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Author
Catron, Peter

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Peter Catron
Department of Sociology
University of Pennsylvania
catron@sas.upenn.edu

WORKING PAPER

Abstract: Scholars who study immigrant economic progress often point to the success of Southern and Eastern Europeans who entered in the early 20th century and draw inferences about whether today's immigrants will follow a similar trajectory. However, little is known about the mechanisms that allowed for European upward advancement. This article begins to fill this gap by analyzing how naturalization policies influenced economic success of immigrants across generations. Specifically, I create new panel datasets that follow immigrants and their children across complete-count US censuses to understand the economic consequences of citizenship attainment. I find that naturalization raised occupational attainment for the first generation that then allowed children to have greater educational attainment and labor market success. I argue that economic progress was conditioned by political statuses for European-origin groups during the first half of the twentieth century – a mechanism previously missed by contemporary research.

The Citizenship Advantage: Immigrant Socioeconomic Attainment across Generations in the Age of Mass Migration

In the Age of Mass Migration (1850-1924), thirty million immigrants disembarked on America's shores. The inflow of "new" immigrants – Italians, Slavs, and Jews – became the largest migration period in US history where in 1907 alone 14.2 immigrants were admitted for every 1,000 Americans – the highest rate ever (Fischer and Hout 2006). Scholars who are concerned about immigrant economic progress often point to the success of these European-origin groups and then make claims about whether today's immigrants will follow similar paths. However, little is known about the sources of within-European immigrant group differences in socioeconomic attainment. While small but growing number of studies have begun to fill this large lacuna in the literature (e.g., Abramitzky et al. 2014; Goldstein and Stecklov 2016; Biavaschi et al. 2017), the political dimension's effect (i.e. citizenship acquisition) on intragenerational and intergenerational economic attainment has largely gone unnoticed. The goal of this article, therefore, is to understand whether European immigrant economic success during this era was, in part, interlinked with macro-level political institutions and processes.

Specifically, this article examines the impact of parental citizenship acquisition on intergenerational socioeconomic attainment in the first half of the twentieth century. There are several advantages to understanding the effects of citizenship acquisition during this time. First, earlier immigration took place in an era of relatively unrestricted migration when all European immigrants were eligible to naturalize once they had been in residence for five years. By contrast, today's immigrants enter with a large range of legal statuses, some of which do not allow for naturalization (Menjivar and Abrego 2012). Growing restrictions at the territorial border has led to the proliferation of undocumented immigrants, which means that the population of persons ineligible for citizenship has grown. Moreover, for the eligible, the barrier to

citizenship acquisition began to climb in the early 1990s, which has resulted in a large portion of

the legally resident population forgoing naturalization. As a result, isolating the effects of

citizenship acquisition is difficult for today's immigrants since starting points of immigrants are

different and it is only after considerable time and expense that immigrants can obtain this status.

Second, there are virtually no longitudinal datasets for today's immigrants that allow for the

effects of naturalization on both the first and second generation to be understood. However, the

release of digitized full-count censuses allows for the development of panel datasets through

matching individuals with unique names. This study seeks to understand how parental political

status influences their children over time.

Citizenship and Labor Market Outcomes

Migration policies at both the territorial border and within fundamentally shape the life

chances and opportunity structures of immigrants. While there has been considerable focus on

how legal status created by territorial restrictions impede immigrant economic success (Menjivar

and Abrego 2012; Bean et al. 2011; Dreby 2015), less attention focuses on the role of status

citizenship in creating inequalities between individuals. Indeed, segmented assimilation and

neo-assimilation hypotheses, the two most dominant accounts of how immigrants move through

the stratification system, have entirely ignored the process of naturalization and instead focus

solely on the social and economic aspects of ethnic inequality (Alba and Nee 2003; Portes and

Rumbaut 2001).[1] In these frameworks, disadvantages based on individual-level political statuses

are often assumed to be temporary. Although the first generation may have limited economic

prospects given their political status, birthright citizenship laws in the fourteenth amendment are

[1] The only time both frameworks mention the naturalization process is in discussion of dual
citizenship.

assumed to be assimilatory by design bringing anyone born in the US into formal membership (Ueda 2001; Brubaker 2001; Soysal 1994). Because second generation children benefit from the increased resources associated with birthright citizenship, the effect of first generation political status on second generation outcomes is often assumed to be severed or limited. However, a growing body of research has begun to show how political statuses of immigrants affect their US-born second generation children across the life course (Yoshikawa 2011; Bean et al. 2011; Bean et al. 2016; Yoshikawa et al. 2016).

According to research on today's immigrants, foreign workers' labor market outcomes are driven by their legal status and visa credentials (Rissing and Castilla 2014). Immigrants in disadvantaged political statuses may be excluded from the formal labor market, deported, and barred from reentry (Menjivar and Abrego 2012; Ngai 2003). Because visas and documented status dictate what type of occupations immigrants can hold, their political status at the time of arrival is one of the most important predictors of their occupational success (Bean et al. 2011). Thus, there are differences in occupational outcome between undocumented immigrants versus immigrants who arrive legally or those who have temporary work authorization compared to those who have lawful permanent residence. While immigrants can acquire different political statuses over the course of settlement, which would allow for different occupational outcomes, it is difficult for many immigrants to switch into more desirable political statuses and they therefore remain in occupational classifications determined by their initial political status. As a result, some immigrants experience financial and non-financial hardships, which ultimately lead to fewer resources that can be invested in their US-born children. Indeed, parental political status has been shown to affect a diverse range of second generation outcomes including level of

schooling, birth weights, cognitive skills, labor market outcomes, etc. (Yoshikawa 2011; Bean et al. 2011; Menjivar et al. 2017).

Whereas legal and citizenship status have become a focus of interest in studies of contemporary immigration, that attention has not extended to turn-of-the-century immigration from Europe, as most analyses assume that formal legal status had little effect on the experience of European immigrants (Shertzer 2013). Researchers note European immigrants and their descendants were often treated better than their Mexican and Asian counterparts by the government and native-born, which helped European-origin groups bypass some of the negative impacts of noncitizen status (Fox 2012; Fox and Bloemraad 2015). European immigrants rarely had blanket exclusions from voting, owning land, holding public office, or working in certain occupations primarily because they were classified as white by the federal government (Fox and Guglielmo 2012). When these exclusions were targeted towards European immigrant groups, they were often targeted more specifically at individuals who were noncitizens. However, noncitizen European immigrants could often naturalize relatively easily to bypass these exclusions (Fox 2012; Ngai 2003). The political dimension's effect on ethnic inequality, therefore, is assumed to have generated disparities between immigrants from Europe and those from elsewhere but without producing meaningful differences among immigrants from the various parts of Europe. Thus, like the assimilation frameworks noted above, the political dimension's effect on producing ethnic inequality within European groups are assumed to be limited.

Discussions on the low importance of citizenship for European immigrants, whether being due to birthright citizenship laws or because they were treated as de facto citizens, have never tested these assertions using national and longitudinal data. However, as rights and

entitlements of citizens and noncitizens are unequal – a gap that widened during the first half of the twentieth century – there is good reason to hypothesize that citizenship mattered more than most scholars suppose. Indeed this subject had considerable sociological interest on intergenerational processes during the time (see, e.g., Gavit 1922; Gosnell 1928, 1929, 1937; Bernard 1936; Rich 1940; Fields 1933, 1935). This article provides the data needed to test these claims for European immigrants and their children. It finds that citizenship acquisition was associated with increased economic outcomes for the first generation and that children of citizens also had better labor market outcomes than children of noncitizens.

The Citizenship Advantage in Economic Outcomes

Conventional arguments contend that citizenship acquisition had little impact on economic trajectories of yesterday's immigrants. However, at the turn of the twentieth century, there was an abrupt change in policies regarding the acquisition of citizenship and likewise states and localities adopted measures that either blocked the employment of noncitizens or gave preference in hiring and promotion to citizens. These changes were part of the broader, long-term restriction movement in the US that sought to slow immigration at the territorial border and make access to citizenship more difficult. From the US's inception, restrictionists attempted to block certain nationalities and ethnicities from entry and impose long-term residency restrictions and high fees for immigrants to gain access to citizenship. However, these movements only became successful at the turn of the twentieth century. Thus, to understand policies implemented in the early 20th century, which made the formal status more difficult to obtain, it is important to understand citizenship in light of the long term evolution of the US.

The US began as a settler colony needing a population in order to seize control of the territory from indigenous groups, maintain control, and then build a viable self-sustaining

economy and independent state (Fitzgerald and Cook-Martin 2014). It needed to do this while the costs to migration were incredibly large. As a result, the US created policies such as open borders and liberal access to citizenship that were designed to induce more migration (Ueda 1992; Parker 2015). The first naturalization law of 1790 allowed any free white male who had been in residence for two years to be admitted citizenship provided he was of good moral character. However, James Madison and other restrictionists opposed this easy access and successfully implemented a stricter naturalization law in 1795 requiring immigrants to have five years residence, forswearing allegiance to every other sovereignty, be of good moral character, take an oath of allegiance, and renounce any nobility title. In 1798, the residency restriction was raised to 14 years, but was later reduced to 5 years in 1802. The 1802 law would be in place for over 100 years and the naturalization law would be used by states "to attract immigrants and absorb them into local life" with naturalization proceedings being "extremely loose and casually administered" for much of the 19th century (Ueda 1992: 737).

Despite naturalization being used as an inducement policy to promote more immigration, the broader restriction movement continued to lobby for longer residency restrictions and high fees. For instance, the Know-Nothing party in early 1850s, sought to expand the residency restrictions in Massachusetts to 21 years fearing that easy naturalization procedures allowed Catholic immigrants to increase their political influence. While the restriction movement was largely unsuccessful in the 19th century, the costs to migration began to decline due to changes in steamship technology, the lifting of poverty constraints in sending countries, and chain migration that allowed the broader restriction movement to gain leverage in their arguments due to the population influx. The US no longer needed to provide such a strong inducement package and events such as the assignation of President McKinley by an immigrant anarchists and alien

suffrage laws that allowed noncitizens to vote fueled widespread fear that undesirable immigrants were entering the US and would "elect enough representatives to control the entire Congress" (Ueda 1992: 741). Due to fear of fraudulent naturalizations occurring before elections throughout the country, the federal government began shifting towards restrictions at the territorial border and within as the penalties associated with a noncitizen status began to rise.

The fundamental shift away from immigration inducement for naturalization policies occurred in 1906. Prior to 1906, states controlled the naturalization process, which allowed for inconsistent and fraudulent naturalization procedures allowing political machines to gain tremendous power throughout cities (Bloemraad 2006; Gavit 1922). A 1905 commission on naturalization for President Roosevelt pointed to these concerns and argued in favor of higher fees ($7) and a standardized process of naturalization designed to undermine political machine power and to ensure that only desirable immigrants were gaining access to the franchise. The commission used James Madison's earlier restriction attempts as justification for new naturalization practices, which resulted in the Naturalization Act of 1906. The 1906 law codified the requirements of naturalization and established the Bureau of Immigration and Naturalization to administer the new law uniformly. Officials created a standard application form and scrutinized documents attesting to immigrants'' length of residence. The law also added the need to demonstrate a command of English by answering basic civics questions and imposed a fee ($5) to pay for administrative costs. The standardization and new requirements forced some immigrants to delay naturalization (Schneider 2001; Bloemraad 2006).

The naturalization procedure during this time consisted of a two-step procedure. First, noncitizens wanting to naturalize had to declare their intention. Declaring intent to naturalize involved a $1 fee (roughly $25 today) and at least two years residence in the US. Court clerks

would review the applicant to ensure they would likely qualify for full citizenship (Motomura 2006). Second, after at least five years of residence in the US and 2 years after declaring intent, intending citizens could petition for naturalization. This step involved a $4 fee (roughly $100 today), proof that they can speak English, have two character witness statements by citizens, and taking an oath of allegiance. Individuals who petitioned for citizenship were rarely denied (Biavaschi et al. 2017).[2] Similarly, most intending citizens would obtain full citizenship within two to seven years (Motomura 2006). As the naturalization procedure became more difficult, however, states, cities, and private practices began amplifying differences between noncitizens and citizens creating unequal life chances between groups.

