Leapfrogging the Melting Pot? European Immigrants’ Intergenerational Mobility across the Twentieth Century

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Abstract: During the early twentieth century, industrial-era European immigrants entered the United States with lower levels of education than the U.S. average. However, empirical research has yielded unclear and inconsistent evidence about the extent and pace of their integration, leaving openings for arguments that contest the narrative that these groups experienced rapid integration and instead assert that educational deficits among lower-status groups persisted across multiple generations. Here, we advance another argument, that European immigrants may have “leapfrogged” or exceeded U.S.-born non-Hispanic white attainment by the third generation. To assess these ideas, we reconstituted three-generation families by linking individuals across the 1940 census; years 1973, 1979, and 1981 to 1990 of the Current Population Survey; the 2000 census; and years 2001 to 2017 of the American Community Survey. Results show that most European immigrant groups not only caught up with U.S.-born whites by the second generation but surpassed them, and this advantage further increased in the third generation. This research provides a new understanding of the time to integration for twentieth-century European immigrant groups by showing that they integrated at a faster pace than previously thought, indicative of a process of accelerated upward mobility.

Keywords: intergenerational mobility; European immigrants; education; integration

The persistence of patterns of ethnic social distinctiveness has been a concern animating American discussions of immigration throughout the nation’s history (Zolberg 2006). Such concerns played a pivotal role in shutting down the great wave of European migration that brought an estimated 15 million mostly poor and mostly Catholic and Jewish immigrants from Southern and Eastern Europe to reside in America between about 1880 and 1920 (Benton-Cohen 2010) and continue to motivate research about inequality and social cohesion in contemporary multiethnic societies (Baldassarri and Abascal 2020; Portes and Vickstrom 2011; Putnam 2007). In the long run, these anxieties seem misplaced given that sociologists have generally understood rapid upward mobility coupled with widespread intermarriage to have weakened ethnic attachments and identities to the point of rendering them “symbolic” (Gans 1979) or “optional” (Waters 1990) and leading Alba to famously declare that the European ethnicities produced by the great industrial migration had reached their “twilight” 60 years after its cessation (Alba 1981, 1985).

Yet despite the ubiquitous national influence of the melting pot story, the empirical evidence supporting this narrative remains limited, largely due to shortcomings in the nature of publicly available census and other survey data. As we review
below, although the extant results from analyses of historical census data seem to provide incontrovertible evidence of large-scale mobility between the industrial-era immigrant generation and the second generation consisting of their children, actual estimates of this intergenerational mobility vary considerably across studies. And perhaps more importantly, the picture of status attainment beyond the second generation remains foggy, and thus questions remain over just how long, in generational time, ethnic differences in attainment persisted. This has led to vague statements in contemporary social science theorizing that integration among the European ethnics occurred over the course of about three or four generations and that earlier disadvantages of some European ethnic groups may have even persisted beyond the third generation and into the decades after World War II (Borjas 1994; Glazer and Moynihan 1970).

For example, although the narrative of the melting pot optimistically paints a picture of rapid upward socioeconomic mobility, at least for European-origin groups, Glazer and Moynihan (1970) posited that cultural, social, and economic differences persisted among ethnic groups and integration may not have occurred until the third or fourth generation. Likewise, Borjas (1994) and, more recently, Ward (2020) claimed that immigrant group disadvantages persisted into the third generation and beyond. These points are important because they have been interpreted as supporting the notion that there are steep and long-lasting costs to the nation of admitting low-skilled immigrants (Borjas and Tienda 1987; Borjas 1990; see also Putnam 2007). Even though serious methodological concerns have been raised over much of the work purporting to find evidence of multigenerational ethnic inequalities (Abramitzky et al. 2021; Portes and Rumbaut 2014; Waters, Ueda, and Marrow 2007), this work continues to infuse contemporary debates about immigration policy and is used to support proposals to curtail contemporary low-skilled immigration flows (Davis and Shear 2019). If disadvantages persisted across generations for European-origin groups, wouldn’t the outcome be even worse for today’s immigrants, many of whom not only are low-skilled but are also likely to encounter substantial discrimination or adjustment difficulties on account of their non-European racial and cultural origins and documentation status (Portes and Zhou 1993; Waters and Jiminez 2005)?

