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ABSTRACT

The analysis of a new dataset on state prisoners in the 1900 to 1930 censuses reveals that immigrants rapidly assimilated to native incarceration patterns. One feature of these data is that the second generation can be identified, allowing direct analysis of this group and allowing their exclusion from calculations of comparison rates for the “native” population. Although adult new arrivals were less likely than natives to be incarcerated, this likelihood was increasing with their years in the U.S. The foreign born who arrived as children and second generation immigrants had slightly higher rates of incarceration than natives of native parentage, but these differences disappear after controlling for nativity differences in urbanicity and occupational status. Finally, while the incarceration rates of new arrivals differ significantly by source country, patterns of assimilation are very similar.

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Practically every law-enforcement officer who was interviewed in the course of this study, whether he were a police officer, a prosecutor, a probation officer, or a judge, expressed the opinion that it was not the immigrants themselves but their sons that constituted the big crime problem at the present time. All were emphatic in that belief. . . . Generally they did not have statistics at hand in support of their belief (National Commission on Law and Enforcement 1931: 157).

1 Introduction

Over nine million immigrants entered the United States in the first decade of the twentieth century. The arrival rate in 1907 reached almost 15 per 1000 persons in the population, a number surpassed only in the early 1850s and in 1882. This "third wave" provoked a significant nativist backlash. Unlike previous nativist movements, however, this one succeeded in securing legislative restrictions on immigrant arrivals, from the literacy test imposed by the 1917 Immigration Act to the Emergency Quota Act (1921) and then the National Origins Quota Act (1924) that placed quotas on the numbers of arrivals during a given year. The result of the quota system was a sharp drop in the number of immigrant arrivals. By 1930, the immigrant arrival rate was only 2 per 1000 in the population, where it remained until the quota system was abandoned in the 1960s.

The most politically persuasive argument for restricting immigration was that immigrants undercut the wages of the native born (Goldin 1994). But the evolution of federal immigration law was also influenced by the perception that immigrants increased crime. Starting in the 1890s, the list of "inadmissible" classes of immigrants included individuals convicted of crimes and misdemeanors in their home countries, and the 1917 Immigration Act included a provision to deport immigrants convicted of serious crimes. Recent research using published data from the prison censuses of the period has shown that the incarceration patterns of the foreign born were in fact fairly similar to those of natives at the turn of the twentieth century, but by 1930, the foreign born were much less likely to be incarcerated than natives at every age group (Moehling and Piehl 2009). However, like the law enforcement officials interviewed for the National Law Enforcement (Wickersham) Commission report, contemporary scholars have been hampered by limited data on parental birthplace and, as a result, have not tested the view

highlighted in the quote above that it was the children of the foreign born – the so-called, "second generation" – who were most responsible for increasing crime rates. Data limitations have also prevented the study of how the crime and incarceration patterns of first generation immigrants varied with time spent in the U.S.

While many studies have examined the assimilation of immigrants to the U.S. in terms of labor market and educational outcomes both historically (e.g., Abramitzky et al. 2012) and for recent cohorts (e.g., Card 2005, Smith 2006), few have focused on crime patterns. Given the higher measured rates of criminal behavior among natives, assimilation of immigrant groups to native crime patterns cannot be viewed as a marker of success as is assimilation in a measure like occupational distribution or years of schooling. Nonetheless, it would indicate a convergence in experience and perhaps a narrowing of the cultural and social distances between the immigrant and native populations. Moreover, documenting the changes in immigrant crime patterns with time in the U.S. and across generations may provide greater insight into theories of criminal behavior, particularly those developed in the 1920s to explain the perceived connection between immigration and crime. It could, for example, help us evaluate the theory that immigrant crime patterns were driven by a conflict in cultures (Sellin 1938). These conflicts were perceived to be most acute for the second generation who found themselves caught between the Old World culture of their parents and the American culture they experienced all around them (Brown 1969: 251). This theory implies that second generation immigrants would be more likely to be involved in criminal behavior than their parents and perhaps even their contemporaries of native parentage.

Studies of assimilation in the current period have found substantial assimilation to higher incarceration rates of natives (Butcher & Piehl 1998). Contemporary researchers benefit from the systematic collection of data on year of arrival and birthplace for immigrants, but they too suffer from limited data on the second generation. Modern census data and often even administrative records do not provide data on parental birthplace, making it impossible to identify second generation immigrants from the native-born population. Morenoff and Astor (2006) and Sampson (2008) study residents of Chicago and find assimilation across generations to the higher levels of violence of the native born. However, the

place-based sampling of these studies may lead to selection bias resulting from the choice of residential location. More problematic, though, these studies can only speak to the patterns of assimilation in one city and cannot shed light on how immigrant and native crime patterns are influenced by environmental factors.

In order to investigate assimilation within and across generations in crime patterns, we have constructed a new dataset drawn from population census data. Although there are publicly available random samples of the census data, the relatively low sampling rates combined with the very low (by today's standards) rates of incarceration yields very small numbers of incarcerated individuals. To provide sufficient power, we assembled individual-level data from the schedules of the U.S. population censuses for men incarcerated in state penal institutions in 1900, 1910, 1920, and 1930 for a set of high immigration states. With a census of all inmates, we are able to use the publicly available census of population extracts to provide the complementary data set for non-incarcerated persons. The new dataset includes detailed, individual-level data on age, birthplace, parents' birthplaces, year of arrival for immigrants, and literacy, and hence allows us to directly describe and assess assimilation and incarceration.

We start by documenting the incarceration rates by age for first and second generation immigrants relative to the native born of native parentage. We then estimate multivariate logit models to see whether nativity differences remain after controlling for other factors like illiteracy, urbanicity, and occupational status. These models also allow us to look at the effect of time spent in the U.S. for the first generation immigrants.

Before turning to the second generation, we consider the differences in first generation experience by age of arrival. Those who make the decision to migrate may well be unrepresentative of the broader population, and this self-selection is likely to be related to conditions in either home or source country (Abramitzky et al. 2012). Those who are older when they immigrate are more likely to have played some role in the decision to move – even if simply by not voting with their feet to stay in the home country – than are very young children. In addition, the process and extent of assimilation is likely to be affected by

age at arrival, with those who are younger having fewer barriers and greater incentives to act like native-born children (Beck et al. 2012). This “1.5 generation” is generally hypothesized to fall somewhere between the first and second generations, without the self-selection of the first generation but with greater influence of the culture and conditions of the home country than the second generation. Finally, we look at the differences in immigrant incarceration experiences by source country, taking care to control for age, year of arrival, the fraction of a group living in large urban centers, and average occupational status.

2 Immigration and Crime: Theory and Measurement

Early theories of criminology were greatly influenced by the popular perception of a connection between immigration and crime. Some scholars focused on the demographics of the immigrant population and how these related to criminal behavior. Most important among these were age and gender. Males are much more likely to be engaged in crime than females, and the age-crime profile is very steep, peaking in the early 20s and falling sharply thereafter. New immigrant arrivals tended to be young and male – precisely the group most likely to engage in criminal behavior. In addition, immigrants were concentrated in large urban centers in what sociologists referred to as “socially disorganized” neighborhoods (Taft 1933, Bodenhorn et al. 2010). Crime rates in these areas were high due to the breakdown of social bonds and high rates of poverty. The correlation between nativity and crime in these theories was viewed as spurious, reflecting the demographic characteristics and experiences of the immigrant population rather than a greater proclivity toward criminal behavior (Shaw & McKay 1931, 1942).

Other scholars emphasized factors specific to migration. Thorsten Sellin (1938) argued that immigrants faced a “culture conflict” as they adjusted to a new set of behavioral norms in the host country which may have made them more likely to become involved in crime. In contrast, Edwin Sutherland (1924) argued that immigrants may have developed a strong respect for the law as well as social connections in their home countries before migrating to the disorganized urban centers of the United States. These characteristics would make immigrants less likely to be involved in crime than their native-born urban neighbors.

As noted above, there was particular concern about the children of immigrants. Breckinridge and Abbott (1912) include a chapter in their book on “the delinquent child” on “The Child of the Immigrant: The Problem of Adjustment” in which they describe the difficulty immigrants have in understanding American culture. As the children of immigrants begin to think they understand the culture, the parents become disadvantaged in their parental control, leaving the children without guidance and support needed in late childhood. The diminished parental control was theorized to explain the relatively high rates of court appearances for delinquency among the children of immigrant.

The public and academic discussions did lead to some empirical examination of the issues, albeit limited. The most extensive investigations were conducted as part of two prominent federal government commissions -- the Federal Immigration (or Dillingham) Commission in 1911 and the National Commission on Law Enforcement (or Wickersham Commission) in 1931. Politics, however, influenced how both of these commissions presented and interpreted the data on immigrants and crime. The Dillingham Commission’s reports clearly reflect the growing support for restrictions on immigration. Unable to find “satisfactory evidence” that immigrants were more likely than natives to commit crime, the focus was placed on nativity differences in the types of crimes committed. The Commission claimed that immigration had changed the nature of crime in the U. S. and in particular, increased “the commission of offenses of personal violence” (U.S. Senate 1970b: 2). The Italians, in particular, were assigned blame for driving up homicide rates. The evidence underlying these claims, however, were conditional crime distributions: conditional on being incarcerated, the Italians were more likely than other groups to have been convicted of homicide. But as Oscar Handlin argued in his review of the Dillingham Commission reports, such evidence does not reveal anything about the relative or absolute criminality of immigrants (U.S. Senate 1970a: xxxv-xxxvi). The criticisms of the Wickersham Commission – just twenty years later – were the opposite: scholars accused the Commission of trying to portray immigrants in a favorable light (Taft 1933).