States and cities during this era enacted several employment restriction laws that barred noncitizens from certain occupations and public works projects. As societal resentments toward alien workers deepened throughout the country, many citizens sought to block all alien labor from occupations and projects believed to belong to American citizens (Schneider 2001). Thus, every state had at least one occupation restriction for noncitizens (Konvitz 1946) and the number of restrictions was positively correlated with the number of aliens in a given area (Fields 1933). Restricted occupations, however, were largely skewed towards white collar occupations such as lawyers and accountants that would have had little impact on poor, recently arrived immigrants. However, over time, these laws would have a larger impact as immigrants sought to improve their occupational standing.

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[2] Between 3 and 14 percent of those who petitioned for citizenship were denied between 1907 and 1920. Well over half of these denials were due to the immigrant not showing up to court. Almost all of the denials based on the qualifications of the individual were due to their lack of knowledge of American institutions (Report of the Chief of the Division of Naturalization, 1907-1920).

More important than occupation restriction laws, however, were public works restrictions since these would comprise a larger number of potential jobs for immigrants. In most states in the US, noncitizens were ineligible to work on projects that were financed by government money. These laws were often challenged in the courts under the Fourteenth Amendment's equal protection clause, however, many were deemed constitutional when courts accepted the argument that the presence of unemployed American citizens sufficed to justify exclusion of aliens (Fields 1933). On the books, these laws excluded noncitizens from employment, but on the ground these laws were not strictly enforced until the mid-1910s as World War I gave a totally new inflection to anti-immigrant sentiments (Tichner 2003). For instance, in New York, laws dictated that only citizens were allowed to build the subway system. In practice, however, most of the unskilled workers were noncitizens. Beginning in 1914, New York began enforcing the law, which quickly led to lawsuits. The New York Supreme Court eventually ruled that "[publically funded jobs] do not belong to aliens" (People v. Crane 1915). The sudden enforcement of the law led to a rush of Italian subway laborers to get their naturalization papers, which overwhelmed the Naturalization Bureaus in New York and Bronx counties (New York Times 1914). Eventually, the law was amended to permit employment of aliens when Americans were unavailable. However, preference given to citizens in hiring and promotion decisions to citizens over noncitizens likely produced differences in economic outcomes. Thus, cities and states tied publically financed works to citizenship status during this era, which barred or disfavored noncitizens from employment in these large public works projects. These laws would have a larger impact as America's infrastructure was expanded in this era. Noncitizens would then need to find employment in the private-sector where economic attainment was also often blocked.

Discrimination by private-sector employers generated differences between citizens and noncitizens. Citizens and noncitizens were sorted into different kinds of jobs through hiring, promotion, and termination that led to better life chances for citizens. Throughout this era, discrimination was embedded in societal and labor market institutions. Employers often implemented "all American" or "Americans First" campaigns where higher paying, higher status occupations were reserved for the native-born and naturalized citizens (Fields 1933; Schneider 2001). [3] Industrialists offered, and at times required, their immigrant workers to attend courses in English and citizenship (Barrett 1992). For instance, Detroit's industry leaders developed an "Americans First" campaign that encouraged immigrants to learn English and about American system of values (Loizoides 2007). In the case of Ford Motor Company, the largest employer in Detroit at the time, noncitizens were required to enroll in education programs designed to Americanize them. Further, it developed a sociology department designed to ensure that southern and eastern European immigrants shared the same values as natives before they would qualify for the Five Dollar Day Plan. These types of policies led to high rates of naturalization among Ford's workforce (Loizoides 2007). Thus, in 1914, before Ford began its Americanization program, 65% of employees were aliens, but by 1916, after the Americanization program was implemented, half the workforce was a citizen and the workforce had doubled in size (Loizoides 2004). Although Ford was at the extreme end, industrialists across the country engaged in these practices of discriminating against noncitizens.

As a result of "all American" policies, noncitizens often held temporary and unskilled positions in firms – especially in manufacturing, warehousing, and other blue collar sectors

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[3] These sentiments were particularly strong during WWI where aliens who claimed exemption from war were thought to be unfit for American employment. Similarly, the red scare provoked worries that immigrants would become sympathetic to Bolshevism and ruin American industry (Schneider 2001).

(Gerstle and Mollenkopf 2001). Noncitizens were often the first in the queue to be laid off during slack periods and would often not be rehired by their employers once production increased resulting in high rates of unemployment (Fields 1933; Gavit 1922). Moreover, US citizenship allowed immigrants to start in higher occupational positions and subsequently experience greater upward occupational mobility than noncitizens within firms (Catron 2016).

Historical evidence points to multiple direct effects of citizenship on economic outcomes through changes in law and the sudden enforcement of those laws as well as employer practices preferring citizens over noncitizens. However, indirect effects linking citizenship with economic outcomes are also in the mix. As noted by Bevelander and colleagues (2008), citizenship may serve as a signaling mechanism that convinces employers to hold on to certain employees. Citizenship may reflect attachment to the US and therefore perhaps stronger commitment to stay in a particular company or job. Given the high return rates of many immigrant groups during this time, citizens were signaling that their return was less likely.[4] Similarly, citizenship acquisition changed time horizons and naturalized citizens likely began to demand higher wages and tried to obtain better jobs. Since naturalized citizens knew that they were going to stay in the country for a longer time, they likely began to invest in their US-specific human capital, which led to better employment over time. Whatever the specific mechanisms, however, there is evidence that citizenship during the first half of the 20th century became increasingly difficult to obtain and policies sought to increase the gap between citizens and aliens. In this light, it is appropriate to assess whether the increases in both the obstacles to, and consequences of, citizenship acquisition affect the socio-economic mobility of turn-of-the twentieth century

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[4] Return rates were upwards of 60% for some groups.

European immigrants and their descendants. It is that question to which the rest of this paper is addressed.

The Citizenship Advantage and Intergenerational Attainment

While there were likely to have been many economic benefits to citizenship acquisition among the first generation, this paper also seeks to understand citizenship's effect on second generation attainment. As suggested above, citizenship acquisition is likely to have allowed access to occupations and promotion lines that were otherwise unavailable. Because parent's social background has large effects on children's later outcomes, any positive effects associated with citizenship acquisition likely had lasting effects across generations. That is, parent's membership confers formal rights and privileges such as access to certain jobs as well as informal components like a sense of belonging to community. The formal and informal aspects of citizenship allow parents to invest in their host-land human and social capital at greater levels and gives access to promotion lines within firms that allows for greater economic mobility. Children, who are already being socialized in the host society, benefit from their parent's capital due to increased wealth and they become more likely to be exposed to the native-born customs and values thereby increasing chances of upward mobility. Thus, parent's citizenship status will affect children's later outcomes simply by virtue of parents being in one category or the other, net of other factors.

To make this reasoning more concrete, Figure 1 presents a diagram to describe the relationship between parental citizenship and intergenerational mobility. In agreement with the current literature, parental characteristics and community level characteristics are thought to influence both parental citizenship status and child's social destination. The individual level

characteristics include English ability, literacy, occupation, years spent in the US, etc. These

variables exert their influence in determining citizenship status as well as hold a direct influence

on their children's social destination through increased education, wealth, ambition, and the like.

Community characteristics such as local political activity, the presence or absence of various

economic opportunities, and the strength and structure of ethnic communities also have an

important impact on citizenship acquisition (Bloemraad 2002). These contextual variables also

exert direct influence on second generation outcomes as has been shown throughout the

assimilation literature. However, there is likely a direct influence of parental citizenship

attainment on child's later success. The mechanism by which citizenship leads to different

outcomes is through the increased tangible (i.e. access to better occupations and associated

wealth as mentioned above) and intangible resources (i.e. belonging to the community) for the

first generation that is then transferred to the second generation. Because of this direct link, we

expect children of citizens and noncitizens to have different outcomes later in life.

[FIGURE 1 HERE]

The effects of citizenship, however, may also depend on the timing by which parents

obtain citizenship. That is, parental citizenship attainment may operate as an exposure variable

where each additional year that a parent has citizenship (years which may begin to accumulate

before a child's birth) has significant increases on children's later outcomes, net of parent's years

spent in the US. Those effects of citizenship over time may compound leading to unequal life

chances depending on how long a parent has been a citizen. Because increased resources

enhance parents' ability to provide more attractive home environments in material and

nonmaterial ways, parents who naturalize when children are young may benefit more than

parents who naturalize when children are older. Any increased income and wealth associated

with citizenship will also improve the family economy. As during this era, children of low-income families were often required to drop out of school early and contribute to the family's finances (Bodnar 1985). Having a parent who naturalized when children were very young may have yielded positive effects not experienced if a parent only naturalized after a child reached adolescence. If naturalized citizen parents gained more than those who remained in alien status, family income would have been higher, thus allowing children to remain in school longer and thereby obtain the education that would later lead to better jobs. Therefore, the timing of family resources may lead to different outcomes depending on the age of the child and the time of naturalization where children with more years of parental citizenship perform better than children with fewer years.

While the relationship between parental citizenship status and intergenerational mobility is straightforward, citizenship attainment by parents is governed by issues of selection that in turn affect children's later outcomes. As noted above, the historical record suggests a correlation between citizenship status and occupational outcomes. Naturalization allowed entry into otherwise restricted jobs, and this was especially true for white-collar and public sector employment. Although laws and employer policies that favored citizens over noncitizens were not strictly enforced in all cases, citizens likely had an advantage when obtaining more preferred occupations. While this would suggest that citizenship status produces an economic advantage, the better occupational outcomes of citizens may reflect their commitment to remain in the US or unmeasured productivity where immigrants who happen to naturalize would do better in the labor market even if they were not naturalized. As noted in Bratsberg et al. (2002), naturalized immigrants often invest in human capital favored in the labor market because they expect to remain in the US. Those who naturalize will find employment in better occupations as a result of

their human capital even if naturalization has no effect on occupational achievement. Similarly, immigrants who naturalize may have different productivity than those who do not naturalize given their demonstrated English ability, good moral character, and other standards that the US uses to select its membership (Bratsberg et al. 2002). Because policy dictates the criteria by which citizenship can be obtained, those who anticipate rejection may not apply.

Data and Methods

First Generation Outcomes

My analyses begin by first understanding whether immigrants who naturalized had better economic outcomes than immigrants who did not. The results rely on three data sources: the complete-count 1920 census, a new panel dataset linking European immigrants between the 1910 and 1920 complete-count censuses, and the 1% 1920 census sample (IPUMS; Ruggles et al. 2010). I discuss each sample and analysis in order.

First, I use the restricted complete-count 1920 decennial census to test whether there were differences between citizens and noncitizens. To address concerns about selectivity, I compare citizens and noncitizens to those who have declared intent. As mentioned, immigrants during this period were required to declare their intention (first papers) two years before they were allowed to naturalize. This declaration served as an administrative function that allowed early review of eligibility by a court clerk (Motomura 2006). Intending citizens are a useful comparison group because they likely hold characteristics and preferences similar to citizens given their interest in citizenship and ability to pay administrative fees, but they do not enjoy the benefits of full citizenship. Because most families who declared intent obtained citizenship (Motomura 2006), and few who petitioned for citizenship were denied their second papers

(Biavaschi et al. 2017), this in-between group makes intending citizens more similar to citizens than to noncitizens allowing us to understand the effect of naturalized status on employment outcomes. That is, the difference between intending citizens and noncitizens will tell us about selection of who wants to be a citizen and the difference between intending citizens and citizens will tell us about the value of citizenship.

Using the 1920 cross-section, I limit the data to men who were born in Europe and who have lived in the US for more than five years.[5] The residency restriction is because immigrants who lived in the US for fewer than five years were not at risk of naturalization due to US policy. The data are also restricted to individuals between the ages of 20 and 65. Immigrants who live in the South are also omitted because over 95 percent of European immigrants settled in the North, Midwest, and West. Inclusion of those living in the South in the below analyses, however, does not substantively change any results.