Part of the difficulty in assessing these ideas is that data on immigrant integration are rare and incomplete. Data limitations make it especially difficult to connect immigrants’ status attainments with those of their descendants three or four generations later, which in turn makes it hard to empirically test claims about the “stickiness” of European industrial-era ethnicity. Given how such claims continue to shape perspectives about contemporary immigration theory and policy (Alba, Lutz, and Vesselinov 2001), it is crucial that they be subjected to greater empirical scrutiny than they have to date. The integration of the descendants of industrial-era migrants looms large in sociological theorizing—and public discussions—about contemporary immigration. Any ability to apply lessons from that era to current and future eras of immigration is dependent on precisely measuring and estimating patterns of mobility experienced by the descendants of industrial-era immigrant families.
To that end, this article uses newly linked U.S. Census Bureau data to provide novel empirical estimates of intergenerational progress in educational attainment among the children and grandchildren of industrial-era European immigrants in the United States. We reconstitute three-generation families whose members were interviewed across multiple census data sets spanning nearly eight decades: adults in the 2000 decennial census long form and American Community Survey (ACS) samples from 2001 to 2017; their parents in the Current Population Survey (CPS) from the 1970s and 1980s; and their grandparents in the full-count 1940 census, a group that we show is representative of European immigrants who arrived between 1880 and 1924. These data allow us to follow immigrant families across generations and compare them with their U.S.-born contemporaries. One major benefit of our approach is that we classify ethnic groups based on the place of birth of the first generation rather than individuals’ self-reported ethnic identity or ancestry. This avoids potential bias related to “ethnic attrition,” that is, when members of later generations cannot be found in data due to intergenerational shifts in identity (Alba and Islam 2009; Duncan and Trejo 2018).

We focus on educational attainment as the outcome of our analyses because of its centrality for socioeconomic status and position in the United States in the twentieth century. In part because the U.S. Census Bureau did not collect education or income data prior to 1940, historical work on the mobility of industrial-era immigrants frequently relies on a proxy of social status, namely, occupational income (e.g., Abramitzky et al. 2021; Ward 2020), which is the average income of a person’s occupation, akin to an occupational status score. Although occupational status is central to classic notions of social status (e.g., Blau and Duncan 1967; Featherman and Hauser 1978), the measure has limitations, perhaps the most problematic of which is that its measurement is restricted to those in the labor force, a group composed mostly of men during the early twentieth century.1

Although educational attainment has its own limitations as a measure of status (e.g., Haveman and Smeeding 2006), its relevance for understanding the process of upward mobility of immigrant families who arrived in the early twentieth century is clear. Education is the linchpin to the assimilation of immigrants into the mainstream of twentieth-century America. It is linked, most likely causally, to an individual’s socioeconomic position during his or her adult lifetime (Galobardes et al. 2006; Haller and Portes 1973), his or her health and well-being (Halpern-Manners et al. 2020; Kaplan, Fang, and Kirby 2017; Lynch 2003; Mirowsky and Ross 2003; Montez, Hummer, and Hayward 2012), and the life circumstances of his or her children (Dubow, Boxer, and Huesmann 2009; Erola, Jalonen, and Lehti 2016; Vollmer et al. 2016). For industrial-era immigrants who tended to arrive with lower levels of education than the U.S.-born population, the educational attainment of their children and grandchildren is a highly relevant indicator of structural integration into the U.S. labor force and wider society. Education provides a pathway to obtaining a job outside of ethnic occupational niches, learning English, wage growth, and ultimately interaction with and acceptance within the U.S. mainstream (Baldasarri and Abascal 2020; Duncan and Duncan 1968; Fischer and Hout 2006).

We find that many European immigrants had lower levels of educational attainment than their U.S.-born white counterparts. However, these deficits were
minimized or eliminated by the second-generation descendants of immigrants from most European nations. Moreover, by the third generation, the grandchildren of immigrants had attained even higher levels of education than the descendants of U.S.-born whites. Results were similar for both men and women, although men tended to experience greater upward mobility between the first and second generation than did women. As we discuss, the results provide overwhelming empirical evidence against the notion of intergenerational persistence of disadvantage among European-origin groups and speak to the degree and speed to which immigrants were able to integrate. However, the results also leave open questions for further research about whether the experiences of European-origin immigrants can be applied to non-European groups, a point to which we return in the article’s conclusion.