Politics aside, the real challenges faced by contemporary investigations of immigrants and crime were limited data and limited understanding of how aggregate crime rates reflect the age distribution of a

population. In a recent paper, Moehling and Piehl (2009) conducted a systematic re-examination of the prison census data that served as the basis of research of the Dillingham and Wickersham Commissions. The U.S. Census Bureau conducted special censuses of all penal institutions in 1904, 1910, and 1923, and then annual surveys of state facilities starting in 1926. Although the Census Bureau collected data on the population of inmates in prison on a given date (the "stock" of inmates), most of the data analyzed and presented in the published reports focused on commitments over a set period of time (the "flow" of inmates). Census Bureau analysts were sensitive to the differences in the age distributions of immigrants and natives, but they were most worried about the differences in the sizes of the juvenile population for the two groups rather than the differences in age distributions within the adult population. Moehling and Piehl (2009) controlled carefully for age and calculated population estimates to correspond to the timing of the prison censuses. Notably, even in the period of high immigrant arrival rates before 1904, the older age distribution of the foreign born led to an aggregation bias that made immigrant prison commitment rates look more favorable in comparisons to natives. Had the Dillingham Commission controlled more carefully for age, it would have found some evidence that immigrants were more likely than natives to engage in crime. In particular, the 1904 prison census data reveal that immigrants ages 18 to 19 were more likely than their native white peers to be committed to prisons for serious offenses. Nativity differences for older age groups, however, were small. The 1923 prison census data revealed similar patterns. But by the 1930 prison census, the story had changed: at all but the youngest age categories (under 21), immigrants were substantially less likely to be committed to prison than were native whites. This change was driven not by declines in the commitment rates of immigrants but rather by substantial increases in the commitment rates of natives. Strikingly, though, the nativity differences in prison commitment rates in 1930 were driven by differences in non-violent crimes; immigrants were just as likely as natives to be committed for violent crimes. None of these features identified in the reanalysis of the prison census data were apparent in the aggregate data that provided the empirical basis for the policy debates at the time.

The data reported in the prison census volumes, however, do not allow for much analysis of immigrant assimilation and crime outcomes. Only in the report for the 1904 prison census did the Census Bureau publish data separately for second generation immigrants. These data show that for more serious crimes the age-commitment profile of the second generation looked much like that of the children of natives, but for less serious crimes, the second generation exhibited the first generation's pattern of relatively high commitment rates in middle age (Moehling and Piehl 2009). Also, only in the 1904 report did the Census Bureau present data on the time spent in the United States by foreign-born males committed to prison. In these data, more recent arrivals were disproportionately represented in the commitments for serious crimes, but this comparison cannot control for age. Moreover, given the history of migration flows to the United States, at any given point in time, the time spent in the U.S. is strongly correlated with one's country of origin. In 1904, for instance, recent arrivals would have been mostly Italians and Central and Eastern Europeans whereas the long-time residents would have been mainly the Irish, Germans, and Scandinavians. Contemporary observers certainly believed that involvement in crime varied across immigrant groups, but so too did the age distributions. Unfortunately, none of the published reports for the prison censuses provided data disaggregated by both age and country of origin.

3 Data on the Incarceration of Immigrants, Natives, and the Second Generation

3.1 Data Collection

We collected micro-level data from the 1900 to 1930 U.S. population censuses for all male inmates in state correctional facilities in a sample of eight states: Massachusetts, Connecticut, New York, New Jersey, Pennsylvania, Illinois, Michigan, and California. Table 1 provides data from the prison censuses of 1904, 1910, 1923, and 1930, on the numbers of male inmates enumerated on a given date in all penal facilities, male inmates in state facilities, and male inmates in state facilities in the sample states. For the years for which we have data, state facilities accounted for 60 to 72 percent of all male inmates incarcerated on a given date, and the sample states, which were the most populous and urban states during this period, accounted for more than one-third of all male inmates in state correctional facilities. More

importantly for our project, the sample states were major immigrant destinations and therefore accounted for around 60 percent of the foreign-born male population in the United States at the turn of the century and nearly 70 percent by 1930. For the two years for which we are able to produce calculations, 1904 and 1923, the sample states account for slightly higher fractions of the imprisoned foreign-born male population than they do of the total foreign-born male population.

<Insert Table 1 here>

We limited our data collection efforts to state correctional facilities in order to focus on incarceration for more serious offenses. Although state laws varied, most state-run facilities housed inmates sentenced to a year or more. Inmates with shorter sentences were housed in county or municipal jails, commonly for minor offenses such as disorderly conduct and vagrancy (Moehling and Piehl 2009). The types of crimes resulting in commitments to state institutions were those that imposed the greatest costs to society, and were the types of offenses that could lead to deportation under the provisions of the Immigration Act of 1917, including larceny, burglary, robbery, assault and homicide.

We limit our sample to men because the incarceration rates of women were extremely low during this period.¹ We also excluded facilities for juvenile offenders from the data collection since they contained many inmates committed for minor offenses.² Youth offending rates based only on those youths housed in state prisons will, therefore, understate youth involvement in crime. Therefore we drop the small number of inmates under the age of 18 in the prisons in our dataset and restrict our examination to males ages 18 and older.

¹ Women were most commonly imprisoned for prostitution and typically served short sentences. Many states during this period did not have separate facilities for women and housed women sentenced to longer terms in segregated housing in the same facilities as men or even in local jails. When the state prisons in our sample housed female inmates we excluded them from the analysis.

² Many states established juvenile courts as well as juvenile detention facilities during the period of our study. Including juvenile facilities in the prison sample, however, would lead to an overstatement of youth offending rates because many of the inmates in these facilities were committed for minor, juvenile-specific offenses like truancy or for non-crime reasons such as having deceased or incapacitated parents. More problematic, though, is the variation over time and across states in the treatment of juveniles in the criminal justice system. A sixteen year old convicted of burglary may have been sentenced to a prison in one state but a juvenile detention center in another.

We began the data collection project by drawing from the published volumes of the 1904, 1910, 1923, and 1930 prison censuses to develop lists of state correctional facilities likely in operation in the decennial census years. We then searched for these facilities in the census schedules, a process that often involved consulting data from state departments of corrections and local historical societies. Once a facility was located in the census schedules, all data on inmates for that facility were entered in a spreadsheet.³

Care was taken to enter the data exactly as they appeared on the census schedules. Before the data collection began, we had worried that some of the columns on the census forms would be left blank for prison inmates since it was likely that prison officials rather than the inmates themselves provided information to the census enumerators. Fortunately, we found that this was not the case. Prison officials tended to fill in all the data in the columns of interest to us: age, birthplace, parents' birthplace, literacy, and year of immigration. We found, in fact, that the state prison data suffer less from age-heaping than the IPUMS data on non-incarcerated males for the sample period.⁴ The only variable missing more frequently for the prison population than for the non-prison population was year of immigration. Overall, approximately 6% of the foreign born in the dataset are missing information on the year of immigration compared to about 11% of the foreign born in the prison sub-sample. We address this issue in the multivariate analyses by including an indicator variable for those observations with missing data. In later analyses where the focus is on age of arrival or arrival cohort, these observations are dropped.

Once collected, the prison inmate data were formatted and coded to be consistent with the Integrated Public Use Microdata Series random samples of the population censuses.⁵ We then combined the prison data with the IPUMS samples for the same census years. To prevent double-counting, we dropped from the IPUMS samples all individuals enumerated in correctional facilities other than military prisons, jails

³ During this period, it was common to have the officers and workers of an institution live on the grounds. These individuals and their families were enumerated on the same schedules as the institutional inmates. Such individuals are easy to identify, though, by the data on their relationship to the head of household as well as their occupations, and we excluded them from the dataset.

⁴ The Myers' Blended Index is only 1.8 for the male prisoners ages 18 to 87 compared to 4.1 for the males in the same age range in the non-prison sample.

⁵ IPUMS data and supporting documentation is available on-line at: www.ipums.umn.edu.

and houses of corrections.⁶ We are left with a dataset that allows us to examine the prison population from 1900 to 1930 in comparison to the general population.

It is worth noting that any measured assimilation within and across generations to crime outcomes may depend on the measure of crime employed. The studies mentioned above on the assimilation across generations in the current period generally relied on delinquency outcomes, either self-reported or based on arrest or appearance in court. In contrast, our research uses incarceration as the outcome. All of these outcomes potentially capture something different from (or, rather, in addition to) criminal behavior. Prison data record an event that takes place several stages beyond the crime event of interest, and there is considerable discretion involved in each intervening stage. Police reports from the first half of the 1900's were considered more likely to contain bias than data based on court outcomes (Maltz 1977, Brown & Warner 1995), though analysts at the time detailed the many reasons that immigrants might be disadvantaged in court, as well (Claghorn 1971), with especially large immigrant disadvantages for minor and nuisance offenses (Jones 1976). Unfortunately, even in modern crime data it is difficult to obtain reliable evidence on the magnitudes of these effects.

Our use of data from late in the criminal justice process means that the outcome measure is less likely to reflect discrimination. The data used do not contain crime type so no disaggregation by seriousness of offense is possible, but we do know that state prisons were generally reserved for more serious crimes. To the extent that enforcement discretion remains, any differences between natives and foreign born will be noisy measures of the differences by nativity in criminal behavior. Inference about assimilation - the primary concern in this article - would not be affected by constant levels of discrimination. The historical literature does not contain sufficient detail to allow a careful assessment of how discrimination might have evolved over the time under study here. Relevant factors have been noted already - the change in perceptions reflected in the national commission reports would suggest that the

⁶ To be precise, we dropped individuals coded as residing in the following types of correctional facilities: correctional institutions, n.s.; federal or state correctional facility; prison; penitentiary; reformatory; and camp or chaingang.

perception of the foreign born improved over the decades but the legislation enacted became increasingly punitive toward the foreign born over this same period.

However, using data on inmates in state prisons does raise concerns about the estimation of the effects of time in the U.S. for first generation immigrants. The time lags between the commission of a crime, arrest, conviction, and then commitment to prison could create a mechanical relationship between time in the U.S. and incarceration. These time lags, though, were much shorter in the early twentieth century than they are today. A mechanical relationship could also arise if repeat offenders were more likely to be sentenced to state prisons. Under such a system, a new immigrant arrival, who had committed his first offense in his home country, would be less likely to be committed to a state facility than a native with the same criminal history convicted of the same crime. But while habitual offender statutes expanded greatly in both number and scope over the late 20th century (Roberts 1997), it is not clear that this is how the criminal justice system operated during the period of study. While histories of criminal sentencing note that criminal law frequently aspired to punish repeat offenders more harshly (Friedman 1993), “. . . it was not until official record keeping became more systematic than an offender's prior crimes came to count heavily against him in subsequent sentencing proceedings. To that point, unless the offender had committed his previous offenses in the same area, it was likely that his prior misconduct would remain hidden.” (Roberts 1997: 308).