Using the 1920 cross-section, I regress occupation income score on a set of control variables including the immigrant's citizenship status. The occupation income score (OCCSCORE) is calculated by IPUMS and reflects the median income of each occupation observed in the 1950 census in hundreds of dollars. The score is calculated by taking the median total income for each occupation published in a 1956 special report by the Census Bureau on occupational characteristics from a 3.33 percent sample of the population of both men and women. Occupations in the 1920 cross-section are assigned the corresponding 1950 value as a way to economically scale occupations on a continuous measure. The OCCSCORE is not a direct measure of income, but rather a measure of occupational attainment and is used in most research that analyzes economic outcomes of immigrants during this era (e.g., Abramitzky et al.

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[5] In separate analyses, I also limit the sample to immigrant men with children between 5 and 18. Results remain largely similar to these analyses.

2014; Goldstein and Stecklov 2016; Biavaschi et al. 2017).[6] Although the scale of occupations may have changed between 1920 and 1950 given the amount of time elapsed, income and other measures used to scale occupations are not available from representative samples prior to 1940. This is true for any other measure of occupational standing variables available in US censuses (e.g., SEI).

The 1920 census asked all individuals born in another country their naturalization status including whether they had declared intent. The control variables also come from the 1920 census and are relatively straight forward and standard in similar research: age and age squared, whether the immigrant is married, and years spent in the US and its square. I also include dummies for the immigrant's literacy coded as 1 if the immigrant can read and write in any language and 0 otherwise. Similarly, I control for whether the immigrant can speak English. Both literacy and English ability are rough proxies for other important variables like educational attainment that deeply influence what jobs individuals take. However, these measures are self-reported and enumerators were not required to determine the level of competency. Unfortunately, educational attainment is unavailable in all censuses prior to 1940 making the literacy and English variables the best, though imperfect, predictors for the analyses. All analyses also control for whether the individual lived in an urban area and a state fixed effect. Because of these two variables, I am implicitly comparing immigrants who settled in the same places.

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[6] A problem with using OCCSCORE as an outcome variable is that it reports differences between occupations, but not within. However, there is considerable heterogeneity in success within some occupations. In particular, the farming occupation holds considerable variability in income, which may obscure occupational differences between groups. Logistic regressions predicting the odds of being a farmer suggest that citizens are more likely to be a farmer vis-à-vis noncitizens. Therefore, I reran the analyses below without the farming occupation included and find that the citizenship advantage for groups is larger than those reported.

Because citizenship may matter more for some groups than others, I regress occupational

score by citizenship status and control variables by different ethnicities separately. Ethnicity is

defined in these analyses by birthplace and mother tongue since sociologically distinctive groups

arrived from common national origins (i.e. Slavs and Jews). While separating ethnic groups

based on their mother tongue is standard (Pagnini and Morgan 1990; Perlmann 1988), many

Central Jewish immigrants did not speak Yiddish before arrival. Therefore, I use a Jewish index

created by Abramitzky, Boustan, and Connor (2017). The Jewish index takes individuals in the

complete count censuses between 1920 and 1940 and calculates the share of individuals with a

given first or last name who spoke Yiddish or Hebrew before coming to the United States. This

measure holds a value between 0 and 1 for every individual's first name and a value between 0

and 1 for every individual's last name. The first and last name index scores are added and an

individual is counted as a Jewish immigrant if the sum is at or above 1.4. The cutoff of 1.4 is

used because when this index is applied to complete count censuses, the Jewish population

estimates roughly match Kuznets' (1975) estimates.[7] Other groups follow a similar definition as

Pagnini and Morgan (1990) with their definitions presented in Appendix A. I estimate the

following model for both a pooled sample and for each ethnic group separately:

$$OCCSCORE_i = \alpha + \beta NONCIT_i + \beta CIT_i + \gamma X_i + e \qquad (1)$$

where $OCCSCORE_i$ is the occupational income of person i; X_i is a vector of control variables

noted above; $\beta NONCIT_i$ is a dummy variable (1,0) if the individual is a noncitizen and βCIT_i is

a dummy variable (1,0) if the individual is a citizen. The reference category for $\beta NONCIT_i$ and

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[7] The Jewish index increases the sample size for both Central and Eastern Jewish populations
used in the analyses. Results that define Jews as speaking Yiddish or Hebrew before coming to
the US (without the index) show similar effects, but the sample sizes are smaller.

βCIT_i is the group of individuals who have declared intent to naturalize. If $\beta NONCIT_i$ is

negative, I interpret this finding as the evidence for positive selection into citizenship. If βCIT_i

is positive, I interpret this as the relative value of citizenship for each ethnic group.

While the 1920 cross-section analyses report the magnitude of the citizenship effect, the

reference category of intending citizenship does not completely overcome problems of selection

mentioned above. To supplement the cross-sectional analysis, therefore, I develop a panel

dataset linking immigrants in the restricted complete-count 1910 census to the restricted

complete-count 1920 census (1920 panel). I match immigrants between the two US censuses by

first and last name, age, and state of birth. The iterative matching technique has become the

standard practice in creating panel datasets using historical US censuses (Ferrie 1996; Ferrie and

Long 2013; Abramitzky et al. 2014; Connor 2016). This technique links individuals from their

1910 census record to their 1920 census record by first standardizing first and last names by

correcting for nicknames (e.g., "Pete" v. "Peter) and then uses a *soundex* program to address

orthographic differences between phonetically equivalent names using the NYSIIS algorithm

(see Atack and Bateman 1992) to account for alternate and misspelling of names.[8] Observations

from the 1910 census are matched forward to the 1920 census by first looking for exact matches

based on the above criteria. If there is one unique match, the procedure stops and the individual

is considered matched. If there is not a match, I try matching within a 1-year age band (older

and younger) and then within a 2-year age band; if there is one unique match, the individual is

included in the final sample. However, if there are multiple matches, or there is no match, the

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[8] A recent study by Bailey et al. (2016) has suggested that the use of a *soundex* program may
lead to a number of false matches. I therefore create a separate highly conservative linked
sample that omits the *soundex* program to mitigate potential bias due to false linkages. The
results are presented in Appendix C. The conservative match produces estimates of the
citizenship advantage that are larger than those reported in the analyses. Therefore, potential
false matches are not driving differences between political groups.

observation is discarded as unmatched; details on representativeness of this matching procedure are provided in Appendix C.

I limit the 1920 panel sample to European immigrant men who are between the ages of 20 and 55 in 1910 and who have been in the US for at least five years. The sample is also limited to immigrants who were noncitizens in 1910 to understand the occupational change given their citizenship status in 1920. Table 1 presents the match rates along various dimensions in the panel dataset. The matching procedure generates a final sample size of 445,229 European immigrants where I successfully match 24 percent of immigrants forward from 1910 to 1920. The primary reason for not matching between the two census years is likely due to return migration. During this time, Italians, Russians, and Poles had high return rates where between 50 and 60 percent of individuals emigrated back to Europe. In addition, immigrants are given the choice to change their name at time of naturalization and 30 percent of immigrants did so during this time (Biachavi et al. 2017). It is impossible to link individuals who change their names, but there was about a 14 percent occupational income score premium among naturalized immigrants who changed their name versus naturalized immigrants who did not (Biaschavi et al. 2017). This will lead to a conservative bias in the estimates below where more successful naturalized immigrants remain unmatched.

[TABLE 1 HERE]

To assess the representativeness of the sample, Table 2 compares the panel dataset to the full-count 1910 and 1920 censuses on a number of baseline characteristics. As shown, the matched sample has a higher occupation score than the mean population occupation score in 1910. However, the gap in occupation score falls when comparing it to the 1920 population mean. It is impossible to limit the 1920 full-count census to only those who were noncitizens in

1910. Thus, the effects likely reflect comparisons of more successful noncitizens in the matched dataset being compared to individuals who have been citizens for a long time rather than effects of selective return migration or mortality. Accounting for differences between the population and matched sample through weighting are discussed in Appendix C.

[TABLE 2 HERE]

Using the panel dataset, I fit the following regression specification:

$$OCCSCORE_{it} = \alpha_i + \beta NONCIT_{i1920} + \beta CIT_{i1920} + \gamma X_{it} + e_{it} \qquad (2)$$

where OCCSCORE is the occupation-based income of immigrant i in time t. The main right-hand side variables are whether the immigrant (who was a noncitizen in 1910) became a citizen in 1920 (CIT_{i1920}) or remained a noncitizen ($NONCIT_{i1920}$) compared to a reference category of declared intent by 1920. Forty percent of noncitizens in 1910 became citizens by 1920 and about 23 percent had declared intent (see Table 1). The regression also includes an individual fixed effect (α_i), which ensures that all stable characteristics of the individual are controlled for (i.e. age, ethnicity, place of birth, intelligence, etc.; Allison 2009). X_{it} includes vectors of time varying coefficients including the immigrant's literacy, marital status, and state lived in. Unfortunately, English ability is not available in the 1910 full-count census as of this writing. Equation (2) helps us understand the economic effects of switching political categories between 1910 and 1920.

Finally, I also test whether there were immediate effects of citizenship or whether they grew over time. In 1920, enumerators were instructed to ask all foreign-born citizens what year they naturalized. Thus, we can understand whether the citizenship advantage is immediate or gradual, which may have implications for the second generation. However, this variable has yet to be coded in the 1920 cross-section. I therefore use the representative one-percent 1920 census (1% cross-section) available from IPUMS to understand these effects. To supplement the 1920 cross-section data, therefore, I disaggregate citizens by how long they have been naturalized into four categories: 0 to 5 years; 6 to 10 years; 11 to 15 years; and over 16 years. The purpose of the broader categories is due to the potential nonlinearity in the influence of citizenship acquisition over time. Descriptive statistics of the dependent and independent variables for the complete-count and 1% census are described in Appendix B.

Second Generation Outcomes

The above analyses establish whether there was a citizenship advantage in the labor market for the first generation, but it remains unknown whether this advantage transferred to their children. To assess the effects of parental citizenship on second generation outcomes, I use a panel dataset that follows individuals from their childhood household in 1920 to when they were participating in the labor force in 1940 using the same matching procedure described above. Because year naturalized is missing from the complete-count census, as mentioned, I create two matched datasets. The first matches second generation children in the complete-count 1920 census to the complete-count 1940 census. The second matches the 1% 1920 census to the complete-count 1940 census for analyses analyzing timing of naturalization.

I restrict my attention to second generation male children who had European-born parents and were between the ages of 5 and 18. The purpose of not matching those who are younger than 5 years old is because mortality is unequally distributed in these younger ages and this may bias estimates through matching by introducing selectivity at some levels but not others. Matched individuals who are between 0 and 4 in 1920 are also young in 1940 (between the ages of 20 and 24) when the outcomes analyzed in this paper, years of education and income, are still in process. All matched children were born in the US and therefore US citizens.

The sample is restricted to those who are living with at least one parent in 1920. Keeping those who are living with at least one parent is because parent's citizenship status must be inferred from those living in the same household. Not living with a parent reflects class (see Bodnar 1985) and this may have implications to the extent that citizenship reflects social class.[9] However, because we cannot infer parental citizenship status of children without parents, nor any other family variables, these children are omitted from the analyses. Thus, the second generation is defined as a child living with a foreign-born father. In single-mother households, however, a child is defined as second generation if his mother was born outside the US. The focus on children's father is because household citizenship status during this era was dependent on men. Before 1922, when the Cable Act was signed into law, women took their husband's citizenship status even if they were in the US. During this era, there were no mixed status families as there are today since parent's citizenship status was the same.

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[9] Children who do not live with their parent, but were successfully matched in the dataset, have on average fewer years of education in 1940 than children of noncitizens, intending citizens, and citizens. The age distribution of those who did not live with at least one parent is skewed such that most were in their teens and 42 percent were between the ages of 16 and 18. Of the matched second generation children who were not living with their parents, fifteen percent had fathers born in Ireland, fourteen percent in Italy, and eighteen percent in Germany. The rest had parents born throughout the rest of Europe.