Background

Upon arrival to the United States in the early twentieth century, European groups differed dramatically from one another, and from the U.S.-born, with regard to the amount of social and economic capital they possessed. Alba (1990) characterizes European immigrant groups as fitting within a status hierarchy whereby Protestant groups from the British Isles occupied the top (i.e., the highest attaining status group), other groups from Northern and Western Europe occupied the middle, and at the bottom were the Southern and Eastern Europeans. Northern and Western Europeans were mainly literate, skilled, and quick to assimilate. Southern and Central European migrants such as Italians, Jews, Poles, and others from Balkan regions were predominately labor seeking, occupying industrial jobs in manufacturing, construction, and steel industries (Hutchinson 1965). These status attainments and positions within the hierarchy differentiated each of these ethnic groups by place of origin. As historical accounts of discrimination show, Irish, Jews, and Italians alike were targets for nativist hostility (Alba and Nee 2003; Foner 2000; Higham 1955). This discrimination and separation of classes meant that the opportunity structures among immigrants were also different. Immigrants often lived and worked in separate spheres, which may have limited the educational opportunities for certain groups, at least prior to educational expansion in the 1950s and before major changes in compulsory schooling (Alba 1985; Sassler 2006).

It remains unclear whether and how quickly these initial disparities among European ethnic groups disappeared. Until recently, no large-scale data source existed to observe intergenerational progress in educational attainment across immigrant generations within European immigrant ethnic families (from first-generation grandparents to second-generation children, to third-generation grandchildren, and so on). Also, as noted earlier, the U.S. Census Bureau did not collect data on educational attainment until 1940. Thus, the production of empirical evidence germane to questions of the persistence (or absence) of ethnic disadvantage among the offspring of European immigrants has relied on proxies for educational attainment that were collected in the U.S. Census earlier than 1940 (e.g., literacy and school attendance). Additionally, high quality data linkage algorithms and the attachment of unique personal identifiers to census records based on administrative and genealogical
data have improved enough in the last few years that we are only just now seeing studies that examine intergenerational mobility between immigrants, their children, and in some cases grandchildren (e.g., Abramitzky et al. 2021; Catron 2019, 2020; Ward 2020). Absent the linked data employed here, researchers have generally had to rely on less-direct observational methods—typically either synthetic cohort analyses of the various immigrant generations as they appear in multiple survey cross-sections over time (e.g., Alba, Lutz, and Vesselinov 2001; Borjas 1994), or comparisons of integration outcomes (such as educational attainment) across immigrant generations or birth cohorts observed within a single survey cross-section (e.g., Alba 1981, 1985; Hirschman and Kraly 1990; Neidert and Farley 1985; Sassler 2006). The result is an empirical literature that presents a rather overwhelming, if blurry and incomplete, picture of ethnic convergence to levels of outcomes exhibited by whites of “native stock,” defined as white children with U.S.-born grandparents (the “fourth-plus generation”) (Sassler 2006).

For example, analyses of data collected during or in the decades following industrial-era migration demonstrate that the process of intergenerational mobility in educational attainment and convergence with U.S.-born whites was already well underway. Sassler’s (2006) analysis of 1920 census data revealed that, even before immigration to America from around the world was largely curtailed by restrictive entry laws enacted in the 1920s, the U.S.-born (second-generation) children of nearly all the major industrial-era European ethnic groups made clear gains in their rate of school enrollment, over that of their European-born (first-generation) peers, even if their rates failed to converge to U.S.-born white levels. These patterns of ethnic and generational variation in adolescent school enrollment in 1920 are echoed in the educational attainments observed for these adolescents when they were adults in the middle of the century. Hirschman and Kraly (1990) present statistics from 1940 and 1950 census data showing large deficits in average years of schooling completed among men from major source countries of industrial-era migration relative to the U.S.-born. Unlike in the case of second-generation school enrollment among adolescents in 1920, however, the second generation of industrial-era ethnic groups reported average educational attainments that were equal to those of the U.S.-born majority; men born in America to Russian or Ukrainian parents (a group that was predominantly Jewish) proved exceptional, opening up an average schooling advantage of two years over U.S.-born whites (Hirschman and Kraly 1990: Table 3).