The research that exists suggests that repeat offenders would serve longer terms (Bodenhorn 2009) but is silent on the issue of whether they would be more likely to appear in state prisons than in other types of facilities. In the early twentieth century, the facility into which a convict was committed seems to have been determined mainly by crime type. The 1923 prison census presents data by crime type on the number of commitments to state prisons and reformatories versus local jails and workhouses for both native and foreign-born white males (U.S. Department of Commerce 1927: 249). Conditional on crime, the shares of native and foreign born sentenced to state facilities are very similar. For the most

serious crimes such as homicide, burglary, and robbery, the shares are almost equal.⁷ The 1930 prison census reports some data on recidivism, although not separately by nativity. These data reveal that a sizable fraction of individuals committed to state facilities were first-time offenders (U.S. Department of Commerce 1932: 29).⁸ There is likely some mechanical relationship between our measure of crime – incarceration in a state facility – and time in the U.S. for the foreign born and will interpret our empirical findings in this light. However, we believe the extent of this problem is small and note that it does not affect our findings on second generation immigrants.

3.2 Incarceration Rates

As discussed earlier, we limit the analysis to males aged 18 and older. On the upper end, we limit our attention to those under age 45 in order to concentrate on the ages of greatest participation in serious crime. Table 2 reports incarceration rates for males aged 18-44 by birthplace and race. These rates are very much in the spirit of the data presented in the prison census and government commission reports: they do not control carefully for age and do not separate out second generation immigrants from the native born population. One issue presents itself immediately: race. Overall, in 1900 natives had an incarceration rate of 266 per 100,000 and the foreign born rate was 174. But the native rate varied greatly by race: the white native rate was 231 while the rate for blacks was 1466 per 100,000 – over six times the rate for whites. For this paper, we limit the analysis to whites for the native and the foreign born. Doing so moves the native rate more than it moves the foreign rate, as the flow of immigrants was primarily white during the period under consideration. While the decision to limit the analysis to whites follows the historical literature on immigration, it is worth noting that this sets aside any discussion of the high rates of incarceration of Asians and particularly African Americans.

<Insert Table 2 here>

⁷ For some lesser crimes, such as having stolen property and larceny, the share of natives sentenced to state facilities is slightly larger (55 versus 46 percent in the case of having stolen property and 35 versus 24 percent for larceny) but at least some of this difference can be attributed to the different geographic distributions of natives and immigrants.

⁸ For the almost 38,000 commitments to state facilities in 1930 for which the Census Bureau could obtain data, almost 17,000, or 44 percent, were first offenders. Of the remaining commitments involving recidivists, 70 percent had previously been committed to state facilities.

It is also worth noting that there is substantial cross-state variation in incarceration rates, from California with on the order of 400 per 100,000 to Pennsylvania with rates only one third as high. Cross state differences in incarceration persist today, partly reflecting the organization of punishment authority (e.g., which crimes qualify for punishment in prisons as opposed to jails) and partly reflecting the level of criminal activity and how severely it is punished (Piehl and Useem 2011). Across the states, the trend over time is toward increased incarceration, especially over the 1920's. To capture these features in the data, the multivariate models of incarceration will flexibly control for state and year variation.

The incarceration rate of whites was constant between 1900 and 1910, fell for 1920, and then increased substantially by 1930. In 1930, the rate was 20 percent higher than it had been in 1910. When disaggregated by birthplace, this general time pattern remains, but the increase in the incarceration rate between 1920 and 1930 is much more dramatic for natives than the foreign born. As a result, the gap between natives and the foreign born increases between 1920 and 1930. These patterns echo those found by Moehling and Piehl (2009) in their analysis of the prison census data. The growing nativity gap in incarceration rates over the 1920s was due more to changes in the experience of natives than that of immigrants.

One concern in interpreting the incarceration trends for the foreign born, though, is how they were affected by deportations. As noted above, the Immigration Act of 1917 included a provision to deport immigrants convicted of serious crimes. In particular, the law proscribed deportation for any immigrant who had been in the U.S. five or fewer years and had been sentenced to at least one year in prison, and any immigrant no matter the time spent in the U.S. who had been convicted of a more serious offense or prostitution. Between 1926 and 1930, 3189 immigrants were deported for criminal activity committed in the U.S. (National Commission on Law and Enforcement 1931: 67) If those who were deported were added back into the foreign born prison population for 1930, the foreign born incarceration rate would be much higher. However, it is not clear that such an adjustment would be appropriate. The practice at the time was to deport immigrants after the "termination of their imprisonment" so we would expect little direct effect of deportations on the number of the foreign born in prison on a given date

(Clark 1931: 181-183). But there could have been an indirect effect if we assume that recidivism rates were higher than overall crime rates for the foreign born. However, even if we assume that half of all those deported between 1926 and 1930 would have been in an American prison in 1930, the foreign born incarceration rate would be only 239 per 100,000, still considerably lower than the rate of 287 observed for native born whites.⁹

It is important to note, however, that the incarceration rates of native born whites may also reflect immigration trends because the children of immigrants, the second generation, would be included in those calculations. As noted above, many contemporaries speculated that the second generation had a higher proclivity to be engaged in crime than natives of native parentage due to cultural conflict or economic disadvantage. Including the second generation in the calculation of the incarceration rates of natives may bias those rates, as well as their trend over time, upward. The advantage of the dataset on state prisoners from the population censuses is that the second generation can be separated out from the rest of the native-born population.

Table 3 provides the population shares and personal characteristics of three mutually exclusive population groups of interest: native born to native parents, foreign born, and members of the “second generation.” We define the latter as individuals with at least one foreign-born parent.¹⁰ The cell sizes for each group are large: the smallest (second generation in 1900) is over 20,000 and the largest (1930 native born, native parents) is nearly 60,000.

<Insert Table 3 here>

In 1900, 41% of the population of white males aged 18-44 were born in the United States to parents who were born in the U.S., 31% were foreign born, and 28% were members of the second generation. The data for 1910 reflect the large numbers of new arrivals in the preceding decade. By 1910,

⁹ This calculation assumes that 76% of those deported would have been from the sample states. As shown in Table 2, this is the fraction of foreign-born state prisoners who were in the sample states in 1923.

¹⁰ We drop from the sample a small number of people who were born abroad to U.S. parents. For the majority (over 70%) of the second generation, both parents are foreign born. Among the second generation, those with “father only” foreign born have lower incarceration rates than others in the second generation.

37% of the prime age male population in the sample states was foreign born. By 1930, though, the share foreign born had dropped to 25% while the share second generation had risen to over 31%. Table 3 shows other features of the immigration restrictions of the 1920s. By 1930, the illiteracy rate of the foreign born had fallen to 6.6% from 12% in 1900, and the average number of years in the United States rose to over 16.¹¹ And even within the fairly narrow age band considered in this sample, immigrants had aged. In 1930, the foreign born were nearly 4 years older, on average, than the native born in this highest incarceration age group. Throughout the period, the second generation closely resembles the native born in terms of age and illiteracy, important predictors of crime and incarceration.

Figure 1 shows the age distributions in more detail for 1910 and 1930. The dark bars show the distribution for the foreign born, who are older than the natives and the second generation in 1910. While there is little change in the age distribution for the native born to native parents over time, by 1930, the foreign born are dramatically older, nearly unrepresented in the 18-19 category and almost twice as likely as the other groups to be in the oldest age category. In contrast, the second generation is slightly overrepresented in the youngest age categories.

<Insert Figure 1 here>

Figure 2 shows the incarceration rates by the same age categories for the same three population groups. In both years all three groups show the usual age-incarceration curve, with a peak in young adulthood. Together with the differing age distributions in Figure 1, this demonstrates the importance of tightly controlling for age when comparing native and foreign born populations, especially during periods of changing immigration patterns, as demonstrated in Moehling and Piehl (2009).

<Insert Figure 2 here>

What is novel in Figure 2 is the striking pattern for the second generation. In 1910, the age-specific incarceration rates are consistently higher for the second generation than for the other population groups. Earlier analyses grouped the (sizeable) second generation with the native born to native parents, and thus missed this feature of immigration and incarceration. Without decomposing the native

¹¹ Note that literacy means able to read or write in any language.

population into second vs. third and higher generations, the observed native-born incarceration experience included these high-incarceration second generation immigrants, muting the (relative) poor outcomes of the foreign born at young ages, and exaggerating the positive performance at older ages. By 1930, the foreign born have lower age-specific incarceration rates throughout all the ages in the sample, and the second generation's experience aligns closely with that of the native born with native parents. Overall, these pictures give some support to the concerns of analysts at the time that the second generation was the "big crime problem." The second generation was overrepresented in the high crime age groups and for all ages, had much higher incarceration rates than their parents. However, at least by 1930, the second generation looks very similar to the natives to whom they might more appropriately have been compared.

4 Assimilation within and across Generations

The multivariate analyses allow us to examine assimilation within as well as across generations and to consider the impact of socioeconomic variables on nativity differences in incarceration rates. Table 4 reports the results of logistic regressions of the probability of incarceration, with average marginal effects reported in the tables. Each specification includes full sets of year and state dummies. The reported average marginal effects represent percentage point effects. In other words, -0.055 represents a reduction in the probability of incarceration of 0.055 percentage points. To put this in perspective, the incarceration rate of native whites over this period was 232 per 100,000 or 0.232 percent.

<Insert Table 4 here>

The first column shows that, unadjusted for demographics, the foreign born have a lower incarceration rate than the native born to native parents, and the second generation's rate is higher. Both of these estimates are strongly statistically significant. Column (2) adds a quartic in age and literacy status.¹² These controls move both of the estimates of interest somewhat closer to the native-born comparison, consistent with the discussion above of the sensitivity of crime-related rates to differences in

¹² We experimented with several ways to control for age and found that the quartic was sufficient to capture the age patterns in the data.

age distributions. But even with the controls for age and illiteracy, the second generation is somewhat more likely than natives with native parents to be incarcerated while the foreign born are much less likely to be incarcerated. The average marginal effect of -0.044 for being foreign born represents an almost 20 percent decrease in the rate of incarceration compared to the native born.

