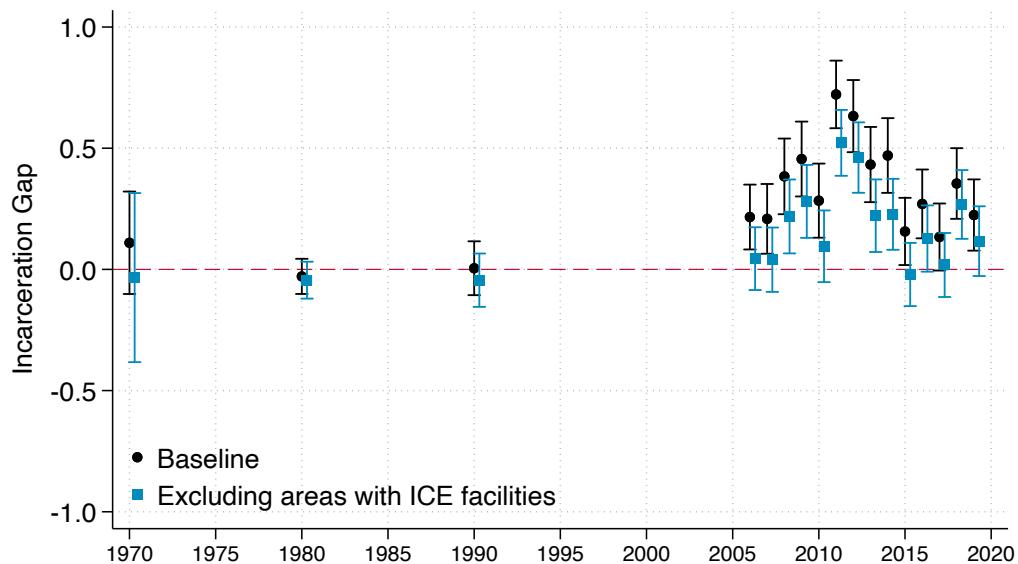
*Notes:* This figure plots the incarceration gap between immigrants and white US-born men ages 18–40. The first series reproduces the baseline estimate including all immigrants regardless of time since arrival. The second and third series exclude individuals who arrived to the US within five and ten years, respectively. Estimates for 1940–1960 are omitted because the Census did not include a question about time since arrival to the United States.