Table 3 presents the match rates of second generation children along various dimensions in the second generation panel dataset. The matching procedure generates a final sample size of 830,024 second generation children where 34 percent of children are successfully matched forward from 1920 to 1940. This match rate is higher than for the first generation match above and in other historical matched samples (e.g. Abramitzky et al. 2012). The primary reasons for better match rates include better transcription in the 1940 Census, a more literate population who can report their names and ages more accurately over time, and younger samples have lower mortality rates than adult samples. Sometimes, second generation children during this era would Americanize their names in order to bypass discrimination (Lieberson 2000), which would result in unmatched children. However, using the same 1920-1940 match as in this article, Abramitzky et al. (2016) find little evidence that children's names are different than the population.   The match rates for the 1% 1920 census to the full count 1940 census are available upon request. The match rates for the 1% matched sample are slightly higher than in Table 3, most likely due to better transcription by IPUMS.

[TABLE 3 HERE]

Table 3 suggests that the probability of being linked is likely correlated with parental citizenship status: 28 percent of children of noncitizens matched while 38 percent of children of citizens matched. In part, the lower match rate of noncitizens reflects return migration where parents took their children back to Europe. Similarly, it is possible that children of noncitizens had higher mortality rates, which would mean that the effects of citizenship are understated since analyses are inevitably conducted on individuals who survived to 1940. The results, therefore, will likely provide conservative estimates of citizenship's intergenerational effect. Nevertheless, while sons with uncommon names are more likely to match between census years, the matched

sample is reasonably representative of the population. Sons in the matched sample in Table 4

Show that they are close to a representative sample in 1940 on educational attainment and

income. Second generation children in the matched sample had an average of .25 more years of

education and earned $36.25 more than those in the representative sample. However, as a

sensitivity check, I ran each analysis below for the pooled samples by reweighting the panel

sample as discussed in Appendix C. Results with a weighted sample do not substantively change

any conclusions.

[TABLE 4 HERE]

To analyze the intergenerational citizenship advantage, I focus on two outcome variables

for second generation children separately. First, I focus on the number of years of education

because it often explains labor market outcomes and is an important factor for immigrant

incorporation (Bean et al. 2011). Second, I focus on income, measured as the respondent's pre-

tax wage and salary income received in the previous year as an employee.

The control variables used to predict the second generation's social destination include a

number of individual and family characteristics that are straightforward: child's age and age-

squared, parent's age and age-squared, parent's years in the US and years in the US-squared,

urban status, and state fixed effects. I also control for parent's English ability and literacy as

rough proxies for parental education level as mentioned above. Since children come from

different family structures that may influence their later attainment, I also include a dummy

category for whether the child lived in a single father household and a dummy for whether the

child lived with both parents compared to a reference category of living in a single mother

household. Almost all of the parents in the both parents category report being married to each

other. All control variables are measured in the 1920 census. Descriptive statistics of the control variables are presented in Appendix B.

Similar to the first generation analyses, child's outcomes are riddled with selection where parent's political status may correlate with other variables that will allow children to do better in life whether or not his parents have naturalized. Above, this was corrected for by comparing citizens with intending citizens since both categories were likely similar with the exception of political status. Similarly, an individual fixed effect model was used to understand the economic outcomes after changing political statuses. Thus, the gap between these two groups provided the citizenship advantage in occupational outcomes for the first generation. However, the difference between children of citizens and children of intending citizens may not represent the intergenerational citizenship advantage. This is because there is no guarantee that children of those who declared intent had no parent citizenship years in their life course. Analogous to an event history setup, parental political status is right censored in 1920 (i.e. we do not know about political status after this year). Since many intending citizens naturalized, children may have grown up with a citizen parent, which is unknown in the analyses. For instance, if an intending citizen had a five year old child in 1920 and then naturalized after their citizenship status was recorded in the census, the child grew up with a citizen parent and thus would have benefited from the citizenship advantage. Because of the likelihood of children of intending citizens growing up as children of citizens, I continue with the declared intent reference groups, but note that this will give a conservative estimate of the intergenerational citizenship advantage. To analyze children's social destinations, therefore, I fit the following model:

$$Y_i = \alpha + \beta NONCIT_i + \beta CIT_i + \gamma X_i + e \qquad (3)$$

where Y_i represents the outcome variable (either years of education or the natural log of income) for individual i, X_i is a vector of control variables noted above; $\beta NONCIT_i$ is a dummy variable (1,0) if the child's parent was a noncitizen in 1920 and βCIT_i is a dummy variable (1,0) if the child's parent is a citizen in 1920 compared to a reference category of if the child's parent had declared intent.[10] As with the first generation analyses, I estimate the above model separately for each ethnic group defined in Appendix A and a pooled sample of all ethnicities.

Finally, I test the timing of citizenship acquisition based on when the parent naturalized and when the child was born using the 1% 1920 to complete-count 1940 census. To do this, I limit the matched sample to children of citizens and generate three dummy categories: parent naturalized when the child was 0 to 5; parent naturalized when the child was 6 to 12; parent naturalized when the child was a teenager; compared to a reference category of parent naturalized before the child was born. In addition to running OLS regressions using the same control variables above, I also include a household fixed effect with the following specification:

$$HGA_{ij} = \alpha_j + \beta NatTiming_{ij} + \beta Age_{ij} + e_{ij} \qquad (4)$$

Where HGA is the highest grade attained of child i in household j measured in 1920. $\beta NatTiming_{ij}$ is the set of dummy variables based on the timing of naturalization and birth of the child described above. The regression also includes household fixed effects (α_j) which ensures that parental characteristics that do not vary across children born at different times (i.e. years in the US, nativity, etc.) are controlled. I also include a dummy for whether child i was a teenager in 1920 (βAge_{ij}) to absorb cohort effects in educational attainment. Of the 6,952 children of citizens who match, 5,040 have at least one matched brother.

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[10] The number of individuals dropped due to logging income is 138,118.

Results

First Generation Outcomes

My analyses begin by providing estimates of the relative citizenship advantage for the first generation by ethnicity. Each analysis is restricted by ethnic group. Thus, the British noncitizen coefficient in Figure 2 reports the difference in occupation-based income between noncitizens and those who declared intent among individuals who were born in Britain. The pooled sample in the last row includes all immigrants from Europe, controlling for ethnicity. As mentioned, I interpret a negative coefficient of noncitizens as evidence for positive selection into citizenship and a positive coefficient of citizenship as evidence for the citizenship advantage. The results are presented in 2010 dollars for ease of interpretation.

Figure 2 reports that in all cases, noncitizens had a lower occupation-based income compared to intending citizen counterparts, all else equal. This suggests positive selection into citizenship for all groups. However, not all groups show behaviors equally. British, Italians and Eastern Jews betray the lowest, albeit statistically significant, gap between noncitizens and intending citizens. Noncitizen Italians had $794 lower occupation-based income than Italian intending citizens. Similarly, noncitizen Eastern Jews had $997 lower occupation-based income ceteris paribus intending citizens. Irish and Russians report the largest gap between noncitizens and intending citizens: Irish noncitizens had roughly $1,257 occupation-based income lower than Irish intending citizens and Russian noncitizens had $1,579 lower occupation-based income. Thus, part of the citizenship advantage is due to selection where immigrants who happen to naturalize also likely perform better in the labor market even if they do not naturalize.

While there was positive selection into citizenship, there is also evidence for a citizenship advantage in occupational income. All groups show a positive and significant coefficient

comparing citizens with those who declared intent. At the low end, Italian citizens had an occupation-based income of $611 more than Italian intending citizens. This may reflect Italian concentration in sectors like construction that were often less affected by the policies mentioned above. Similarly, the Italian enclave may have fostered better mobility for noncitizens leading to smaller differences between different political statuses. That is, the occupational niching and ethnic enclave among Italians may have protected noncitizens from discriminatory practices and aided in upward occupational mobility without the need to obtain citizenship. Future research should analyze the role of the composition of the local population and citizenship.

Other groups that often concentrated in sectors that were more susceptible to the above policies and likely experienced greater discrimination in the workforce, such as Slavs, held a high citizenship advantage. For instance, non-Jewish Russian citizens had an occupation-based income of $1,924 more than Russian intending citizens. This effect likely reflects signaling where groups that were heavily discriminated against due to their perceived unassimilability are able to show that they are becoming similar to their American countrymen. Given the societal reception of these groups and their industrial concentration, the value of citizenship was greater for these Eastern Europeans. Public and private employers would reward citizenship for members of these groups due to the social forces mentioned above and this is reflected in the Eastern European citizenship advantage among Jews and Russians in Figure 2. By contrast, groups that may have been treated as members without the need for formal citizenship, such as the British, do not report as high of citizenship advantage. British immigrants likely did not need to prove their membership to employers and thus experienced better occupations without formal citizenship.

Other groups, such as the Irish, also report a large citizenship advantage. Here, we may be seeing the economic impact of political mobilization. The importance of government as an important historical lever of upward attainment for Irish immigrants during this time was famous: government was a chief locus of employment for Irish immigrants, who, along with their descendants, carved up its functions into a series of ethnic strongholds; it steered contracts, and through contracts jobs, to its ethnic political backers; and it provided services for those ethnics whom it could not furnish with jobs. Irish immigrants who became citizens likely benefited disproportionately from this process since they could vote and hold public jobs. Although it is impossible to know the specific reasons individuals in the census became citizens, future research should understand the role of different avenues into citizenship that would lead to different outcomes. Nevertheless, the gap between citizens and those who have declared intent suggests that there was a citizenship premium over and above the positive selection into this variable mentioned above. The pooled sample suggests that the citizenship advantage was roughly $1,160 during this period.

[FIGURE 2 HERE]

Although the analyses in Figure 2 control for years in the US, however, intending citizens who have been in the US for many years may be fundamentally different than those who declared intent earlier. Intending citizens who declared late may have had financial considerations, problems learning English, or any other feature that may have limited their ability to obtain this status. This may positively bias the citizenship advantage by comparing citizens to immigrants who intended late. Figure 3 reports the average occupation-based income of the three political categories by years in the US. The years in the US past 40 are not reported since few intending citizens and noncitizens had been in the US for this long. As shown,

intending citizens remain a steady middle group as the number of years in the US increases. However, there is a growing gap in the average occupation-based income between intending citizens and citizens the longer immigrants have remained in the US. In part, this reflects the differences in individuals who intend late and in part the advantages citizenship accrues over time as discussed below. As a sensitivity test, I also ran each regression for only those who have been in the US for fewer than 20 years and again for fewer than 10 years. Results of the pooled sample report that the citizenship advantage is lower (approximately $950 occupation-based income) than in Figure 2 when limiting the sample to those who have been in the US for 5 to 20 years, and roughly $161 when limiting the sample to those who have been in the US for 5 to 10 years.

[INSERT FIGURE 3 HERE]

Figure 2 suggests that there were economic advantages associated with citizenship acquisition for all European groups in 1920. Figure 4 reports the effect of a noncitizen becoming a citizen between 1910 and 1920 using the fixed effects model described above. These models are able to control for the much of the selection and unobserved heterogeneity that may be found in the above cross-section. While the estimates are slightly lower in the fixed effect models compared to the cross-section in most cases, there continues to be a strong economic advantage in reference to immigrants who declared intent. Noncitizens in 1910 who became citizens by 1920 were concentrated in occupations that paid $533 to $2,219 more than noncitizens who had declared intent. These effects were especially high for Jews and Russians similar to the cross-section analysis in Figure 2. For instance, non-Jewish Russians who became a citizen between

the two time periods had over $2200 occupation-based earnings more than non-Jewish Russians who had declared intent. By contrast, British immigrants who became citizens had $533 occupation-based earnings more than British immigrants who had declared intent during this same period.