The third column of the table adds the variable “years in the U.S.” and its square to examine how the likelihood of incarceration for an immigrant changed with his time in the United States. The longer an immigrant had been in the country, the higher the incarceration rate. Note the large effect of missing information on the year of immigration. We interpret this as the result of data collection procedures at correctional institutions, as noted earlier.¹³ Column (4) of Table 4 contains results for the foreign born only, showing quite similar results to those for the whole population.

As noted above, some of the observed increase in incarceration risk for immigrants with time in the U.S. may be due to the time lag between the commission of a crime and commitment to prison or the potentially different treatment of first and repeat offenders rather than temporal changes in criminal behavior. Such arguments, though, would only apply to those immigrants who arrived in the U.S. as adults. Because age is controlled in the models presented in Table 4, those who have been in the U.S. longer must have arrived at earlier ages. To take a more detailed look at assimilation, Table 5 divides the foreign born by whether they arrived age 15 or younger (“child”) or age 16 or older (“adult”) and adds consideration of differences in residential location and socioeconomic status as drivers of incarceration. Since identifying the age at arrival requires information on arrival date, immigrants with missing arrival dates must be dropped from this analysis.

<Insert Table 5 here>

Immigrants who arrived as children are often referred to as the “1.5 generation.” The raw incarceration rate is much lower for foreign born who arrived as “adults” (132 per 100,000) than for those

¹³ We also estimated a model including the dummy for missing arrival date but not years in the U.S. and its square to see whether the observations with missing arrival dates affected the estimated effect of being foreign born in the models presented in column (2) of Table 4. Although the estimated marginal effect of having a missing arrival date was positive and substantial as found in the model presented in column (3) of Table 4, the estimated marginal effect of being foreign born did not change.

who arrived as children (238 per 100,000). While those who arrived as children are less likely to be illiterate (5%), this rate remains much higher than among those born in the U.S., whether second generation or higher. The data on average years in the U.S. shows clearly that this variable was strongly correlated with age at arrival.

As posited by early criminologists, nativity differences in crime may reflect nativity differences in residence patterns and socioeconomic status. We do not know the usual place of residence for prison inmates, nor do we have consistent information on occupations for inmates. However, we can look at the regional and occupational distributions of the non-incarcerated population by nativity group. Over this period, 42% of the young male natives born to native parents lived in cities with populations of 25,000 or more compared to about 70% for the foreign born and 63% for the second generation. The differences in occupational distributions reflect the different residency patterns with natives twice as likely to be farmers and farm laborers. The Duncan Socioeconomic Index provides a summary measure for occupational status based on both income and “social prestige.” The average for this index is higher for natives and the second generation, and lowest for the foreign born who arrived as adults. Those who arrived as adults likely had influence over the decision to migrate but had less chance to take advantage of opportunities in the U.S.

Table 6 presents the results of multivariate logistic models examining the impact of age at arrival. Controlling for age, literacy, state, and year as before, column (1) shows that the low incarceration rates of the foreign born are accounted for entirely by those who arrived as adults. In fact, those who arrived as children have somewhat higher incarceration than the omitted group, natives born to native parents, and are indistinguishable from the second generation. These results are consistent with the notion that immigrants who arrived as children are more like the second-generation than immigrants who arrived as adults, reflecting different processes of selection into migration or different experiences in the U.S.

<Insert Table 6 here>

We cannot look directly at the impact of urban residence or occupation on the likelihood of incarceration because these variables reflect prison status. However, we can examine whether the

geographic distribution and average occupational status of one's nativity group is correlated with this likelihood. This approach has the additional benefit of solving any concerns about endogeneity of residence or employment to criminal activity.

Column (2) adds the average Duncan SEI for the individual's nativity group (defined by state and year, and for the foreign born, arrival cohort). The higher the Duncan SEI, and hence, the higher the average occupational status of one's nativity group, the less likely an individual is to be incarcerated. The addition of this variable, moreover, leads to elimination of a mean difference between the 1.5 generation and the native born. The impact of adding the urbanicity variable (column 4) – the percent of a nativity group that lives in city with a population of 25,000 or more – is even more dramatic. Now both the 1.5 and second generation are estimated to have lower likelihoods of being incarcerated than natives of native parentage. The foreign born who arrived as children now have lower incarceration rates than the native born, and, to a lesser extent, so does the second generation. The foreign born who arrived as adults have a 0.15 percentage point lower rate of incarceration than do the native born. Given that the native born rate is 0.232, this translates into a 65 percent lower probability of being incarcerated. These results support the views of early criminologists like Taft (1933) and Shaw and McKay (1942) that immigrant crime patterns reflected the neighborhoods in which they lived and the economic conditions they faced. Even including these crude controls for urban residence and occupational status eliminates the advantage of the native born relative to the second generation.

Column (4) adds controls for years in the U.S., allowing their effects to differ for adult and child arrivals. For both groups, incarceration probabilities increase with time in the U.S. This effect is more pronounced for those who arrived as adults than for those who arrived as children. Although the incarceration experiences of adult arrivals may have been influenced by the time lags and differential treatment of repeat offenders discussed above, the same arguments cannot be made about the incarceration experiences of immigrants who arrived as children. The model in column (4) indicates that controlling for urbanicity and occupational status, the 1.5 generation had a lower likelihood of

incarceration than natives, but that likelihood increased with their time in the U.S. An analysis of the predicted probabilities for an immigrant arriving at age 10 indicates there is no crossover point.

Another factor which may complicate the interpretation of the effect of time in the U.S. is variation in immigrant experience across the census years. While all the previous models include year dummies, they do not allow the effect of year to vary by nativity. But some changes over time might be expected to have different effects on immigrants than natives: for example, changes in economic opportunities overseas and developments in U.S. immigration law. Column (5) adds separate year dummies for the two foreign-born groups to control for arrival cohort effects. For all of the foreign born, outcomes are worse in 1910 and 1920, relative to natives. Notably, though, the marginal effect of being an immigrant who arrived as an adult was lower in 1930 than in other years. As changes in immigration law made it more difficult to enter the U.S., the gap in incarceration rates between adult arrival immigrants and natives was increasing. However, as with the previous models, immigrant incarceration probabilities were increasing with their time in the U.S.¹⁴

Overall, we have found a substantial role for assimilation. Among the foreign born, incarceration is consistently related to time in the country, but some of this estimated could be somewhat mechanical. Incarceration rates for the 1.5 and second generations are very similar to those of the native born. But these groups look better than natives once their residential patterns are considered. Assimilation for those arriving as children is less rapid than for those who arrived as adults, but it is still substantial.

¹⁴ The positive effect of time in the U.S. on the likelihood of incarceration may have been even more pronounced if immigrants convicted of serious crimes had not been deported. The effect of return migration is more uncertain. If return migrants were negatively selected from the immigrant population and therefore represented those who were disappointed with their economic or social outcomes in the U.S., then their departure would likely have served to lower the incarceration rate of the foreign born. But if return migrants were instead positively selected from the immigrant population, their departure may have actually increased the foreign born incarceration rate. There is a small literature on selection in return migration during this period, though the research suffers from incomplete availability of data. This literature considers labor market outcomes, not crime measures, so we hesitate to judge the direction of selection as it relates to the incarceration context (Biavaschi 2012; Abramitzky et al. 2012).

Now we turn to the claim of contemporary observers that involvement in crime varied by country of origin. Table 7 characterizes the four largest immigrant groups in 1910.¹⁵ As described earlier, the immigrant flow to the United States changed over time. Therefore, any examination of country of origin must also take into account year of arrival. In 1910, 39% of immigrants in our sample were born in Central Europe, with smaller but large fractions from Italy, Germany and Ireland. The vast majority of immigrants from Italy and Central Europe were new arrivals, with 70% arriving within the previous decade and most of the rest the decade before. The German and Irish immigrants in the sample were fairly evenly spread across the 1880s, 1890s, and 1900s. Differences in arrival cohort are also reflected in differences in average age. Thus, age differences occur within the foreign born population as well, and may be important for the interpretation of differences in incarceration across countries of origin.

<Insert Table 7 here>

Note that the fraction living in cities is high for all groups, with nearly 80% of the Irish living in cities of 25,000 or more residents. There is somewhat more variation in occupation outcomes, as shown in the bottom of the table. Forty-two percent of Italians in 1910 were laborers while just 14% of Germans fell into that category. These differences are reflected in the Duncan Index which is much higher for the Germans than for the Irish and those from Central Europe, which are in turn much higher than for immigrants from Italy.

Table 8 reports regression results for these and other immigrant-sending regions. Incarceration rates vary greatly across immigrant groups, with Mexican and Italian immigrants having the highest incarceration rates, higher than the native born and higher than that of the second generation.¹⁶ None of the other sending regions have odds of incarceration higher than the natives. The remaining columns drop the natives from consideration and set Germans as the reference category. Among the foreign born,

¹⁵ For this analysis, we define source country as country of birth. Some scholars prefer alternative definitions based on language as well. For the groups we study, such an alternative definition would only have an effect on the Central and Eastern European group.

¹⁶ Both age and literacy are controls in these specifications. If the literacy variable in part reflects some bias against the foreign born from southern Europe, then including this variable may over control for some of the regional differences (to the extent that these groups have higher criminality or are subject to discrimination in law enforcement).

Mexicans, Italians, and to a lesser extent Canadians, have higher incarceration rates than the Germans.¹⁷ Scandinavians had substantially lower rates of incarceration.

<Insert Table 8 here>

Recent research has shown that immigrants' experiences in the U.S. were greatly affected by their years of arrival (Abramitzky et al. 2012). Not only were different arrival cohorts differentially selected from their home countries, they also encountered different economic conditions in the U.S. However, column (3) shows that even after arrival cohort controls are added to the model, the rank order by country remains stable. The pattern across cohorts is monotonic, with the most recent much less likely to be incarcerated than those who arrived in the late 19th century. Recall that the cohort of arrivals in the 1920s was smaller due to changes in immigration law and therefore, more likely to have been highly selected than previous arrival cohorts. These cohort effects are difficult to interpret with precision, however, as they necessarily reflect age at arrival as well as cohort of entry.