**Figure A19:** Number of Removals, 1892–2018



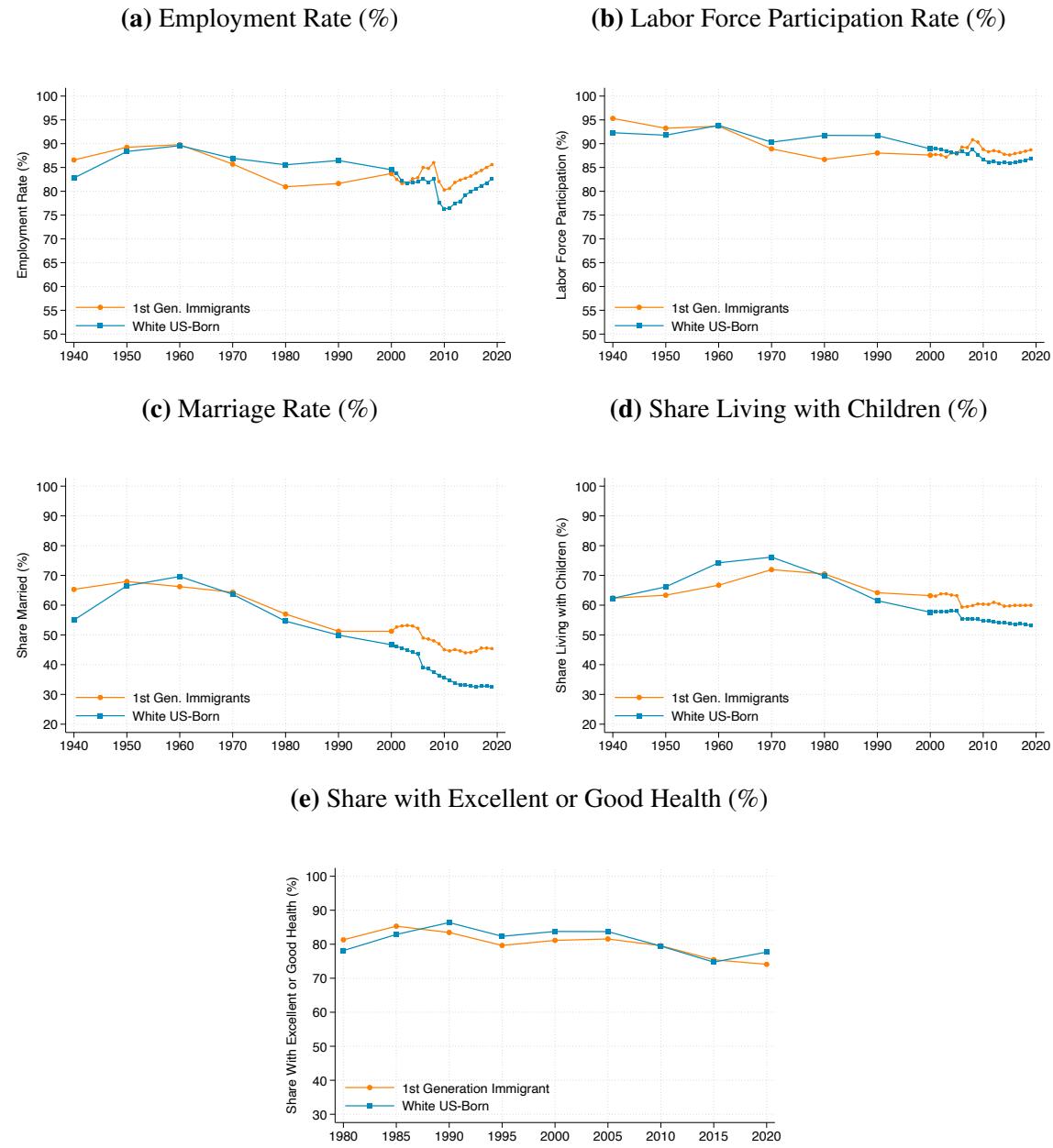
*Notes:* This figure plots the annual number of removals of inadmissible or deportable individuals between 1892 and 2018 using data from the 2018 Yearbook of Immigration Statistics of the Department of Homeland Security.

**Figure A20:** Incarceration Gaps between Mexican and Central American Immigrants and White US-born Men, Excluding Areas with ICE Facilities