[INSERT FIGURE 4 HERE]

The citizenship advantage may not have been instantaneous, however, but rather gradual. The 1920 census is unique in that it is the only census during this period to ask citizens when they naturalized. I therefore supplement the above analyses by analyzing the citizenship advantage based on the number of years since naturalization using the representative 1% decennial census. This analysis reports the immediate and near immediate effects of citizenship as well as whether the citizenship advantage increases the longer an individual has been naturalized. The results report each ethnicity separately and for a pooled sample. As with the above analysis, the four citizenship categories are compared to an intending citizen reference.

As shown in Table 5, there is no statistically substantive effect of citizenship for those who have recently naturalized (0-5 years) vis-à-vis intending citizens in all ethnic samples with the exception of the Polish. By contrast, in all samples, immigrants who have been naturalized for more than sixteen years report large economic advantages compared to their intending citizen counterparts: British immigrants had an occupational income score of just over $1,000 while Austrian/Hungarian immigrants had an occupational income score of over $3200. In some cases, the earnings advantage for citizens falls for those who naturalized between 11 and 15 years prior to 1920. This likely reflects the impact of 1906 legislation that made it harder for immigrants to obtain citizenship (Bloemraad 2006). Nevertheless, the growing earnings advantage suggests

that citizenship allowed for access to promotion lines that moved them into higher occupational positions over time. When understanding the consequences of citizenship, therefore, it is important to understand the accrual of the citizenship advantage and not only whether an immigrant is a citizen. Because of this, the timing between when immigrants naturalize and when their children are born may have important consequences on second generation outcomes.

[TABLE 5 HERE]

Second Generation Outcomes

As shown, naturalized immigrants enjoyed better occupational outcomes than their noncitizen counterparts. The following analyses seek to understand whether this advantage transferred to their children once they enter the labor market. I begin by first reporting the differences between children of citizens and noncitizens versus children of intending citizens for a pooled sample. These analyses allow us to understand how children fared in the labor market compared to one another based on parental political status as well as other factors that influenced intergenerational attainment. Model 1 of Table 6 reports that children of citizens had over four months more education compared to children of intending citizens without any control variables. By contrast, children of noncitizens had four fewer months of education compared to the same reference group. These initial results suggest that second generation outcomes were linked to parents' political status. The gap between second generation groups increases as relevant control variables are added. Children of citizens have over five months more education than their intending citizen counterparts while children of noncitizens have less than a month. These results point to an intergenerational citizenship advantage where children with citizen parents remained in school longer than their noncitizen counterparts.

While the first two models of Table 6 test differences in educational attainment, models 3 through 5 test differences in labor market outcomes. Model 3 reports that children of citizens have roughly 8 percent higher income in 1940 dollars than children of intending citizens without controlling for any other variables. The intergenerational citizenship advantage continues where children of citizens hold over four percent higher earnings once more control variables are added including parent's literacy and parent's English ability. These income differences are important to note because the 1940s, when income is measured, was a period of great wage compression (Goldin and Margo 1992). Indeed, the compressed wage structure has been cited as one component that produced assimilation among the second generation and the native-born during this era (Alba and Nee 2001). Thus, any statistical differences in income between groups are important since they represent unequal outcomes based on different political statuses.

Model 5 in Table 6, however, reports that the citizenship advantage has little substantive effect on income once educational attainment is added to the analyses. This suggests that the intergenerational citizenship advantage does not operate over and above its influence on educational attainment. The remainder of this article, therefore, focuses on educational attainment given its importance in determining labor market outcomes.

[TABLE 6 HERE]

Figure 5 presents differences between children of citizens and noncitizens by ethnicity. Each analysis in Figure 5 is run by restricting the sample to each ethnic subgroup. Thus, as in the first generation analyses, the British coefficients report the difference between children of citizens and noncitizens among those of British descent. Every analysis controls for the same variables as reported in model 2 of Table 6.

Figure 5 reports that the intergenerational citizenship advantage has different effects depending on child's ethnicity. In all cases, there are strong educational effects; however, the groups that report the largest differences in educational attainment also had the largest first generation effects reported in Figures 2 and 4. While the first generation analyses in Figure 5 are not representative of the parental sample in Figure 2 since fertility rates differ across individuals and groups (Duncan 1966), the large impact of citizenship on later outcomes likely reflects membership that allowed citizens to invest in their children at greater rates than noncitizens.[11] Thus, children of Russian immigrants enjoy 8 months more education if their parent had naturalized compared to if their parent had declared, all else equal. Similarly, children of Central European Jewish citizens have over 8 months education than their intending citizen counterparts. As noted above, these estimates are likely conservative given the reference category and the citizenship advantage, therefore, may be larger for many of the groups.

[FIGURE 5 HERE]

The final analyses seek to test whether the intergenerational citizenship advantage should be understood as a binary or continuous measure. As shown, the citizenship advantage allowed for greater wage growth the longer an individual had been naturalized. This suggests that the citizenship advantage is not immediate, but rather gradual. The growth of the citizenship advantage likely strengthens the family economy, which then allows children to stay in school longer instead of entering the workforce early. Thus, the timing of parental citizenship based on when the child was born likely matters where we would expect children who grow up with a citizen parent to do better in educational attainment than a child with a parent who naturalized when he was older. The following analysis limits the pooled sample to children with a citizen

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[11] For instance, some individuals have no children and they are thus not included in the model, while others have many children and have a higher chance of being included multiple times.

parent in the matched 1% 1920 census to the full-count 1940 census (as opposed to the full-count to full-count match above). I separate children based on when their parent naturalized and predict years of education controlling for the variables mentioned above. I do not report the effects by ethnicity due to low cell counts in some categories.

As shown in Table 7, there is no statistically substantive difference between children with parents who naturalize before they were born and children with parents who naturalize when they were young. However, children with parents who naturalized as a teenager have over seven months less education compared to children who have parents who naturalized before they were born. The results in Models 1 and 2 suggest that early naturalization allowed for greater investments in children, which allowed them to remain in school longer. These investments may include early childhood health investments or early schooling investments that allowed children to obtain more schooling. Children of parents who naturalized when they were teenagers had fewer citizenship years and likely dropped out of school early to help support the family. Given the large effect of education on income, however, those with fewer years of education performed worse in the labor market when they were adults. Model 3 of Table 7 adds a family fixed effect to the analysis. The effect of parental naturalization on children who were teenagers when parents became citizens falls to half a year. While the effect is not statistically significant, children who grow up with citizen parents do better than children who do not within households.

[TABLE 7 HERE]

Discussion/Conclusion

This article shows that political status was an important part of the experience for the mass migrations of the turn of the 20th century and the children they produced. Immigrants enter

as aliens, lacking citizenship and full rights. As a result, immigrant destinies and those of their children are inherently affected by the rights they enjoy as noncitizens and their access to formal and status citizenship. Citizenship policies, therefore, produce civic stratification within immigrant groups since rights and entitlements vary dramatically depending on political status. Rights and privileges for these groups are defined by national and sub-national policies and further acted out by employers' discriminatory practices. During the age of mass migration, legal and societal forces influenced public and private employer hiring and promotion practices that favored citizens over noncitizens. While noncitizens were not totally excluded from the formal labor market as some immigrant populations are today, the hiring and promotion practices of the past generated differences between political groups that had long lasting effects. Thus, US-born children were not spared from the negative impacts of parental political status as children of citizens had greater educational attainment and income than children with noncitizen parents.

The results contrast with prior research that has assumed that citizenship had few economic advantages during the age of mass migration. On the one hand, assimilation researchers argue because second generation children are born in the US, and therefore offered the same entitlements as the native-born, that individual-level political status is unlikely to exert a strong influence on their social destinations (Alba and Nee 2003). On the other hand, scholars of race have shown that there were many routes European immigrants could take to avoid the negative effects of noncitizen status (Fox 2012). Because European immigrants were treated as de facto citizens – especially when compared to Mexican and Asian immigrants who entered at the same time – the negative aspects of noncitizen status were thought to have limited effects on the destinies of European immigrants and their children. However, citizenship or lack thereof

likely determined what type of investments parents could make in their children resulting in long-term differences within groups as shown in this article. Similarly, the results of this article show that there was indeed a strong association with citizenship acquisition and economic benefits during this time.

First generation immigrants who naturalized were concentrated in occupations that paid $500 to $2,000 more than intending citizens in 1920 pointing to a strong citizenship advantage in occupation outcomes. However, the citizenship advantage was not immediate for the first generation, but rather accrued over time. The first generation who had naturalized between zero and five years had an occupation-based income of roughly $500 more than their intending citizen counterparts while immigrants who have been naturalized for over 16 years had an occupation-based income of over $1,800. These advantages were also associated with greater intergenerational effects where children of citizens performed better in educational attainment and occupational outcomes than children in noncitizen households. While there was steady upgrading of second generation educational and occupational outcomes during this era (Lieberson 1980), parental citizenship status affected the range of those improvements. Parents who became citizens had more resources to invest in their children, which allowed for higher educational attainment. Through the strong influence of education on income, children performed better in the labor market as a result of their parent being a citizen. However, the positive benefits of parental citizenship also depended on the timing of citizenship acquisition and child's birth. Children who grew up with citizen parents were more likely to have greater educational attainment than children with parents who naturalized when they were teenagers net of parents years spent in the US. The increased resources associated with citizenship acquisition

likely allowed parents to provide a more attractive home environment that was not available to children with parents who naturalized late or never naturalized.

The effects of citizenship, however, were not uniform across groups: Russians and Jews benefited the most from citizenship acquisition. The influence of citizenship likely interacts with the context of reception in the receiving society, the endogenous contextual influences deriving from the society of origin, and the size and type of migration flow. Thus, the policies with citizenship provisions were often concentrated in areas with high southern and eastern European immigrant populations. However, some of the groups who gained most from citizenship acquisition were also the groups least likely to naturalize (Bloemraad 2006). While this article focuses on the aggregate effect of citizenship for immigrant groups nation-wide, the salience of citizenship may have been greater in some areas given other contextual features. These features may occur at the state, county, or firm level. Future research should test mechanisms leading to varying economic benefits for citizenship acquisition by geography.

The results presented in this article likely represent conservative estimates of the citizenship advantage across generations. As mentioned, roughly 30 percent of immigrants changed their name when they naturalized and name Americanization held a 14 percent occupation-based income premium (Biavaschi et al. 2017). Because the matching procedure cannot follow individuals who change their names, more successful citizens are omitted from the analysis. Similarly, WWI may have increased the number of immigrants claiming citizenship status in the census given the anti-immigrant resentment mentioned above. The potential over-reporting of US citizenship in 1920 may lead to smaller differences between citizens and noncitizens. In the second generation analyses, the use of children of intending citizens as the reference category means that many of the children in the analyses grew up with citizen parents.

Thus, the comparisons may lead to smaller differences than if all children in the reference category had no citizenship years. Similarly, children of noncitizens may have had higher mortality rates and therefore did not survive until 1940. Mortality may understate the total effect of citizenship during this time.

While this article focused on the first and second generations, however, the intergenerational citizenship effects may have disappeared by the third generation given the historical period under study (1920-1940). The favorable economy after WWII allowed groups to assimilate into middle-class mainstream due to New Deal policies (e.g., the NLRA and the FLSA), the GI Bill and much later equal opportunity laws that benefited white workers (Alba and Nee 2003). The favorable political climate and a time of rapid economic expansion may have completely severed the link between citizenship and economic success by the third generation. Although it is impossible to follow the third generation past 1940 since complete count censuses have yet to be released, future research should test whether the postwar period effect overrode the negative effects of noncitizen status across multiple generations.