Other studies, however, show evidence of ethnic “stickiness” across generations. One study found that ethnic group–level literacy rates in 1910 are significant predictors of educational attainment even into the third generation (Borjas 1994). This study has been shown to have serious methodological flaws (Alba et al. 2001), yet more recent work using better data similarly finds a correlation between the average occupational income of immigrant ethnic groups with occupational income among third-generation grandsons (Ward 2020). It is important to note, however, that these studies do not assess the degree that the children and grandchildren of immigrants reached attainments that were on par with that of a mainstream group, such as U.S.-born whites. Even if ethnic differences persist to some degree, the conclusion about the success of immigrant groups would be very different if
the second or third generation continued to fall behind, matched, or exceeded the attainments observed for U.S.-born whites.

Still, studies examining intergenerational mobility between parents and children all show patterns consistent with dramatic reductions in the attainment gap between U.S.-born whites and members of industrial-era ethnic groups across immigrant generations (Alba 1981, 1985; Duncan and Duncan 1968; Neidert and Farley 1985). In a recent study, Abramitzky and colleagues (2021) find that children of immigrants from nearly all countries of origin have higher rates of intergenerational upward mobility than children of U.S.-born parents, regardless of whether the outcome is mobility in occupational income or mobility in educational attainment. They were only able to examine mobility in education for the children of contemporary immigrants, however. Additionally, research examining educational mobility across three generations—from parents to children to grandchildren—are very rare. The only study that we know of that examined three generations focused on occupation rather than education (Ward 2020). As a consequence, the evidence accumulated in the decades following the industrial-era migration, although suggestive of substantial group mobility toward mainstream convergence, lacks the precision necessary to confidently make claims about the number of generations it took before convergence in educational attainment occurred (assuming it did). Moreover, this work provides little insight as to the degree to which intergenerational mobility varied across the major ethnic groups migrating to America during the industrial era.

In short, prior research suggests that, en masse, the children and grandchildren of European immigrants of the industrial era seem to have converged to average attainment levels of the native-stock population. However, the extent to which the offspring of European immigrants may have exceeded native attainment levels, the number of immigrant generations required to realize convergence, and whether the integration trajectories and intergenerational mobility patterns vary across ethnic groups are questions without clear answers, owing primarily to data and methodological limitations inherent in the established body of empirical research.

Research Expectations

We examine intergenerational mobility in educational attainment across three generations for industrial-era immigrants. We anticipate three possibilities based on theory and prior research. The first possibility is persistent ethnic disadvantage. According to the status attainment model, parental status (measured here as educational attainment) is the strongest predictor of a person’s attainment (i.e., education) in adulthood, leading to the reproduction of a family’s class position across generations (Blau and Duncan 1967; Haller and Portes 1973). Immigrant starting points are also thought of as “class origins” (or class positions) and are representative of initial status attainments of the first immigrant generation, which are measured here as educational attainment. Indeed, many studies in the United States show that even as absolute levels of education have increased, there has been little change in relative class position (i.e., educational attainment given European national origin) for families over time (Bowles, Gintis, and Osborne Groves 2005). Moreover, some earlier European immigrant groups may have faced discrimination and other
barriers to upward mobility, which in turn could lead to some groups rejecting schooling and legitimate pathways to success (Alba and Nee 2003; Feliciano 2006; Portes and Zhou 1993).

Indeed, not all immigrant groups were supportive of mandatory schooling and preferred that their children worked or helped with other family matters at home, and some even turned to criminal activities and organizations (e.g., Italians; see Alba 1985; Perlmann 2005). This line of argumentation, which we label as the persistent disadvantage model, is similar to that predicted by segmented assimilation theory, whereby groups arriving with few resources and encountering unsupportive contexts of receptions are predicted to experience stagnant or slow assimilation patterns (Portes and Zhou 1993). Consistent with these ideas, Borjas (1994) argued that human-capital differences among immigrant groups at the beginning of the twentieth century were still evident among third-generation descendants three-quarters of a century later, although in muted form. His study found that the relative ordering of national origin and ancestry groups among individuals was similar in the 1910, 1940, and 1980 censuses, and concluded that it may take a century or more until differences among immigrant groups disappear.

A second possibility predicts integration whereby initial ethnic differences quickly attenuate across generations. There are several reasons to expect European immigrants to have rapidly closed the gaps in educational attainments relative to U.S.-born whites. First, European immigrants were well positioned due to their geographic concentration in the northeast region of the United States and their place in history to take advantage of the educational reforms and expansions occurring in the United States in the first half of the twentieth century. In the early twentieth century, educational reforms had introduced compulsory attendance laws that increased the access and opportunity for individuals to obtain an education (Katz 1976; Lleras-Muney and Shertzer 2015; Richardson 1980). These improvements were especially pronounced in the northeast—the geographic locations often inhabited by industrial-era European immigrants.