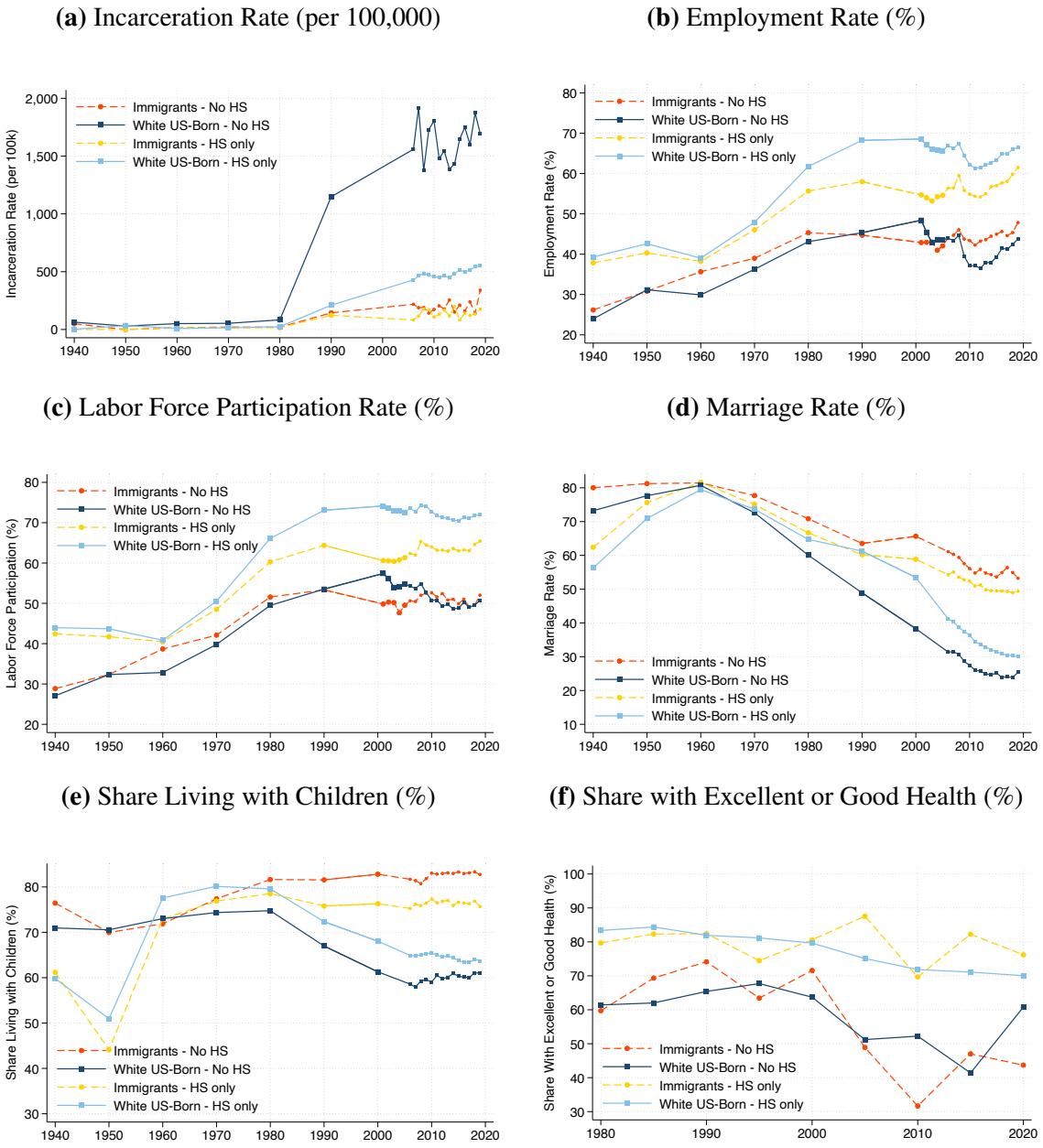
*Notes:* This figure plots the incarceration gap between Mexican and Central American immigrants and white US-born men ages 18–40. The first series uses the baseline sample. The second series excludes the 18 areas (using counties before 1990 and Public Use Micro Areas starting in 1990) that included Immigration and Customs Enforcement (ICE) contract detention facilities and service processing centers as of 2022. For more details, see the Online Appendix.

**Figure A21:** Labor Market, Family Formation, and Health Outcomes of Immigrants and All White US-born Men (Regardless of Educational Attainment), 1940–2019



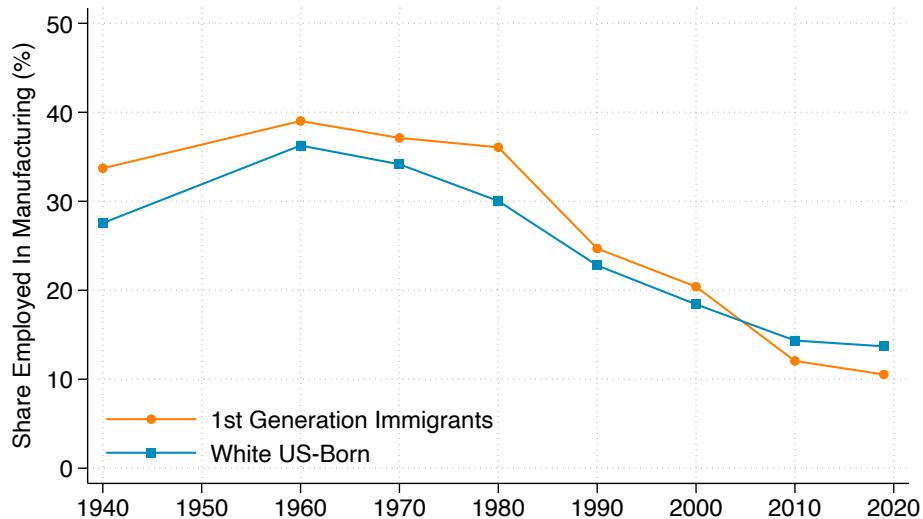
*Notes:* This figure plots the outcomes of immigrant and white US-born men by educational attainment between 1940 and 2019. Data in panels (a)–(c) are restricted to males aged 18–40. Data in panels (d) and (e) are restricted to males aged 30–50 and 18–65, respectively. Data in panels (a)–(e) spanning 1950 to 1990 are from the largest available sub-sample from the decennial Census. Data from 2000 onward are from the annual American Community Survey (ACS). Data in panel (f) come from the 1977–2020 General Social Survey (GSS) and plot the share of individuals who report being in excellent or good health. For more details, see the Online Appendix.