Nevertheless, understanding the citizenship advantage of immigrants in the past also helps us understand current events. Present day trends are a continuation of a pattern put in place in the early 20th century, both impeding access to citizenship and widening formal inequalities between citizens and noncitizens. As noted, the growing restriction at the border had led to both the proliferation of undocumented immigration, which means that the population of persons ineligible for citizenship has grown. Moreover, for the eligible, the barriers to citizenship acquisition began to climb in the early 1990s, with the result that a large portion of the legally resident population eligible to naturalize does not. As a result – especially due to 1990s legislation – noncitizens, regardless of legal status, are increasingly vulnerable to deportation,

with numbers rising in recent years. Although researchers have largely ignored citizenship's role in producing occupational attainment, its effect is likely larger for today's immigrants who must undergo many statuses and expense to achieve this outcome (Bean, Brown, and Bachmeier 2015). Even if immigrants are able to achieve citizenship status, however, the negative effects of noncitizen status lead to negative impacts for their children thus leading to increasing importance of citizenship status (Bean, Brown, and Bachmeier 2015).

This article argues that there are important effects of citizenship acquisition for both the first and second generations. Researchers often point to the past and then determine whether today's immigrants will follow a similar trajectory. However, little is known about how yesterday's immigrants achieved upward attainment. This paper argues that citizenship was one way immigrants made it in America. While more research is needed to understand the sources of within-immigrant group differences, the availability of newly research digitized data of full-count censuses, naturalization records, and passenger files allow researchers to understand these processes in depth. Although sociologists have neglected these rich data sources, the availability of longitudinal data that is not available for today's immigrants will provide important insight into the immigrant experience.

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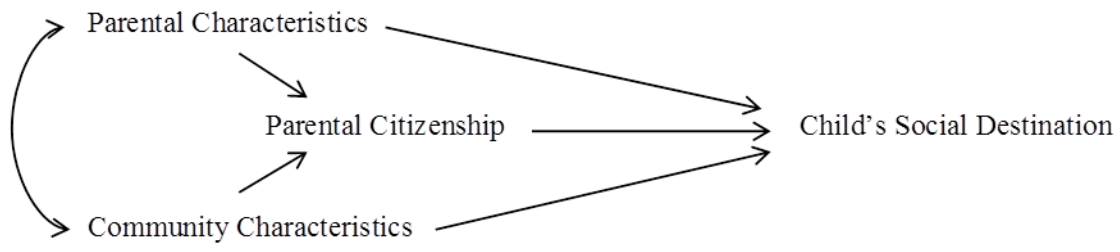
Figure 1: A model relating parental citizenship to second generation social destination
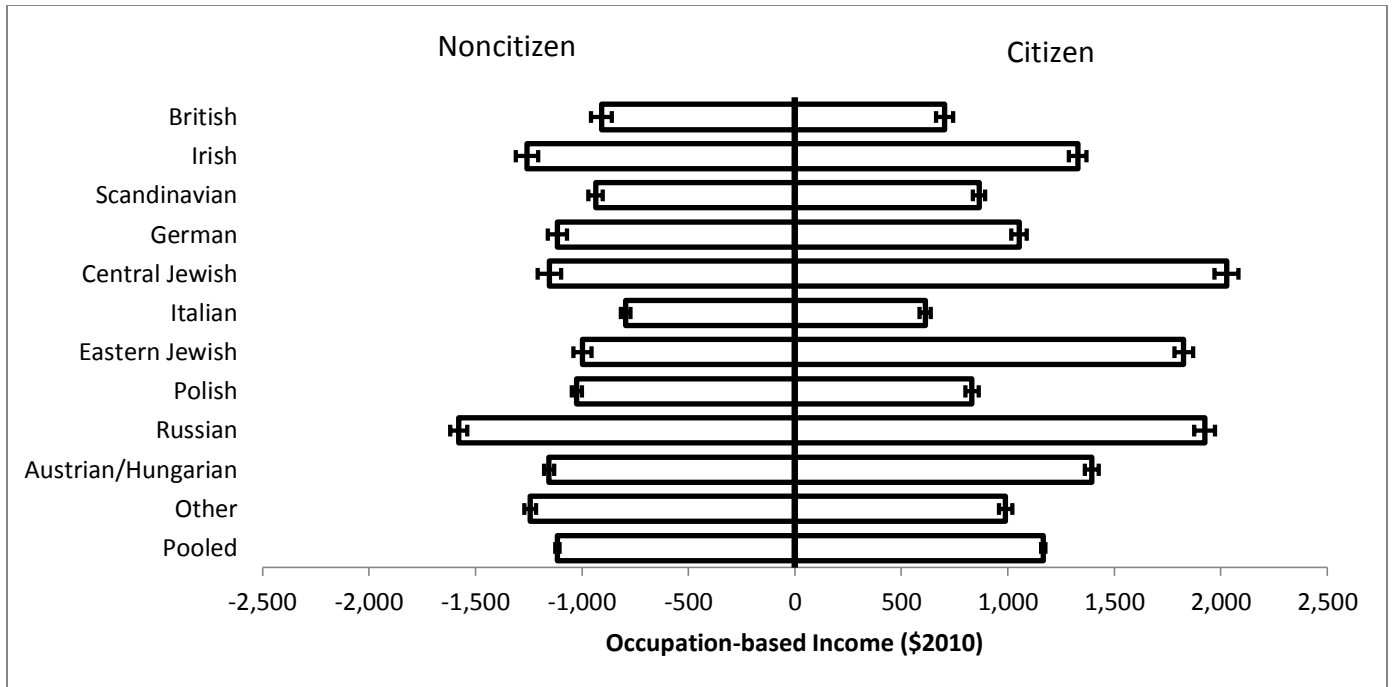
Figure 2: Ordinary least squares estimates predicting occupation-based income (in $2010) of immigrant men ages 20 to 65 by ethnicity in 1920

Note: Regressions are run separately for each ethnic group. The reference category for the citizenship variables is those who declared intent to naturalize. Control variables used in each regression are age and age-squared, English ability, literacy, years in the US and years in the US squared, urban status, and state. Whether the immigrant speaks English is omitted from the British and Irish samples as very few report speaking another language (the other language spoken by these immigrants was Celtic). Inclusion of English ability does not substantively change any results. In the pooled sample, I also control for ethnicity. Results from the omitted variables are available upon request. The number of observations in each analysis are: 359,009 British, 304,251 Irish, 503,571 Scandinavians, 485,266 Germans, 189,844 Central Jews, 679,489 Italians, 312,743 Eastern Jews, 357,819 Polish, 273,070 Russians, 407,238 Austrian/Hungarians, 567,697 Other, and 4,439,997 Pooled. The mean OCCSCORE (in $2010) is: $23,966.26 British, $22,594.13 Irish, $20,436.70 Scandinavian, $21,457.37 German, $24,262.45 Central Jewish, $21,149.55 Italian, $25,382.14 Eastern Jewish, $20,869.39 Polish, $22,356.99 Russian, $21,152.44 Austrian/Hungarian, $20,820.61 Other, $21,870.22 Pooled.
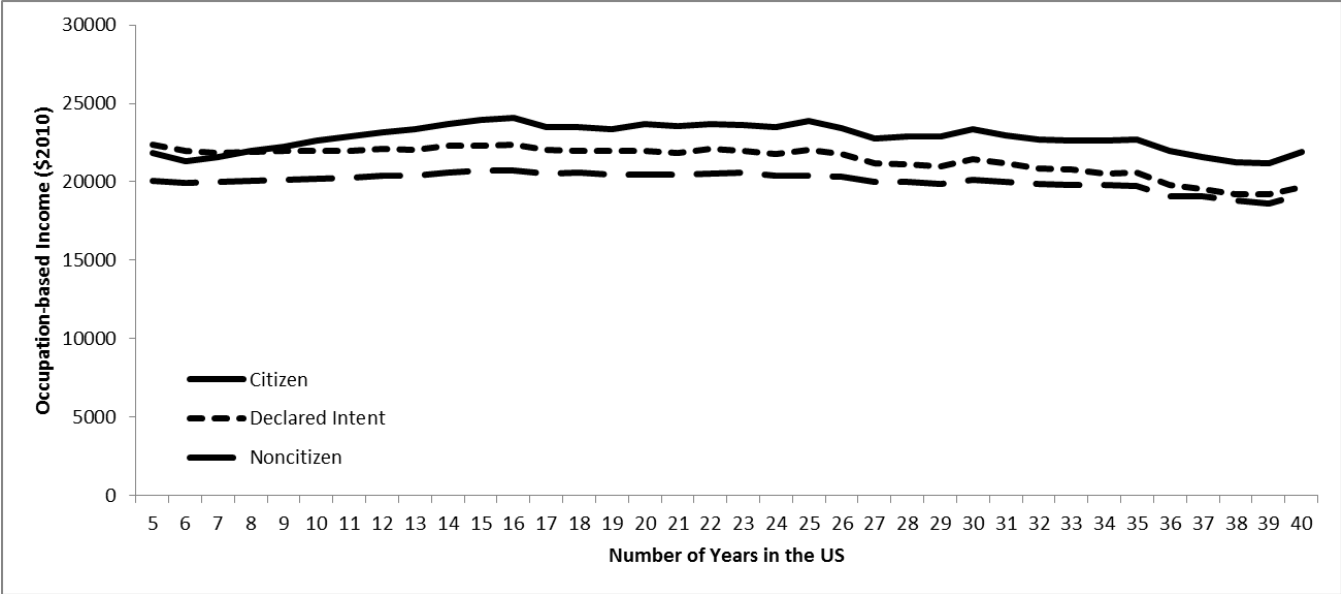
Figure 3: Average occupation-based income by number of years in the US
Note: Descriptive statistics include all ethnicities. Similar trajectories occur by groups. In any given year, a citizen may have recently naturalized or been naturalized from multiple years. Thus, the occupation-based income score does not appear to grow because recently naturalized and long-term naturalizers average each other out.
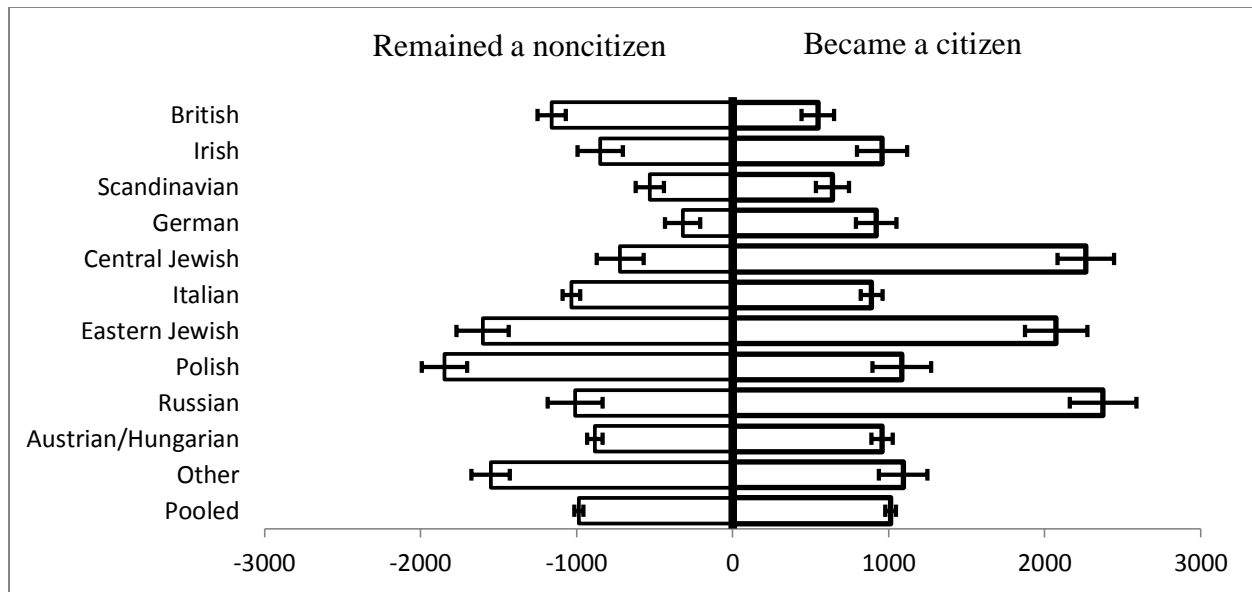
Figure 4: Fixed effect estimates predicting occupation-based income (in $2010) in 1920 for noncitizen immigrant men ages 20 to 55 in 1910 by ethnicity