Additionally, the economic growth and expansion in higher education that occurred during this time period, coupled with large federal investments in the opportunity structure, permitted European immigrants and their children to achieve upward mobility (Alba 2020; Lieberson 1980). As a part of the New and Fair Deals enacted as an attempt to improve economic conditions that resulted from the Great Depression and World War II, the Servicemen’s Readjustment Act of 1944 (i.e., the GI bill) was introduced to create enhanced opportunity for college attendance, after which a college degree became more commonplace (Kim and Rury 2007). As argued by Alba (2020), the rapid expansion in schooling and the labor market provided the structural changes that enabled a non–zero-sum pattern of assimilation, meaning that European-origin immigrant groups could advance without having to out-compete or displace others located above them in the status hierarchy. In other words, the expansion in educational opportunities and compulsory school attendance laws reduced inequalities in educational attainment (Alba 2020). These ideas lead us to hypothesize that differences in educational attainment between the descendants of U.S.-born whites and the descendants of immigrants will be reduced to nonsignificance across generations, hereby discussed.
as the rapid integration model. Indeed, historical studies have found that immigrant groups improved their educational status over time and between the first and second generations (see Sassler 2006; White and Mullen 2016).

A third possibility predicts accelerated upward mobility, whereby the descendants of European-origin immigrants not only reached equal attainment levels as the U.S. mainstream but surpassed them within the space of two or three generations, thus exceeding the expectations of the status attainment model. In other words, we hypothesize that the descendants of immigrants “leapfrog” the descendants of U.S.-born whites. One reason to anticipate accelerated upward mobility among immigrant families is that immigrants were able to draw upon co-ethnic and familial experience and resources to assist in their settlement and integration. The immigrant communities that European groups were settling in provided enclaves where immigrants could live, work, and seek support from earlier-arriving co-ethnics (Alba and Nee 2003; Borjas 2000). White and Mullen (2016) found that more established and early-arriving immigrant groups (e.g., Northern and Western Europeans) improved their socioeconomic status to a lesser extent than did Italian and Polish groups, suggesting that later-arriving groups were given a hand up by earlier-arriving co-ethnics, enabling them to “catch up” more quickly than similarly low-educated U.S.-born counterparts. One way this may have occurred is through the rise in Catholic educational enrollment (Baker 1999). To improve their education, the Catholic working class formed their own schools, which paralleled the rigor of the public schools’ nonreligious curriculum (Baker 1992) yet allowed them to be culturally accommodating (Gleason 1970; Lazerson 1977; Moore 1986). By adapting a model of mass schooling from the public sphere, Catholic schools were able to educate some of the least-educated populations in U.S. society (Baker 1992).

Another reason to expect accelerated upward mobility among immigrant families relates to the fact that some immigrant groups lacked occupational mobility ladders and faced barriers within the mainstream business world (Catron 2016). Furthermore, occupational structures changed dramatically between 1930 and 1970 (Alba 2020). Even if they wanted to, people could not have followed their immigrant parents or grandparents into similar occupations as these jobs grew scarce; education became required to obtain the white-collar jobs that were proliferating. As these shifts in occupational structure occurred, pathways to improving a family’s social position were rerouted through education. The education route to upward mobility may have been particularly important for European ethnics who were not yet fully accepted, such as Italian Americans (Alba 1985).

A third reason to anticipate a pattern of accelerated upward mobility is that children of immigrants often feel obligated to fulfill their parents’ dreams for upward mobility in return for the sacrifices they made to move to the United States. Fulfilling such obligations could mean working long hours to contribute to household income, but it could also mean pursuing secondary and postsecondary educational credentials, particularly in circumstances in which higher education is available, affordable, and recognized as having clear financial benefits. As noted above, such circumstances started to emerge especially for men during economic and educational expansion in the decades following World War II. Children of
immigrants may have felt more pressure than children of U.S.-born parents to take advantage of these expanding educational opportunities.