Column (4) adds the urban and occupation variables, which are now defined by immigrant origin as well as year, state, and arrival cohort. Within the sample of only foreign born, these controls have smaller effects than in Table 6 and in fact the Duncan Index flips sign. Moreover, the addition of these variables does not change sizes or ordering of the source country effects. Differences in incarceration patterns by source country persist even after controlling, albeit rather crudely, for differences in socioeconomic conditions.

The question remains though whether assimilation patterns also differed by immigrant groups. To show the experiences of the four largest immigrant groups by generation, Figures 3, 4, and 5 plot the predicted probabilities from a logit model in which the effects of age, illiteracy, and years in the U.S. are allowed to vary with origin and generation.¹⁸ Figure 3 first shows the estimated age-incarceration profiles

¹⁷ The “other immigrant” category includes the few immigrants from Africa and Oceania.

¹⁸ The predictions are calculated for New York state in 1910, with the urban and occupation variables set at the natives' mean values. The models also include the average Duncan SEI and fraction living in cities with populations 25,000 or more for an observation's reference group where this group is defined by source country, generation, year, state, and arrival cohort (for the foreign born). For the second generation, the reference group is defined by father's birthplace. Re-running the regressions using

for the first generation, immigrants who arrived as adults, relative to natives with native-born parents. Here, the Italians look most similar to the natives, with the Germans, Central and Eastern Europeans, and Irish having progressively lower rates of incarceration at nearly all ages considered. These simulations assume entry to the US at age 18. For all groups, the new arrivals have low estimated incarceration rates which then approach the rates of natives by the 30s and 40s. However, those who arrive as adults never have the high incarceration risks that natives experience in their peak years of their early 20s.

Figure 4 shows the same graphs but this time for the "1.5 generation," those immigrants who arrived as children. The profiles are calculated for an individual who arrived at age 10, and therefore had been in the country 8 years by age 18. For this generation, all sending regions except for Germany have quite similar age-incarceration profiles. And their incarceration rates are quite comparable (in level as well as shape) to those of the native born. Figure 5 presents the same data for the second generation and shows the same patterns. Immigrants who arrived as children had incarceration patterns more like the second generation than the first generation, and the second generation's patterns were very similar to those of natives of native-born parents. While differences in incarceration patterns for the first generation were substantial, all groups assimilated fairly rapidly to the patterns of the native born of native parents.

5 Conclusion

Analysis of a newly created dataset of prison inmates in the U.S. population censuses has shed greater light on the connections between immigration and crime in the early twentieth century and in particular on immigrant assimilation in incarceration patterns. Although new arrivals had much lower rates of incarceration than natives, those rates increased with time in the U.S. This is seemingly at odds with Thorsten Sellin's (1938) theory of the culture conflict suffered by new arrivals and the finding of Moehling and Piehl (2009) that new arrivals were disproportionately represented in prison commitments for serious crimes in 1904. But these contrasts speak once again of the profound effect of age on crime

mother's birthplace to define these reference groups has very little effect on the results. In particular, even using mother's birthplace to define these groups, the German second generation has much lower incarceration rates at all ages than natives of native parentage and the other second generation groups.

rates. New arrivals tended to be in the peak crime ages. What the logistic regression results reveal is that the high crime rates of new arrivals could be better explained by their ages than by their time in the country.

The findings for the 1.5 and second generations provide even stronger evidence of the rapid assimilation to native incarceration patterns. In fact, these two groups have fairly similar incarceration outcomes. The 1.5 and second generations were at a slightly greater risk than their peers with native parents to be imprisoned. This finding coupled with the striking differences in the age distributions of the first and second generation make it easy to see why law-enforcement officials during the period blamed the immigrant crime problem on the children of immigrants rather than the immigrants themselves.

But we also find that the higher incarceration rates of the 1.5 and second generations can be explained by their greater likelihood to live in urban areas than natives of native parentage. When even fairly crude controls are added to the logit models, the estimates indicate lower probabilities of incarceration for the 1.5 generation and, to a lesser extent, for second generation immigrants. The general patterns of assimilation hold for immigrants from a wide range of source countries. While the incarceration rates of new arrivals differed significantly by source country, we still find that incarceration probabilities were increasing with time in the U.S. and across generations.

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Figure 1.—Age Distributions White Males 18 to 44, by Nativity