**Figure A22:** Incarceration, Labor Market, Family Formation, and Health Outcomes of Immigrants and White US-born Women Without Any College Education, 1940–2019



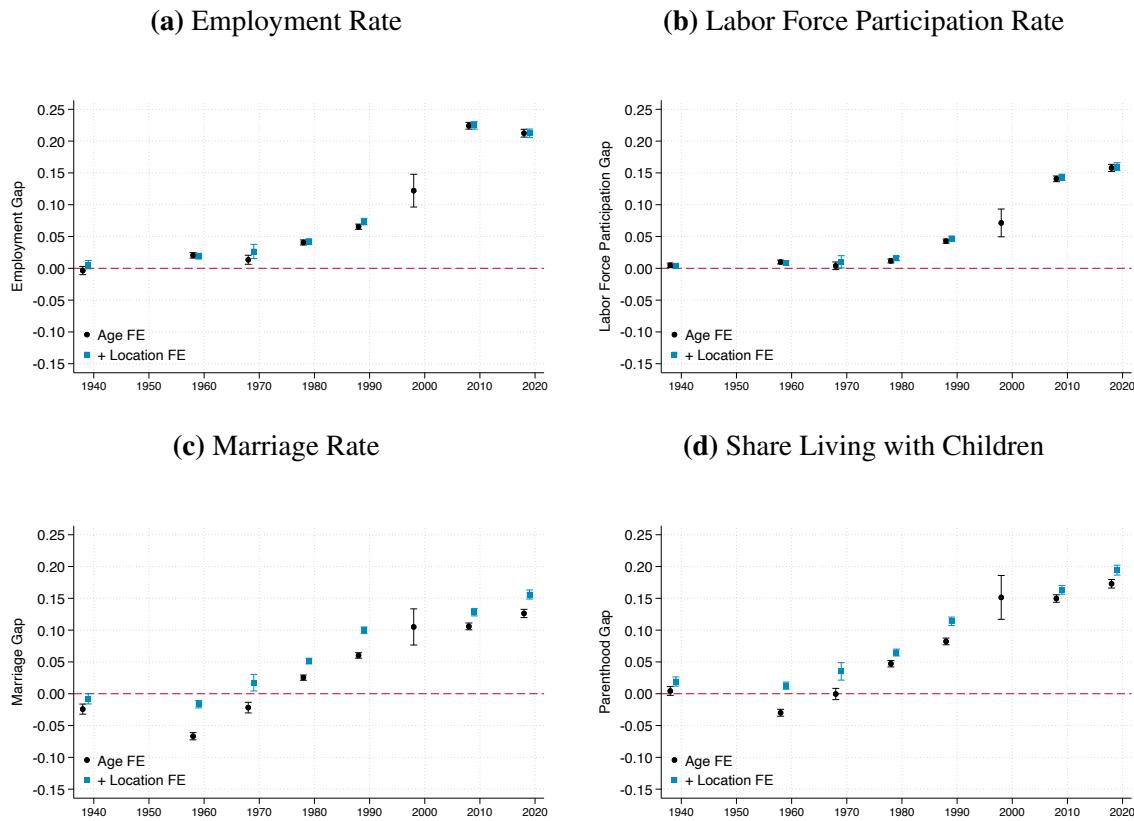
*Notes:* This figure is analogous to Figure 4 but considers women instead of men. For more details, see the Online Appendix.