Note: Regressions are run separately for each ethnic group. The reference category for the citizenship variables is those who declared intent to naturalize by 1920. The number of observations in each analysis are: 48,832 British, 46,072 Irish, 36,834 Scandinavians, 31,063 Germans, 19,078 Central Jews, 123,120 Italians, 20,172 Eastern Jews, 1,392 Polish, 18,530 Russians, 87,983 Austrian/Hungarians, 35,189 Other, and 445,229 Pooled. The mean OCCSCORE (in $2010) is: $23,406.97 British, $22,073.73 Irish, $20,134.05 Scandinavian, $21,448.61 German, $23,253.13 Central Jewish, $20,553.21 Italian, $24,224.36 Eastern Jewish, $20,035.15 Polish, $21,224.45 Russian, $20,367.86 Austrian/Hungarian, $19,943.54 Other, $21,196.20 Pooled.
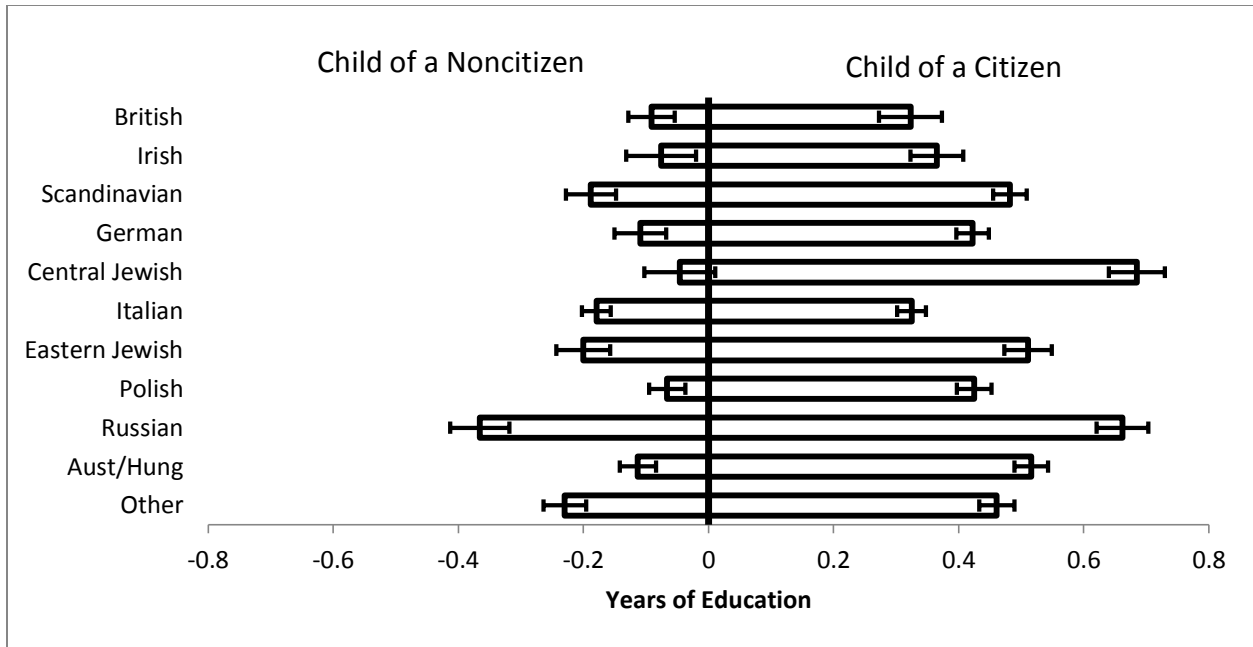
Figure 5: Ordinary least squares predicting highest grade attained by ethnicity
Note: The number of observations in each sample are: 61,838 British, 56,148 Irish, 99,940 Scandinavian, 113,194 German, 36,601 Central Jewish, 111,187 Italian, 50,982 Eastern Jewish, 55,394 Polish, 40,892 Russian, 63,189 Austrian/Hungarian, and 75,844 Other. Each analysis controls for the same control variables as Model 2 in Table 6 with the exception of parent's ethnicity since each sample is limited by this variable. The average years of education are: 10.62 British, 10.55 Irish, 10.19 Scandinavian, 9.73 German, 11.04 Central Jewish, 9.45 Italian, 11.79 Eastern Jewish, 9.00 Polish, 10.16 Russian, 9.54 Austrian/Hungarian, and 9.73 Other

Table 1: Sample sizes and match rates for 1910 to 1920 match for first generation analyses

	First-generation		
	1910 Number in Universe	Number Matched	Match Rate
Total	1,838,446	445,229	.24
Citizenship status in 1920			
Noncitizen	1,838,446	172,333	
Declared Intent		102,906	
Citizen		169,990	
Age in 1910			
20-30	1,025,002	254,230	.24
31-40	535,282	127,397	.23
41-55	278,162	63,602	.23
Not literate in 1910	452,459	88,361	.20
Literate in 1910	1,385,987	35,6868	.26
Not marred in 1910	820,640	191,849	.23
Married in 1910	1,017,806	252,445	.25
Ethnicity			
British	102,113	48,829	.48
Irish	72,116	23,035	.32
Scandinavian	125,796	36,828	.29
German	76,668	31,063	.41
Central Jewish	200,306	18,747	.09
Italian	439,053	123,104	.28
Eastern Jewish	170,565	19,715	.12
Polish	188,959	12,425	.07
Russian	92,785	14,406	.16
Austrian/Hungarian	242,583	81,925	.34
Other	127,502	35,152	.28

Note: the 1910 data universe is comprised of all noncitizen European immigrants who are between the ages 20 and 55, in the US for at least five years, and living outside the south.

Table 2: Comparing first-generation matched sample to population

	Matched	Population	Difference (matched-population)
Occupation score, 1910	20,536.37 (6169.63)	19,898.5 (5781.87)	637.87
Occupation score, 1920	21,856.02 (7816.13)	21,654.71 (9034.38)	201.31
Age, 1910	31.02 (8.29)	31.44 (8.41)	-.42
Age, 1920	40.86 (8.35)	46.78 (9.49)	-5.92
Literate, 1910	80.15 (39.88)	75.38 (43.07)	4.77
Literate, 1920	84.41 (36.28)	91.33 (28.14)	-6.92
Married, 1910	56.81 (49.53)	55.36 (49.70)	1.45
Married, 1920	80.61 (39.53)	78.83 (40.85)	1.78
Years in the US, 1910	18.98 (49.65)	18.04 (159.61)	.94
Years in the US, 1920	28.40 (39.60)	28.72 (15.43)	-.32

Note: standard deviations are in parentheses. The 1910 population consists of European noncitizen immigrant men who have been in the US for more than five years with a sample size of 1,838,446 individuals. The 1920 population consists of European immigrant men who have been in the US for more than 15 years with a sample size of 3,125,759 individuals. Note that the 1920 sample is not limited to individuals who were noncitizens in 1910, which is what accounts for the higher sample size.

Table 3: Sample sizes and match rates for 1920 to 1940 match for second generation analyses

	1920 Number in Universe	Number Matched	Match Rate
Total	2,381,010	830,024	.35
Child's Age in 1920			
5-10	1,176,880	395,291	.34
11-15	807,883	285,548	.35
16-18	369,247	149,185	.40
Family Characteristics			
Single mother household	107,806	38,166	.35
Single father household	76,013	25,989	.34
Both parents	2,197,191	765,896	.35
Parent's characteristics			
Noncitizen	509,480	143,263	.28
Declared intent	406,965	133,957	.33
Citizen	1,464,565	552,804	.38
Age			
< 25	10,151	2,719	.27
26-35	354,064	111,055	.31
35-45	1,013,397	345,329	.34
46+	1,001,637	370,374	.37
Not Literate	285,115	93,050	.33
Literate	2,095,895	736,947	.35
No English	204,660	59,758	.29
English	2,176,350	770,266	.35
Parent's Ethnicity			
British	148,693	67,141	.45
Irish	166,691	61,091	.37
Scandinavian	279,878	107,197	.38
German	281,332	122,747	.44
Central Jewish	111,031	39,708	.36
Italian	406,337	120,902	.30
Eastern Jewish	175,945	55,300	.31
Polish	219,842	60,300	.27
Russian	137,824	44,690	.32
Austrian/Hungarian	213,358	68,541	.32
Other	240,079	82,407	.34
Not urban	510,967	196,072	.38
Urban	1,870,043	633,952	.34

Note: the data universe is comprised of all second generation children sons (5-18) living outside the South.

Table 4: Comparing first-generation matched sample to population

	Matched	Population	Difference
Years of education, 1940	10.04 (2.94)	9.79 (2.93)	.25
Income ($1940), 1940	1282.39 (789.91)	1246.14 (791.70)	36.25
Age, 1920	11.03 (3.98)	10.86 (3.94)	.17
Age, 1940	31.05 (4.11)	30.81 (3.97)	.24
Parent noncitizen, 1920	16.97 (37.53)	21.40 (41.01)	-4.43
Parent intending citizen, 1920	16.23 (36.87)	17.09 (37.64)	-.86
Parent citizen, 1920	66.81 (47.09_	61.51 (48.65)	5.30

Note: standard deviations are in parentheses. The 1910 population consists of European noncitizen immigrant men who have been in the US for more than five years with a sample size of 1,838,446 individuals. The 1920 population consists of European immigrant men who have been in the US for more than 15 years with a sample size of 3,125,759 individuals. Note that the 1920 sample is not limited to individuals who were noncitizens in 1910, which is what accounts for the higher sample size.

Table 5: Ordinary least squares estimates predicting occupational income score (in 1950 dollars) of men ages 25-64

| | Noncitizen | Number of years immigrant has been naturalized | | | |
		0-5	6-10	11-15	16+
Pooled	-1438.24***	457.06**	1324.22***	1498.89***	1816.50***
	(104.49)	(139.66)	(170.38)	(204.20)	(160.23)
British	-1429.04**	391.19	715.79	-160.55	1034.77+
	(464.74)	(433.45)	(568.24)	(652.18)	(531.78)
Irish	-1467.65*	858.79	1055.44	1989.91**	1415.27*
	(565.85)	(548.39)	(678.67)	(681.41)	(567.16)
Scandinavian	-1403.44***	261.47	119.24	609.12	1475.88**
	(386.60)	(446.19)	(458.06)	(510.36)	(440.13)
German	-862.86	42.27	905.65	1377.38*	1227.53*
	(536.75)	(660.25)	(595.99)	(645.44)	(482.55)
Central Jewish	-1663.66***	172.31	1629.85**	2388.96***	2452.52***
	(277.97)	(418.95)	(491.37)	(600.51)	(499.53)
Italian	-851.26***	240.75	1783.53***	664.14	1938.06***
	(243.72)	(327.74)	(458.03)	(597.47)	(514.80)
Eastern Jewish	-1213.61**	963.46*	2175.52***	2995.63**	3888.58***
	(366.58)	(480.09)	(565.07)	(861.86)	(781.81)
Polish	-1370.24***	929.03*	1307.81	1077.29	2182.33**
	(291.55)	(474.18)	(809.08)	(966.95)	(679.40)
Russian	-1940.17***	663.01	3454.19***	2640.33*	2925.28**
	(501.14)	(732.76)	(929.16)	(1030.91)	(957.16)
Austrian/Hungarian	-1377.06***	459.25	1916.29**	2085.69*	2409.84**
	(352.73)	(571.01)	(689.65)	(879.47)	(791.39)
Other	-1806.81***	683.14+	937.09*	2240.77***	1509.68**
	(265.22)	(380.66)	(456.26)	(576.10)	(449.42)

+.05<p<.1, *p<.05, **p<.01, ***p<.001 (two-tailed)

Note: The reference category for citizenship is intending citizens and the analysis controls for the same controls as in Table 4. The number of observations for the British is 3,993, 3,053 Irish, 5,502 Scandinavians, 4,167 Germans, 5,941 Central Jews, 7,704 Italians, 4,497 Eastern Jews, 3,002 Polish, 2,213 Russians, 2,822 Austrian/Hungarians, 7,078 Other, and 49,982 Pooled. The mean OCCSCORE (in $2010) for the British is 23,320.35, Irish $22,045.01, Scandinavians $19,628.40, Germans $20,775.91, Central Jews $21,478.10, Italians $20,650.19, Eastern Jews $23,694.22, Polish $20,582.27, Russians $21,503.26, Austrian/Hungarians $20,744.45, Other $20,188.10, Pooled $21,192.85

Table 6: Ordinary least squares estimates predicting second generation outcomes.