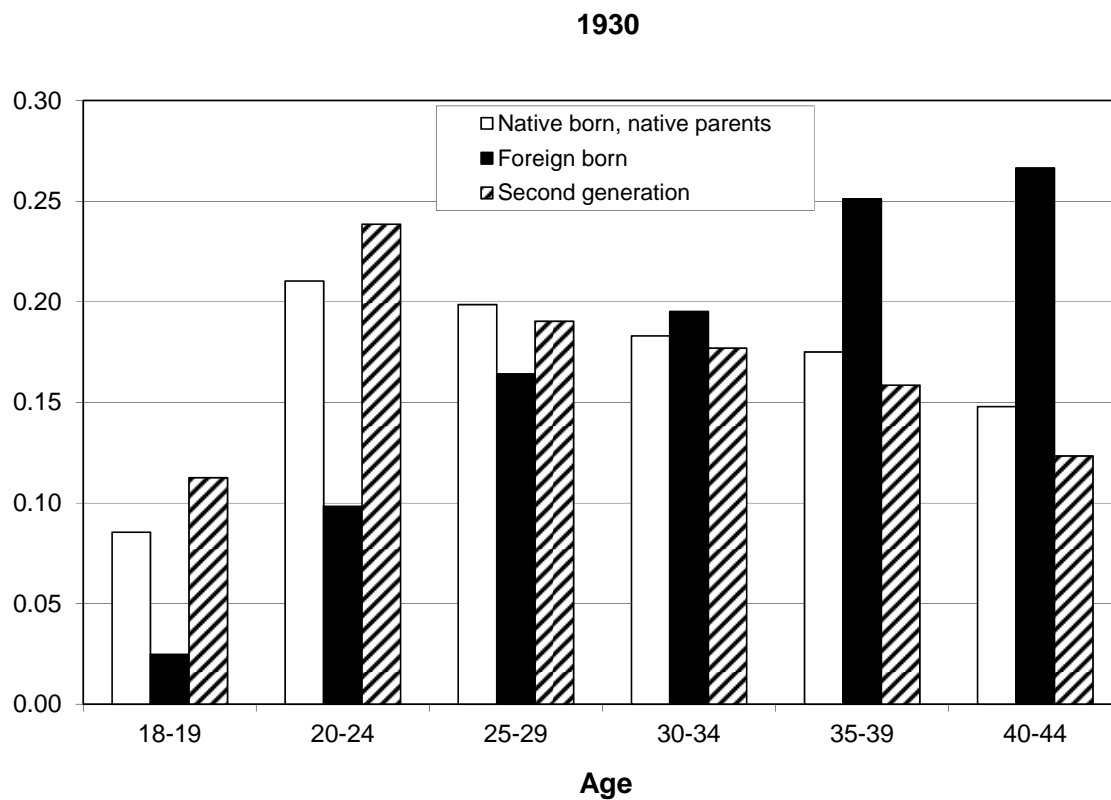
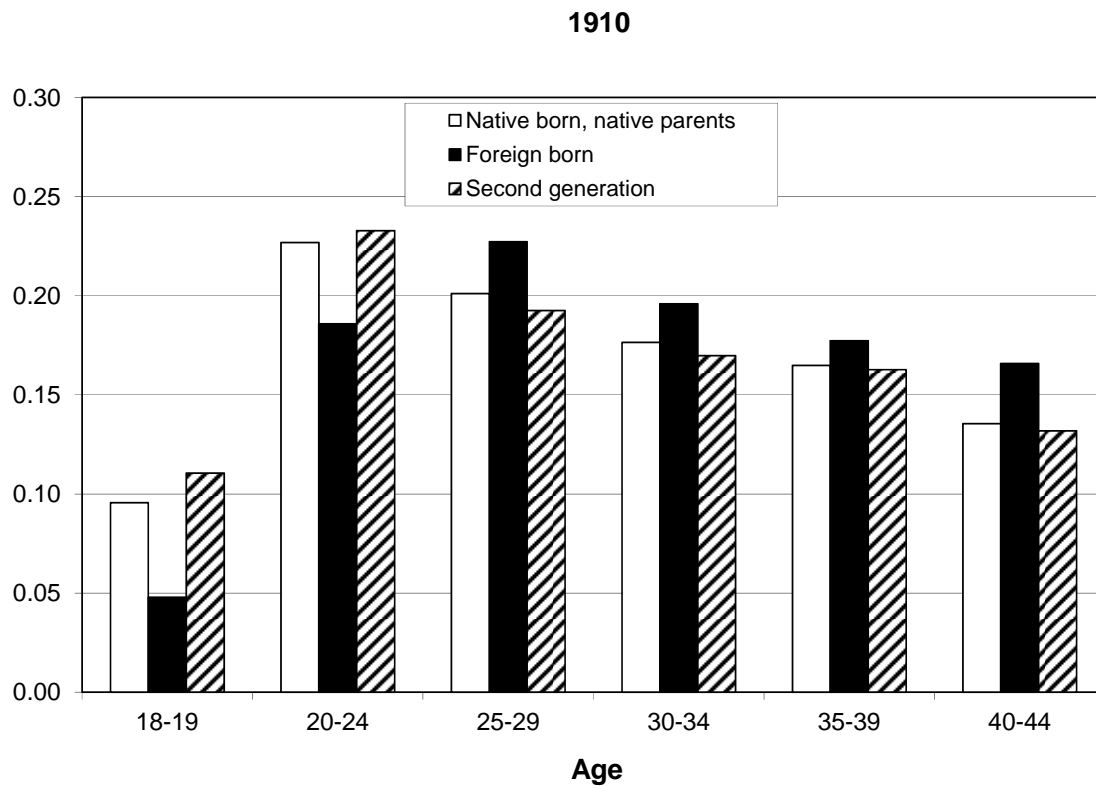
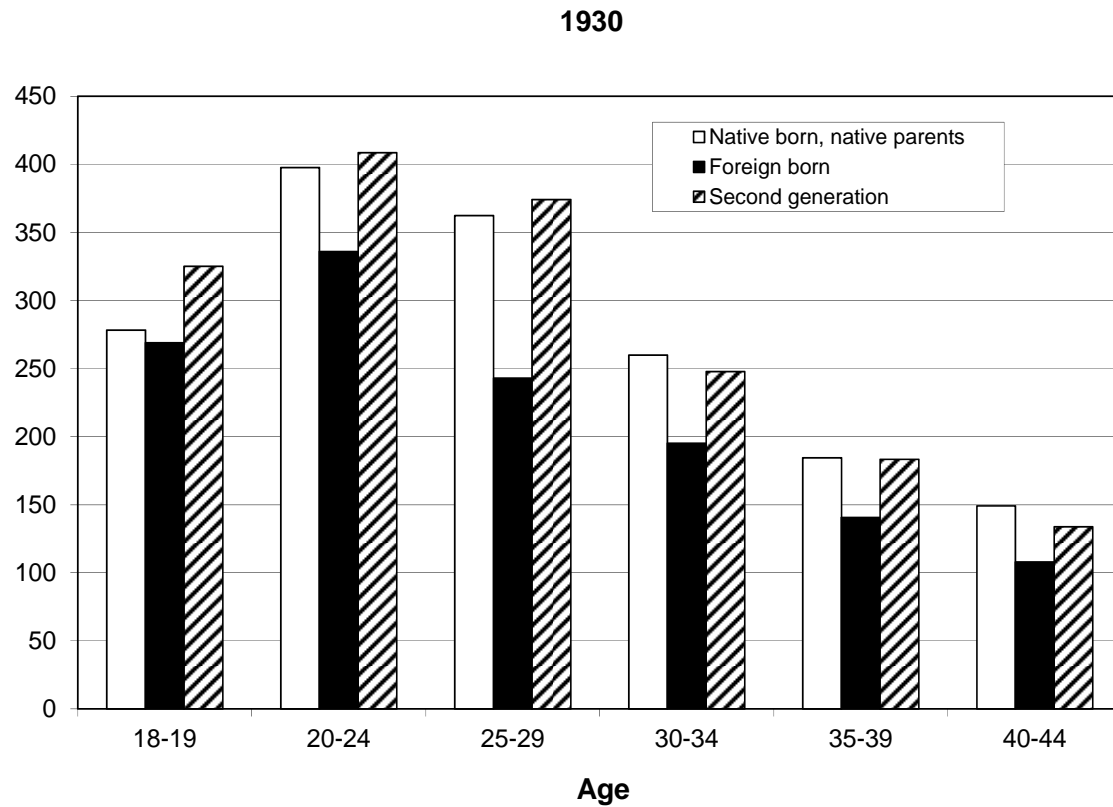
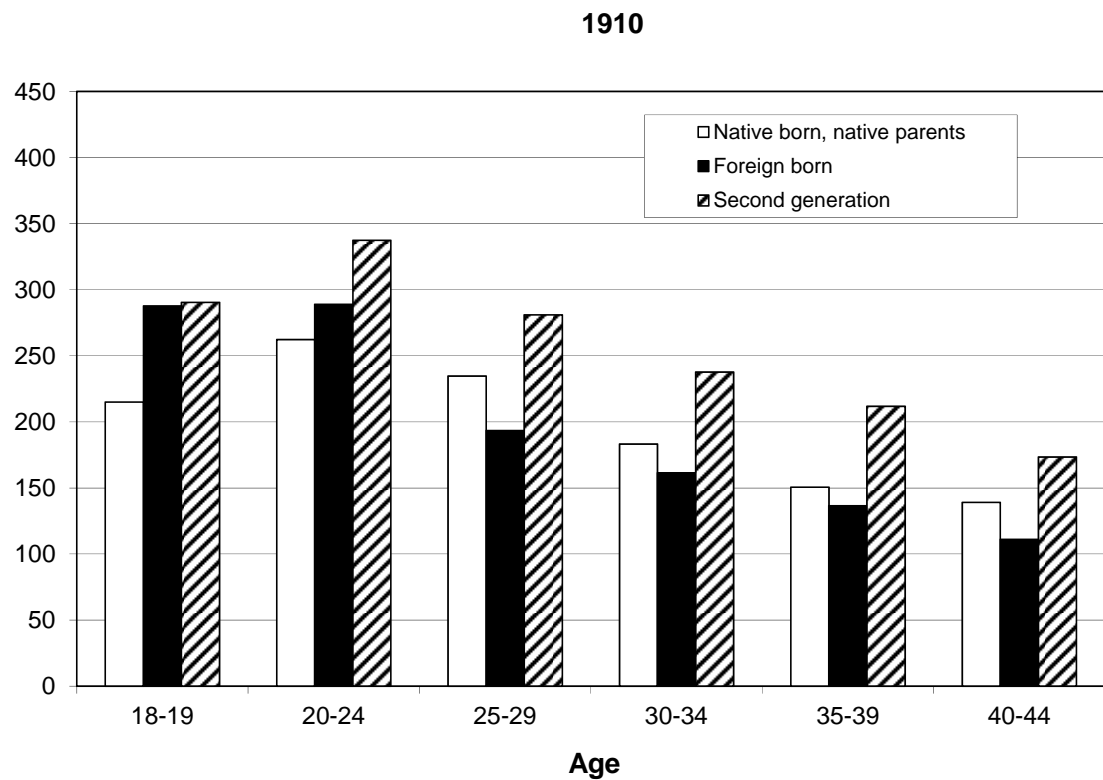
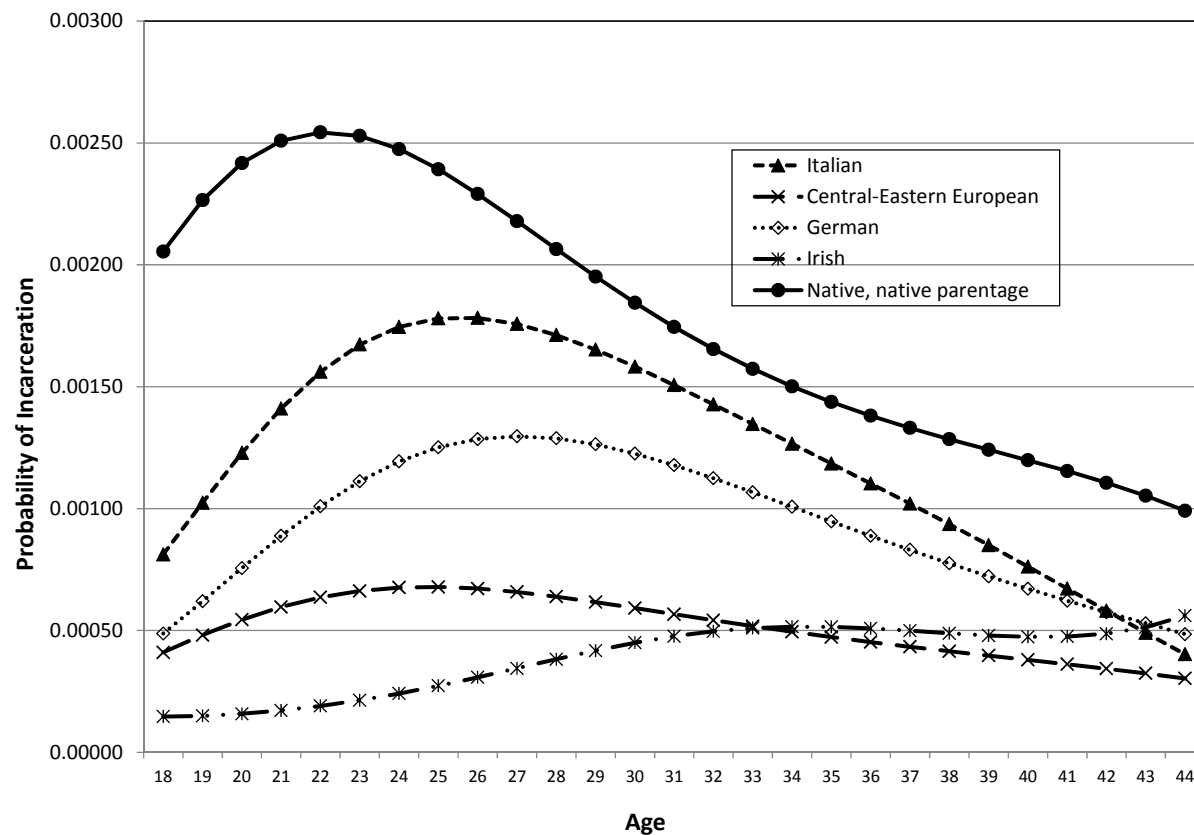