Indeed, pressure to succeed has been observed among present-day immigrant families. For example, Kao and Tienda (1995) suggest that some of the characteristics often found in immigrants, such as their optimism to search for new opportunity via migration, are responsible for their increased success. Lee and Zhou (2015) found that Asian immigrant families promote educational success through family values that place high emphasis on educational performance. Another study found that immigrant families tend to have high expectations for their children’s education and implement strategies to promote their children’s educational achievement, an outcome the authors attribute to the tendency for immigrants to have higher education relative to others in their communities of origin (Feliciano and Lanuza 2017).

It is possible that the positive selection processes and the strategies observed among today’s immigrants were also evident among early twentieth-century European immigrants. We know, for example, that Jewish immigrants placed great importance on education in efforts to get ahead (Gibson and Ogbu 1991). Although not all European ethnic groups were as focused on education as were Jewish immigrants, the same pattern may have emerged across multiple groups. This is certainly suggested by the high levels of upward occupational mobility seen between first- and second-generation immigrants for nearly all ethnic origins at the beginning of the twentieth century (Abramitzky et al. 2021). Exceptional levels of educational mobility may be even more evident for industrial-era immigrants given that some of their second-generation children and nearly all of their third-generation grandchildren came of age during the post–World War II period, when educational opportunities expanded rapidly and routes to the middle class became increasingly tied to educational attainment.

Data and Methods

Sample

To test the ideas discussed above, we use linked data from the full-count 1940 census; years 1973, 1979, and 1981 to 1990 of the CPS; the 2000 census long form; and years 2001 to 2017 of the ACS. The 1940 census was the first U.S. census to collect data on educational attainment.

The Census Bureau attached unique personal identification keys (PIKs) to individuals in the 1940 census and CPS data files as part of its Census Longitudinal Infrastructure Project (CLIP), which enabled us to link individuals and families across data sources (Massey et al. 2018). Contemporary census data and surveys include sufficient personally identifiable information (PII), such as name, exact date of birth, and address, that when combined with administrative records from the Social Security Administration, Internal Revenue Service, and other agencies enables the Census Bureau to accurately assign PIKs to the vast majority (90 percent or more) of respondents. Until recently, limited PII and administrative data have restricted the share of individuals in historical census data that can be assigned
a PIK. For example, many historical studies that used linked census data were restricted to individuals whose names do not change over time and who have a unique name and year-of-birth combination. As a result, historical studies have tended to have low linkage rates (typically around 20 percent), and they tended to exclude women, whose names often change with marriage. However, the CLIP modified the linkage methodology to substantially increase the share of 1940 census respondents who could be assigned a PIK based on name, age, state or country of birth, state of residence in 1940, state of residence in 1935, and parents’ names, and this information could in turn be linked to individual’s Social Security Administration record even if they did not enroll in the Social Security system until years later (Massey et al. 2018). The additional matching variables enabled the Census Bureau to assign PIKs to 46 percent of individuals in the 1940 census and to 73 percent of those aged 0 to 19 years—the group primarily included in our analysis.

We used the CLIP data to connect members of families who were linked in data collected during three time periods, resulting in a three-generation family file. Parents with co-residential children were identified in the 1940 census (the “first family generation”). Then, the co-residential children of those parents were identified and linked to their later adult records in the CPS (the “second family generation”). The co-residential children of these individuals were located and linked to their adult records in the 2000 census and/or the 2001-to-2017 ACS (the “third family generation”).

We limited the sample to two groups: (1) families in which at least one of the grandparents in the first family generation was born in Europe and none were immigrants from other world regions and (2) families in which all of the grandparents in the first family generation were born in the United States and identified as non-Hispanic white. Thus, our study focuses on comparisons of European immigrant families with each other and with a contemporaneous sample of non-Hispanic U.S.-born whites, a group we interpret as representing the U.S. mainstream in 1940 and the post–World War II period. Such comparisons help us gauge the relative progress observed for European immigrant families within the context of the rapid rise in educational expectations and opportunities that occurred for non-Hispanic whites throughout the twentieth century. The considerable differences in civil rights and educational opportunities between European immigrant and nonwhite racial-ethnic and national origin groups (e.g., African Americans and Mexicans) require more theoretical development than we have space for here. We thus limit our comparison group to non-Hispanic U.S.-born whites.