**Figure A23:** Share of Low-Educated Immigrants and White US-Born Men Employed in Manufacturing

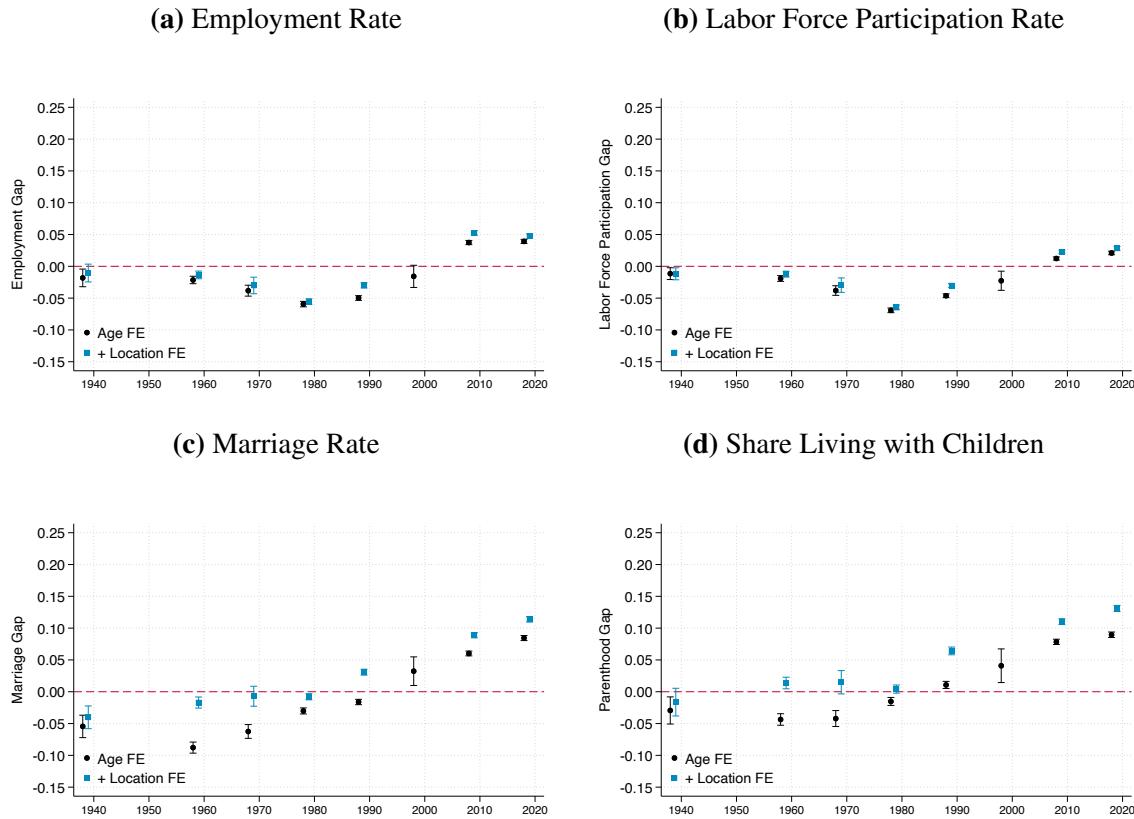


*Notes:* This figure plots the share of immigrants and white US-born men ages 18–40, without a high school degree, and in the labor force that were employed in manufacturing between 1940 and 2019. This figure shows that the shares resembled each other until 2010, suggesting that compositional differences across declining industries cannot alone explain the immigrant-US-born differences in labor market outcomes.

**Figure A24:** Differences in Labor Market and Family Formation Outcomes of Immigrants and White US-born Men Without a High School Degree, Adjusting for Geography, 1940–2019