Figure 2.—Incarceration Rates White Males, by Age and Nativity

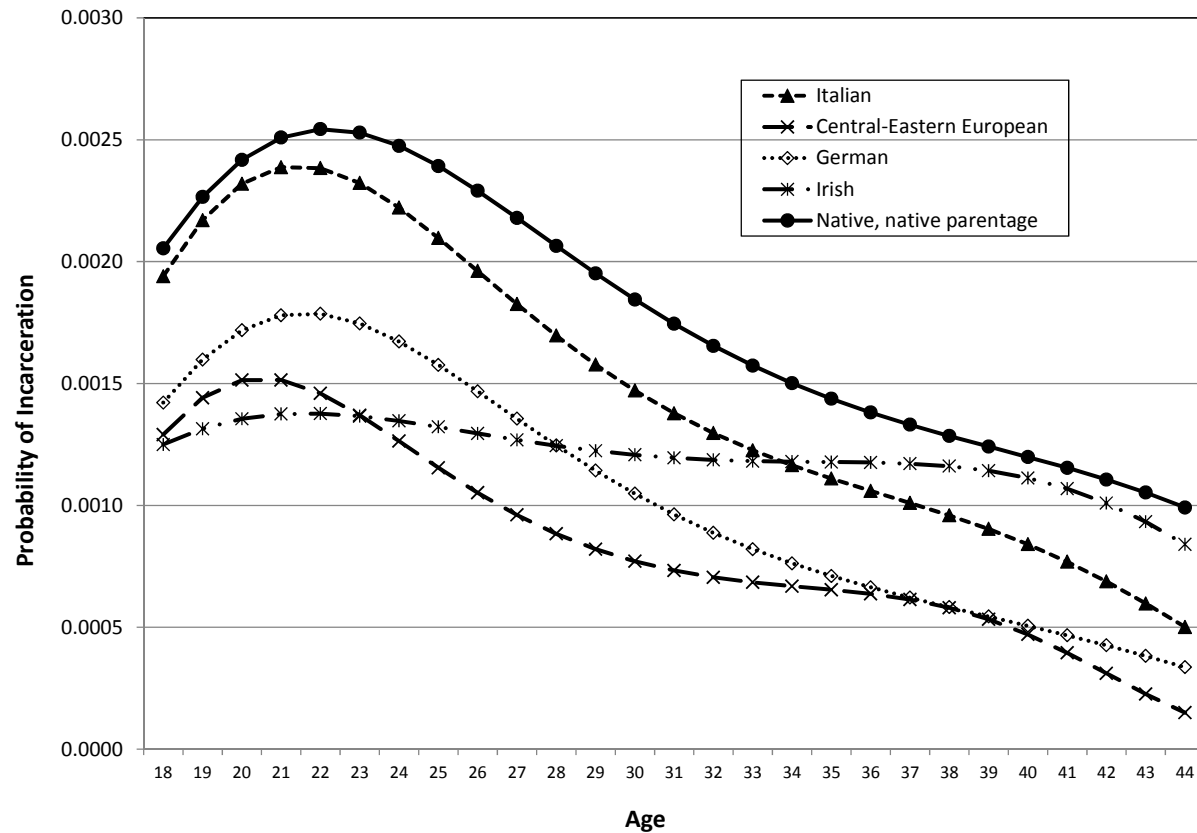


**Figure 3.-- Predicted Age Profiles of the Probability of Incarceration,
First Generation Immigrants versus Natives**



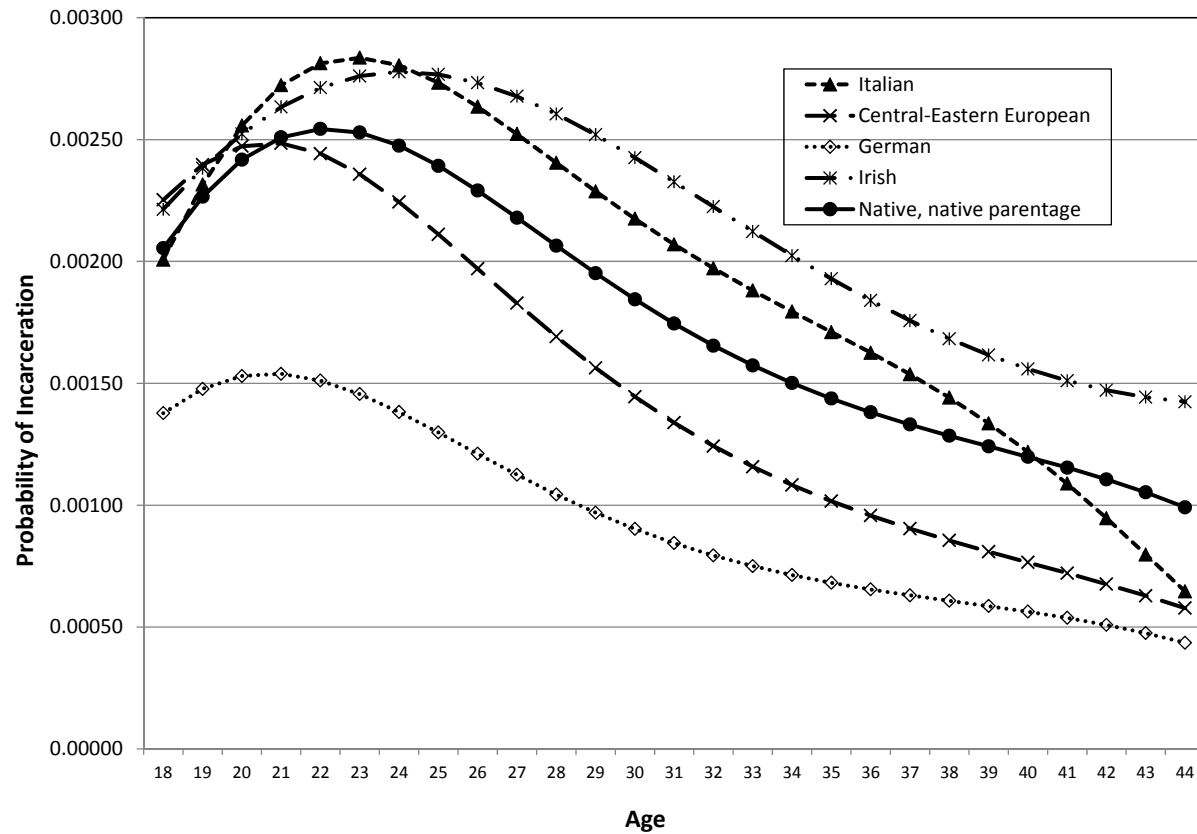
Notes: First generation immigrants assumed to have arrived at age 18. Profiles constructed using estimates from logistic model where all age profiles and time in the U.S. allowed to vary by nativity and ethnic group. Baseline individual is literate and residing in New York State in 1910.

**Figure 4.-- Predicted Age Profiles of the Probability of Incarceration,
1.5 Generation Immigrants versus Natives**



Notes: "1.5" generation immigrants assumed to have arrived at age 10 and therefore have 8 years in the U.S. by the age of 18. Profiles constructed using estimates from logistic model where all age profiles and time in the U.S. allowed to vary by nativity and ethnic group. Baseline individual is literate and residing in New York State in 1910.

**Figure 5.-- Predicted Age Profiles of the Probability of Incarceration,
Second Generation Immigrants versus Natives**



Notes: See notes to Figure 3.

**Table 1.—Male Inmates in All Penal Institutions and State Penal Facilities,
Prison Censuses 1904-1930**

	1904	1910	1923	1930
U.S. total all penal institutions	77,269	105,362	103,883	^a
U.S. total state penal facilities	54,727	64,925 ^b	74,655 ^c	96,944 ^d
Inmates in state facilities in sample states:				
Massachusetts	2,751	3,032 ^b	1,732	1,846
Connecticut	460	591	804	946
New York	4,257	6,452	5,709	7,468
New Jersey	1,689	1,798	1,758	2,451
Pennsylvania	2,688	3,449	4,164	3,814
Illinois	2,383	2,455	4,375	7,785
Michigan	1,397	1,596	3,594 ^c	7,103
California	2,359	2,787	3,738	6,340
Total in sample states	18,984	22,160	25,874	37,753
Percent of male state prison population in sample states	35	34	35	39
Percent of foreign-born male state prison population in sample states	63		64	
Percent of foreign-born adult male population (18+) in sample states ^e	58	61	63	69

^a The 1930 prison census included only state and federal facilities.

^b Data for 1910 includes inmates in Massachusetts State Farm and Massachusetts State Prison Camp. These facilities included in state facilities inmate counts for other years.

^c Data for 1923 exclude state and federal prisoners being held in the Detroit House of Correction. These inmates are described as “misdemeanants” and are explicitly excluded in later censuses of state penal institutions.

^d Data for 1930 do not include state prisoners designated as “in custody outside of institution.”

^e These figures calculated using the IPUMS samples for the nearest decennial census.

Sources: U.S. Department of Commerce and Labor 1907: Table 3, pp. 68-87; U.S. Department of Commerce 1918: Table 60, p. 79; U.S. Department of Commerce 1926: Table 139, pp. 250-265; U.S. Department of Commerce 1932: Table 52: 140-153.

**Table 2.—Incarceration Rates Males 18 to 44, by Nativity and Race
(per 100,000 in population)**

Year	Natives	Foreign born	<u>Whites</u>			Blacks	Asian
			Natives	Foreign born	All		
1900	266	174	231	179	212	1466	292
1910	268	187	227	191	212	1518	166
1920	198	153	165	157	161	925	199
1930	344	187	287	194	260	1325	287

**Table 3.—Population Shares and Personal Characteristics, Major Nativity Groups,
White Males 18 to 44, by Census Year**

	Native, native parents	Foreign born	Second generation	Native, native parents	Foreign born	Second generation
		<u>1900</u>			<u>1910</u>	
Percent of population	41.09 (0.20)	30.92 (0.19)	27.98 (0.18)	38.10 (0.17)	36.65 (0.17)	25.26 (0.16)
Age	29.61 (0.05)	31.64 (0.05)	29.11 (0.06)	29.55 (0.04)	30.79 (0.04)	29.25 (0.05)
Percent illiterate	1.65 (0.08)	12.39 (0.24)	1.33 (0.09)	1.16 (0.06)	15.65 (0.21)	0.94 (0.07)
Years in the U.S. ^a		12.97 (0.06)			11.02 (0.05)	
No. of observations	30,141	21,789	21,022	35,823	33,968	24,913
		<u>1920</u>			<u>1930</u>	
Percent of population	40.61 (0.17)	31.96 (0.16)	27.43 (0.15)	43.32 (0.15)	25.28 (0.13)	31.40 (0.14)
Age	29.90 (0.04)	32.69 (0.04)	29.16 (0.05)	30.05 (0.04)	33.81 (0.04)	29.09 (0.04)
Percent illiterate	0.64 (0.04)	13.29 (0.20)	0.65 (0.05)	0.47 (0.03)	6.64 (0.15)	0.68 (0.05)
Years in the U.S. ^a		14.42 (0.05)			16.39 (0.05)	
No. of observations	41,047	31,746	27,507	57,589	31,061	42,180

^a Approximately 6 percent of foreign born individuals in the dataset have missing data on their year of immigration. These observations have been dropped to calculate the means for years in the U.S.