	Years of Education			Income	
	Model 1	Model 2	Model 3	Model 4	Model 5
Noncitizen	-.327***	-.152***	-.036***	-.027***	-.016***
	(.011)	(.011)	(.003)	(.003)	(.003)
Citizen	.354***	.456***	.083***	.039***	.006*
	(.009)	(.009)	(.003)	(.003)	(.003)
Child's Characteristics					
Highest Grade Attained					.077***
					(.000)
Age		-.025***		.095***	.097***
		(.005)		(.002)	(.002)
Age-squared		-.003***		-.003***	-.002***
		(.000)		(.000)	(.000)
Family Characteristics					
Single father household		-.036		-.033***	-.030***
		(.023)		(.007)	(.007)
Both parents		.225***		-.002	-.017***
		(.015)		(.004)	(.005)
Parent's characteristics					
Age		-.011		-.002***	-.001***
		(.001)***		(.000)	(.000)
Age-squared		.000***		.000***	.000***
		(.000)		(.000)	(.000)
Literacy		.437***		.049***	.018***
		(.012)		(.004)	(.003)
English Ability		.258***		.034***	.019***
		(.014)		(.004)	(.004)
Years in the US		-.001		-.002***	-.002***
		(.001)		(.000)	(.000)
Years in the US squared		.000***		.000**	.000
		(.000)		(.000)	(.000)
Parent's Ethnicity					
Irish		-.082***		-.032***	-.028***
		(.016)		(.004)	(.005)
Scandinavian		-.089***		-.021***	-.015***
		(.015)		(.005)	(.004)
German		-.616***		-.028***	.015**
		(.015)		(.004)	(.004)
Central Jewish		.509***		.039***	.008
		(.020)		(.006)	(.005)
Italian		-.965***		-.139***	-.063***
		(.015)		(.004)	(.004)
Eastern Jewish		1.211***		.096***	.014
		(.018)		(.005)	(.005)
Polish		-1.328***		-.149***	-.047***
		(.017)		(.004)	(.005)
Russian		-.162***		-.041***	-.026***
		(.019)		(.006)	(.005)
Austrian/Hungarian		-.823***		-.084***	-.018***
		(.016)		(.005)	(.005)
Other		-.707***		-.066***	-.013**
		(.016)		(.004)	(.004)
Urban		.499***		.186***	.159***
		(.010)		(.003)	(.003)

	No	Yes	No	Yes	Yes
State					
Constant	9.529***	11.132***	6.845***	6.351***	5.500***
	(.008)	(.118)	(.002)	(.035)	(.034)
N	765,188	765,188	594,254	594,254	585,445
R-squared	.01	.10	.00	.08	.15

+.05<p<.1, *p<.05, **p<.01, ***p<.001 (two-tailed)

Table 7: Timing of parental citizenship predicting educational attainment

	Model (1) OLS Without controls	Model (2) OLS With Controls	Model (3) With household fixed effect
Citizenship timing (before son born ref)			
Parent Naturalized When Child was 0-5	.208*	.011	-.067
	(.091)	(.101)	(.245)
Parent Naturalized When Child was 6-12	-.083	-.008	-.378
	(.123)	(.129)	(.349)
Parent Naturalized When Child was a Teenager (13-18)	-1.086**	-.641*	-.566
	(.331)	(.325)	(.658)
Observations	6,952	6,952	6,952

+.05<p<.1, *p<.05, **p<.01, ***p<.001 (two-tailed)

Note: Model 2 control for the same control variables as in Model 2 of Table 6

Appendix A: Coding for Ethnicity

As described in the text, different groups that are of sociological interest came from the same national origins during this era. Table A1 defines each ethnicity with discussion of the Jewish index defined in the methods section. In the first generation analyses, I use the individual's birthplace, mother tongue, and Jewish index to separate groups. In the second generation analyses, I code each ethnicity based on his parent's birthplace, mother tongue, and Jewish index.

Table A1: Ethnicity of first generation/parent

Ethnicity	Description
Irish, Italian	Born in respective countries
British	Born in England, Scotland, or Wales
Scandinavian	Born in Iceland, Norway, Sweden, or Denmark
German	Born in Germany or Germany-Poland, mother tongue is German, and Jewish index is <1.4
Central European Jewish	Born in Central Europe and Jewish index is >1.4
Eastern Jewish	Born in Eastern Europe and Jewish index is >1.4
Polish	Born in Eastern or Central Europe, mother tongue is Polish, and Jewish index is <1.4
Other	Those not described above

Table B1: Means and proportions of variables used in first generation analyses

	Noncitizen	Declared Intent	Citizen	Pooled Sample	
	1920 Full-Count	1920 Full-Count	1920 Full-Count	1920 Full-Count	1920 1% Sample
Noncitizen				31.34	35.23
Declared Intent				19.20	18.45
Citizen				49.46	
Citizen for 0-5 years					11.01
6-10 years					7.47
11-15 years					5.16
16+ years					22.67
Occupation Score ($2010)	20,329.70	21,966.33	22,808.86	21,870.22	21,192.85
Age	37.14	37.36	44.58	40.86	39.90
Speaks English (%)	79.49	92.52	97.79	91.04	89.67
Literate (%)	72.11	91.13	96.82	88.92	88.75
Married (%)	65.94	75.93	76.29	72.98	63.91
Years in the US	13.75	15.66	27.34	20.84	19.72
Urban (%)	89.63	86.82	79.56	84.11	80.05
Ethnicity (%)					
British	3.59	6.71	11.47	8.09	7.99
Irish	2.54	4.28	10.58	6.85	6.13
Scandinavian	5.07	10.27	15.73	11.34	11.00
German	3.35	8.17	16.80	10.93	8.34
Central Jewish	3.28	4.49	4.82	4.28	11.89
Italian	23.82	15.59	9.79	15.30	15.41
Eastern Jewish	6.69	7.81	6.79	7.04	8.99
Polish	12.58	10.57	4.22	8.06	6.01
Russian	8.66	5.99	4.61	6.15	4.43
Austrian/Hungarian	13.62	12.19	5.17	9.17	5.65
Other	16.52	13.91	9.98	12.79	14.16
Total	1,391,263	852,678	2,196,056	4,439,997	49,982

Note: Percentages and proportions do not add to 100 due to rounding. The noncitizen, declared intent, and citizen percentages in the panel dataset refer to the percent of noncitizens in 1910 who changed to those statuses in 1920.

Table B2: Means and proportions of variables used in second generation analyses by parental political status

	Noncitizen	Declared Intent	Citizen	Pooled
Child's characteristics				
Years of education*	9.52	9.84	10.20	10.06
Income ($1940)*	1,158.78	1,202.60	1,334.42	1,285.13
Age	9.79	9.76	11.67	11.13
Family Characteristics				
Single mother household	6.67	1.74	4.75	4.99
Single father household	3.00	2.07	3.43	3.23
Both parents	90.38	96.18	91.81	91.76
Parent's characteristics				
Noncitizen				17.26
Declared intent				16.14
Citizen				66.60
Age	42.15	41.64	46.37	44.91
Literacy	70.96	88.65	96.02	90.74
English Ability	82.25	92.23	97.39	94.09
Years in the US	19.35	20.22	29.46	26.25
Parent's Ethnicity				
British	4.06	5.82	9.68	8.42
Irish	3.44	3.89	9.21	7.47
Scandinavian	4.73	9.18	15.94	12.96
German	4.55	9.48	18.73	15.08
Central Jewish	4.10	4.86	4.94	4.75
Italian	29.78	17.38	9.94	14.25
Eastern Jewish	7.84	7.86	6.07	6.52
Polish	12.01	11.96	4.89	7.09
Russian	6.23	5.99	5.02	5.34
Austrian/Hungarian	12.68	12.89	5.98	8.14
Other	10.56	10.68	9.58	9.97
Urban	88.17	83.19	71.67	75.78
Total	143,263	133,957	552,804	830,024

*The number of second generation children with years of education is 765,188 and the number of second generation children with income is 594,259

Appendix C: Representativeness of matched samples

Research that uses large-scale historical record linkage has led to questions about how representative these new samples are of the population (Bailey et al. 2017). As noted in the methods section, the first and second generation matched samples produce different means than the full population along various dimensions. Similarly, since limited information is available on each individual, only men who are unique by name, age, and birthplace are able to match. To ensure the results are representative of the population, I follow a weighting technique similar to the IPUMS iterative strategy for weighting matched historical censuses. For the first generation analysis, I first weight the linked sample to resemble the 1910 population by ethnicity by calculating the proportion of the linkable population divided by the proportions for the linked sample. I then apply the ethnicity weight to the linked records and then calculate the proportions for the next weighting variable (5-year age groups). I repeat this process for marital status and literacy with the weights being modified with each iteration. For the second generation analysis, I follow the same iterative technique but use father's ethnicity, father's rural status (urban/rural), parental citizenship status, and five year age groups of the child. Table C1 compares the reweighted differences between citizens and noncitizens with the results presented in the article for the pooled samples. The citizenship advantage appears to strengthen in the results that weight the sample towards the origin population.

Table C1: Comparisons of weighted and unweighted results

	First Generation (DV: OCCSCORE)		Second Generation (DV: Years of Education)	
	Unweighted	Weighted	Unweighted	Weighted
Noncitizen	-985.07***	-1057.19***	-.152***	-.151***
	(28.55)	(33.48)	(.011)	(.011)
Citizen	1013.46***	1239.04***	.456***	.458***
	(34.99)	(44.62)	(.009)	(.009)
Observations	445,229		765,188	

+.05<p<.1, *p<.05, **p<.01, ***p<.001 (two-tailed)
Note: the unweighted samples come from the analyses in the text. The first generation results come from the fixed effects models while the second generation effects control for variables described in Table 6 Suppressed coefficients are available upon request.

In addition to questions about representativeness, recent evidence from Bailey et al. (2017) suggest that the iterative matching approach using the soundex algorithm defined in the methods section may be particularly sensitive to false linkages (i.e. matching person A in census A to person B in census B). While it is unknown just how many false matches are produced in the full samples, I create separate datasets that take out the phonetic standardization (taking out the soundex from the match). Similar to the matching procedure in the text, I matched individuals who were unique by their name, age +/- 2 years, and birthplace. This approach provides a high degree of confidence in linkage quality but also results in severe loss of observation counts. Tables C2 and C3 present the results from the iterative matching procedure used in the above results and the strict match that takes out the soundex algorithm for the first and second generation. As shown, the strict match reports stronger differences between citizenship statuses in the second generation analysis, but slightly weaker differences for the first generation analyses. Thus, some of the citizenship advantage may be due to false matches for the first generation, but they do not appear to drive the differences for the second generation.

Table C2: Comparisons between iterative and strict matches

	First Generation (DV: OCCSCORE)		Second Generation (DV: Years of Education)	
	Iterative Match	Strict Match	Iterative Match	Strict Match
Noncitizen	-985.07***	-828.11***	-.152***	-.176***
	(28.55)	(71.38)	(.011)	(.017)
Citizen	1013.46***	953.42***	.456***	.605***
	(34.99)	(87.19)	(.009)	(.014)
Observations	445,229	76,065	765,188	343,274

+.05<p<.1, *p<.05, **p<.01, ***p<.001 (two-tailed)

Note: the iterative matches come from the analyses above. The first generation analyses come from the fixed effects models while the second generation analyses control for the same varaibles as in Table 6.