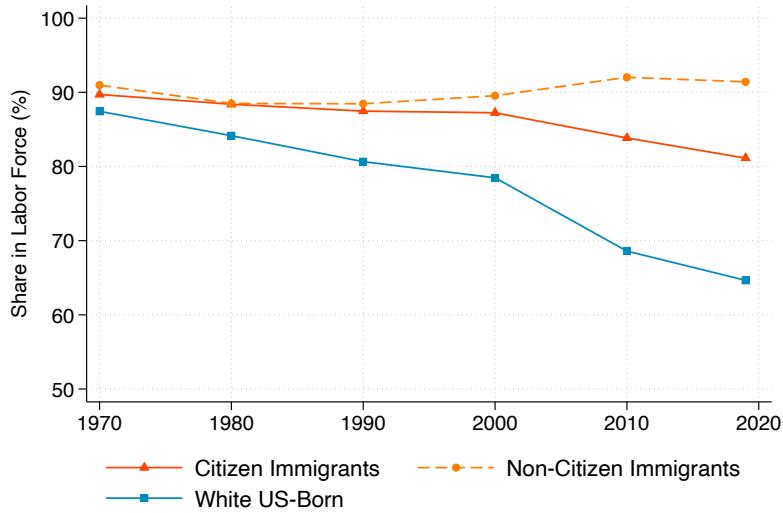
**Figure A25:** Differences in Labor Market and Family Formation Outcomes of Immigrants and White US-born Men With Only a High School Degree, Adjusting for Geography, 1940–2019



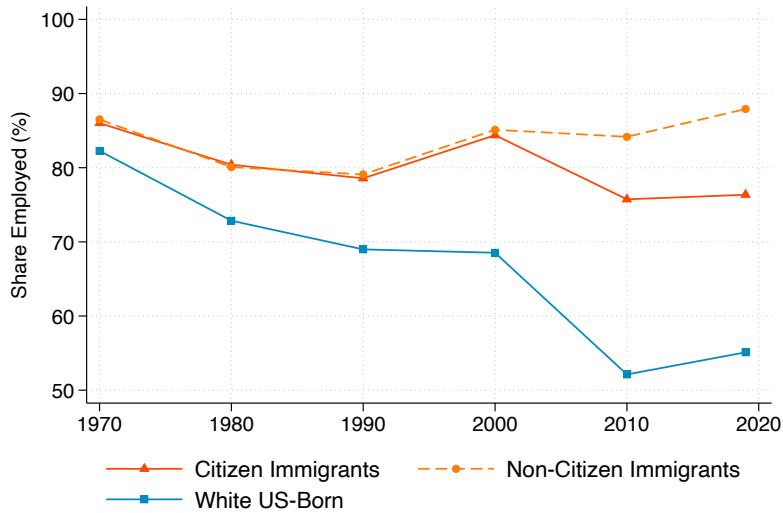
*Notes:* Each panel plots the gap between immigrants and white US-born men with only a high school degree in employment rates, labor force participation rates, marriage rates, and the likelihood of living with children. The first series plots the estimated gaps including age fixed effects. The second series adds location fixed effects. For 1940, we include county-of-residence fixed effects. For 1970 and 1980, we include fixed effects for each county group. For 1990 onward, we include Public Use Metropolitan Area (PUMA) fixed effects. For more details, see the note to Figure ?? and the Online Appendix.

**Figure A26:** Employment and Labor Force Participation Rates of Citizen and Non-Citizen Immigrants and White US-Born Men Without a High School Degree