Notes: Standard errors of population mean estimates in parentheses. Calculations take into account different probabilities of entering sample.

Table 4.— Average Marginal Effects from Logistic Models for the Probability of Incarceration, White Males 18-44

Model	(1)	(2)	(3)	Foreign born only (4)
Foreign born	-0.055 (0.002)	-0.044 (0.002)	-0.176 (0.005)	
Second generation	0.013 (0.002)	0.008 (0.002)	0.008 (0.002)	
Age		0.423 (0.042)	0.430 (0.043)	0.365 (0.072)
Age ²		-0.020 (0.002)	-0.020 (0.002)	-0.018 (0.004)
Age ³		4.1E-4 (5.3E-5)	4.1E-4 (5.3E-5)	3.8E-4 (8.7E-5)
Age ⁴		-3.1E-6 (1.6E-8)	-3.0E-6 (1.6E-8)	-2.9E-6 (2.7E-8)
Illiterate		0.085 (0.007)	0.117 (0.007)	0.052 (0.006)
Years in the U.S.			0.018 (7.9E-6)	0.016 (6.8E-4)
(Years in the U.S.) ²			-4.1E-4 (2.5E-5)	-3.4E-4 (2.1E-5)
Year of arrival missing			0.590 (0.030)	0.482 (0.024)
Number of observations	398,786	398,786	398,786	118,564
Log pseudo-likelihood	-6035.18	-5995.34	-5985.97	-1473.38

Notes: The reported effects and their standard errors (in parentheses) have been multiplied by 100. All models included dummy variables for state and year. Models weighted to account for different probabilities of entering sample.

**Table 5.—Population Shares, Incarceration Rates, and Personal Characteristics,
Disaggregated Nativity Groups, White Males 18 to 44**

	Native, Native Parents	Foreign Born ^a		Second generation
		Arrival- Adult	Arrival- Child	
Percent of population	41.64 (0.09)	20.87 (0.07)	8.76 (0.05)	28.74 (0.08)
Incarceration rate (per 100,000)	223	132	238	245
Age	29.82 (0.02)	33.32 (0.03)	29.89 (0.04)	29.14 (0.03)
Percent illiterate	0.88 (0.03)	15.15 (0.14)	5.29 (0.13)	0.84 (0.03)
Years in the U.S.		10.66 (0.03)	20.98 (0.05)	
Percent in cities 25,000+ ^a	42.20 (0.13)	68.24 (0.18)	70.76 (0.26)	63.23 (0.16)
Duncan SEI ^a	29.57 (0.64)	22.08 (0.07)	28.18 (0.13)	30.55 (0.07)
Occupational distribution ^b				
Professional/technical	6.27	2.35	3.93	5.27
Farmer	8.31	2.13	2.72	4.46
Manager	7.38	7.11	9.53	7.56
Clerical	8.27	1.92	4.67	9.45
Sales	7.15	3.39	7.11	8.10
Craftsman	19.80	22.55	22.97	21.51
Operative	16.03	25.12	24.49	20.33
Service worker	2.74	6.05	5.41	3.85
Farm laborer	7.27	2.64	2.51	3.84
Laborer	10.59	25.14	13.36	9.98
No reported occupation	6.21	1.61	3.32	5.65

^a Foreign-born individuals with missing data on year of arrival dropped.

^b Calculated for non-incarcerated population only.

Notes: Standard errors of population mean estimates in parentheses. Calculations take into account different probabilities of entering sample.

Table 6.— Age at Arrival and Change over Time: Average Marginal Effects from Logistic Models for the Probability of Incarceration, White Males 18-44

Model	(1)	(2)	(3)	(4)	(5)
Foreign born adult arrival	-0.088 (0.002)	-0.107 (0.003)	-0.150 (0.005)	-0.388 (0.015)	-0.412 (0.018)
* 1910					0.077 (0.012)
* 1920					0.058 (0.011)
* 1930					-0.014 (0.008)
Foreign born child arrival	0.006 (0.003)	-0.003 (0.004)	-0.048 (0.005)	-0.178 (0.012)	-0.192 (0.013)
* 1910					0.086 (0.014)
* 1920					0.067 (0.013)
* 1930					-0.004 (0.010)
Second generation	0.008 (0.002)	0.009 (0.002)	-0.017 (0.003)	-0.033 (0.003)	-0.030 (0.003)
Duncan SEI ^a		-0.003 (4.3E-4)	-0.006 (4.9E-4)	-0.013 (6.7E-4)	-0.012 (6.9E-4)
City 25,000+ ^a			0.002 (1.4E-4)	0.003 (1.6E-4)	0.002 (1.6E-4)
Adult arrivals:					
Years in the U.S.				0.037 (0.002)	0.038 (0.002)
(Years in the U.S.) ²				-1.1E-3 (6.5E-5)	-1.1E-3 (6.8E-5)
Child arrivals:					
Years in the U.S.				0.011 (0.002)	0.012 (0.002)
(Years in the U.S.) ²				-1.6E-4 (3.9E-5)	-1.9E-4 (3.9E-5)
Number of observations	391,658	391,658	391,658	391,658	391,658
Log pseudo-likelihood	-5829.56	-5829.17	-5828.05	-5821.87	-5820.14

^aThese variables represent group means, where groups are identified by nativity, year, and state, and for the foreign born, also arrival cohort.

Notes: The reported effects and their standard errors (in parentheses) have been multiplied by 100. All models included dummy variables for state and year as well as a quartic in age and a dummy variable for illiterate. Models weighted to account for different probabilities of entering sample.

**Table 7.—Population Shares, Incarceration Rates and Personal Characteristics,
Most Populous Immigrant Groups, 1910**

	Italy	Central Europe	Germany	Ireland
Percent of foreign born population	17.03 (0.23)	39.03 (0.30)	10.46 (0.19)	7.55 (0.16)
Incarceration rate (per 100,000)	354	126	194	179
Age	29.52 (0.10)	29.48 (0.07)	33.62 (0.13)	33.79 (0.15)
Illiterate	31.40 (0.68)	21.43 (0.40)	3.03 (0.32)	1.91 (0.30)
Years in the U.S.	7.73 (0.09)	7.95 (0.07)	17.83 (0.18)	15.62 (0.20)
Arrival cohort (percent)				
1880 or before	0.65 (0.12)	0.71 (0.08)	8.79 (0.53)	6.40 (0.54)
1881-1890	6.62 (0.36)	8.66 (0.27)	39.69 (0.92)	33.26 (1.04)
1891-1900	22.69 (0.61)	20.92 (0.39)	27.36 (0.83)	30.48 (1.01)
1901-1910	70.03 (0.67)	69.71 (0.45)	24.16 (0.80)	29.86 (1.01)
Percent in cities 25,000+ ^a	61.68 (0.70)	66.31 (0.45)	71.03 (0.82)	78.92 (0.87)
Duncan SEI ^a	16.74 (0.23)	20.03 (0.17)	27.49 (0.36)	23.15 (0.39)
Occupational distribution ^a				
Professional/technical	1.32	1.78	2.84	1.60
Farmer	0.73	0.81	5.18	1.05
Manager	4.83	6.81	9.65	5.20
Clerical	0.69	1.36	3.62	4.16
Sales	2.13	3.76	4.60	4.47
Craftsman	14.42	18.04	27.21	17.85
Operative	21.54	32.77	20.50	22.09
Service worker	8.17	2.65	8.38	10.36
Farm laborer	2.76	1.39	2.57	2.87
Laborer	42.06	28.98	13.95	28.30
No reported occupation	1.34	1.66	1.50	2.05

^a Calculated for non-incarcerated population only.

Notes: Standard errors of population mean estimates in parentheses. Central Europe includes Austria, Bulgaria, Hungary, Poland, and Russia. Calculations take into account different probabilities of entering sample. Immigrants with missing data on year of arrival are not included in these data.

Table 8.— Variation by Source Country: Average Marginal Effects from Logistic Models of the Probability of Incarceration, White Foreign-Born Males 18-44

Model	(1)	(2)	(3)	(4)
Second generation	0.007 (0.002)			
Source countries ^a				
Germany	-0.060 (0.005)			
Britain	-0.075 (0.005)	-0.024 (0.007)	-0.025 (0.007)	-0.024 (0.007)
Canada	-0.040 (0.006)	0.016 (0.008)	0.014 (0.009)	0.024 (0.009)
Mexico	0.296 (0.022)	0.461 (0.036)	0.517 (0.040)	0.666 (0.054)
Scandinavia	-0.147 (0.004)	-0.093 (0.005)	-0.089 (0.006)	-0.078 (0.006)
Ireland	-0.079 (0.005)	-0.027 (0.007)	-0.022 (0.007)	-0.023 (0.008)
Italy	0.069 (0.006)	0.115 (0.009)	0.121 (0.009)	0.141 (0.011)
Central Europe	-0.102 (0.003)	-0.053 (0.005)	-0.050 (0.006)	-0.048 (0.006)
Elsewhere in Europe	-0.095 (0.005)	-0.037 (0.007)	-0.034 (0.008)	-0.024 (0.008)
Other Immigrant	-0.011 (0.013)	0.047 (0.015)	0.060 (0.016)	0.047 (0.015)
Arrival cohort				
1880 or before			0.139 (0.015)	0.129 (0.016)
1881-1890			0.048 (0.007)	0.041 (0.007)
1891-1900			-0.033 (0.005)	-0.023 (0.006)
1911-1920			-0.061 (0.006)	-0.052 (0.007)
1921-1930			-0.127 (0.005)	-0.122 (0.006)
Duncan SEI ^a				1.2E-3 (4.4E-4)
City 25,000+ ^a				1.0E-3 (1.6E-4)
Number of observations	391,658	111,436	111,436	111,405
Log pseudo-likelihood	-5816.86	-1306.75	-1302.43	-1299.48

^a These variables represent group means, where groups are identified by nativity, year, and state, and for the foreign born, also arrival cohort.

Notes: The reported effects and their standard errors (in parentheses) have been multiplied by 100. All models included dummy variables for state and year as well as a quartic in age, and a dummy variable for illiterate. Models weighted to account for different probabilities of entering sample.