(a) Labor Force Participation Rate

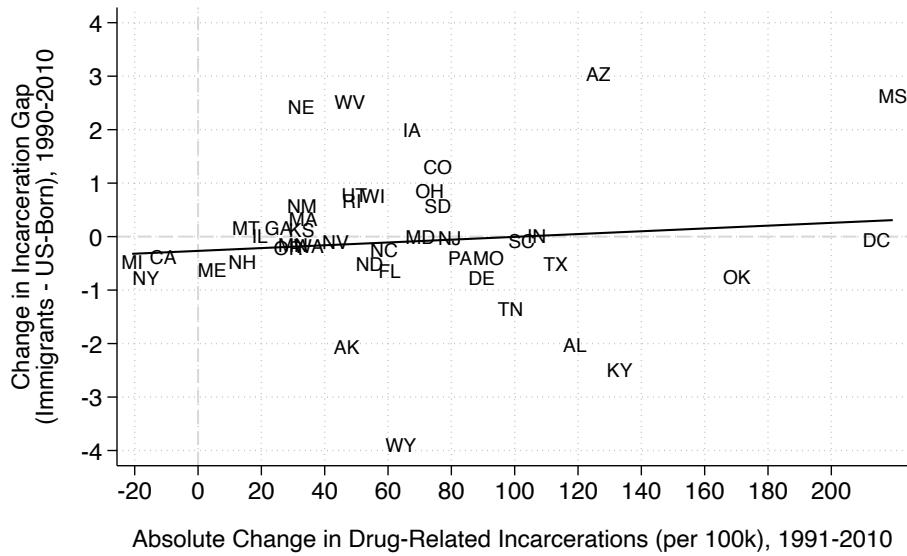


(b) Employment Rate



*Notes:* This figure plots employment and labor force participation rates for citizen immigrants, non-citizen immigrants, and white US-born men between 1970 and 2019. Although the magnitude of the gaps between citizen migrants and the US-born are somewhat smaller in recent decades, the figure shows that less-educated citizen immigrants also have significantly higher employment and labor force participation rates than their US-born counterparts. It is thus unlikely that the availability of social insurance can explain the difference between low-educated immigrant and US-born men.

**Figure A27:** State-Level Changes in Drug-Related Incarcerations and the Immigrant-US-Born Incarceration Gap Between 1990 and 2010



**Table A1:** Overlap Between Alternative Incarceration Measures in the Full Count Censuses

	White US-Born				Immigrants			
	GQ (1)	Preferred (2)	Both (3)	Share (%) (4)	GQ (5)	Preferred (6)	Both (7)	Share (%) (8)
1850	3,798	3,958	3,798	96	2,316	2,401	2,316	96
1860	2,215	2,407	2,215	92	1,584	1,631	1,584	97
1870	6,363	7,471	6,363	85	3,174	3,573	3,174	89
1880	17,772	21,358	17,454	82	5,006	6,322	4,970	79
1900	24,486	32,401	22,811	70	6,788	8,623	6,554	76
1910	–	23,679	–	–	–	8,165	–	–
1920	24,695	30,365	23,254	77	7,829	9,624	7,561	79
1930	89,666	102,666	86,370	84	13,077	14,609	12,672	87
1940	85,203	112,702	38,101	34	4,758	6,826	2,320	34

*Notes:* This table shows the number of incarcerated individuals in each Census year separately by nativity and by measure of incarceration. “GQ” refers to the number of men classified as incarcerated using the IPUMS group quarters variable. “Preferred” refers to the number of men classified as incarcerated using our preferred measure that combines information from the group quarters variable with the original strings of the “group quarters,” “occupation,” and “relationship to household head” variables. “Both” refers to the number of men classified as incarcerated under both approaches. “Share” refers to the share of incarcerated men under the preferred measure that would have also been classified as incarcerated using only using the group quarters variable (column 3 divided by column 2 and column 7 divided by column 6). For more details, see the Online Appendix.

**Table A2:** Sample Size for Immigrants and White US-Born Men, by Year

	US-Born			Immigrants		
	Incarcerated (1)	Total (2)	Inc. (per 100k) (3)	Incarcerated (4)	Total (5)	Inc. (per 100k) (6)
1850	3,958	2,983,792	133	2,401	775,872	309
1860	2,407	3,843,250	63	1,631	1,385,807	118
1870	7,471	4,489,364	166	3,573	1,667,878	214
1880	21,358	6,530,956	327	6,322	1,808,660	350
1900	32,401	10,165,842	319	8,623	2,826,309	305
1910	23,679	12,642,077	187	8,165	4,101,636	199
1920	30,365	14,389,145	211	9,624	3,661,154	263
1930	102,666	17,415,613	590	14,609	3,030,274	482
1940	112,702	20,660,070	546	6,826	1,458,866	468
1950	344	265,511	502	17	8,946	712
1960	6,893	1,105,984	623	132	42,800	308
1970	3,982	753,605	528	103	37,146	277
1980	8,581	1,625,842	528	461	136,617	337
1990	14,820	1,695,569	1,227	1,909	229,569	1,072
2000	-	-	-	-	-	-
2010	40,454	1,386,529	1,840	10,336	340,376	1,574
2019	46,443	1,468,332	1,748	8,284	326,127	1,203

*Notes:* This table presents the sample size and incarceration rates for white US-born men and immigrant men. Whenever available, we use sample weights provided by IPUMS to calculate incarceration rates. The sample is restricted to men ages 18–40. For more information about each data source, see the Online Appendix.