Importantly, the first-generation European-origin parents in our sample arrived in the United States squarely in the middle of the industrial-era wave of immigration, as demonstrated in supplementary analyses of linked 1930-to-1940 census records (Figure S1 of the online supplement).\(^5\) Fifty-eight percent of immigrants who were parents in 1940 arrived in the United States between 1900 and 1915, and 87 percent arrived before 1920. Their year-of-arrival distribution was slightly more concentrated during the peak immigration years than that of all industrial-era immigrants in general. The comparable figures for all immigrants living in the country in 1930 regardless of parental status were 45 percent and 80 percent, respectively. Additionally, the average years of education of immigrant parents (6.2
years) was very similar to those of all industrial-era immigrant (6.5 years). Results were similar across origin groups as well: 7.9 versus 8.0 years among Northern and Western Europeans, 5.6 versus 5.8 among Eastern Europeans, and 4.3 versus 4.6 among Southern Europeans (Table S1 of the online supplement).

We organize the data in our sample from the perspective of adults aged 25 or older in the third family generation, as shown in Figure 1. About 11,000 third family generation adults (63 percent) are linked to their mothers and at least one maternal grandparent, with 93 percent of this group linked to both maternal grandparents. Additionally, about 12,500 third family generation adults (71 percent) are linked to their fathers and at least one paternal grandparent, with 93 percent of this group linked to both paternal grandparents. These two groups overlap; about one-third of third-generation adults are linked to both their mother’s and father’s sides of the family. Altogether, the sample includes approximately 17,500 third family generation adults aged 25 or older who are linked to at least one parent and at least one grandparent (8,500 women and 9,000 men aged 25 or older).

**Linkage Bias**

Although a large number of individuals are assigned a PIK, not everyone is. The rate at which individuals are linked largely depends on the quality of information available to identify them, which varies by data source (Leach, Van Hook, and Bachmeier 2018). The rates of PIK assignment are 46 percent in the full 1940 census but 73 percent for those aged 0 to 19 years, 71 percent in the CPS, and greater than 90 percent in the 2000 census and ACS files. Moreover, some groups have higher PIK assignment rates than others (Bond et al. 2014; Wagner and Layne 2014), and immigrants have been shown to have lower linkage rates than the U.S.-born, presumably because of their lower levels of representation in administrative records (Bond et al. 2014). Luckily, the construction of our sample does not rely on the
linkages of foreign-born individuals. Instead, we link the U.S.-born children of immigrants in the 1940 census to their adult records in the CPS, and then we link their children (the grandchildren of immigrants) to the CPS to their adult records in the 2000 census and 2001-to-2017 ACS. Nevertheless, there may still remain other biases due to differential rates of being assigned a PIK. Additionally, our sample captures only families with children at given points in time (i.e., parents with children present in the household in 1940 census and grandchildren present in the household of their adult children between 1972 and 1990).

To reduce the impact of these potential sources of bias, we developed and use inverse probability treatment (IPT) weights, following the methods of Hong and Raudenbush (2008) and Sampson, Sharkey, and Raudenbush (2008). To calculate the IPT weights, we first model the probability that second family generation children (observed in the 1940 census) are followed up as adults and have co-residential children in the CPS (the third family generation child). We then model the probability that the third family generation children are linked as adults in the 2000 census or the ACS. Predictors include age, race, national origin, and years of parental education. For the final IPT weight, we multiply the predicted probability of selection into the second- and third-generation samples together and take the reciprocal. The IPT weights are then normalized so that the final weights sum to the number of cases in the analytic sample. The adjusted weights give families who are least likely to be included in the sample (given observed characteristics) greater influence in our analysis. In practice, the application of the weights shifts the distributions of age and education of the grandparents slightly downward compared with the unweighted sample, but results regarding educational mobility are nearly identical regardless of whether or not weights are applied.

**Measures**

A key organizing variable in the analysis is family generation. As noted earlier, the parents found in the 1940 census compose the first family generation, their children compose the second family generation, and their grandchildren make up the third family generation. To provide some historical context, the average year of birth for the first family generation was 1902 (standard deviation, 8.8); they attended school primarily during the first three decades of the twentieth century. The second family generation was born on average in 1932 (standard deviation, 6.1), and they attended school primarily during the 1930s, 1940s, and 1950s. Finally, the third family generation was born on average in 1963 (standard deviation, 6.4); they attended school primarily during the 1960s, 1970s and 1980s.

The educational attainment of various family members serves as both outcomes and predictors in our analyses. We measured educational attainment as the highest grade of education attained for adults aged 25 or older in the third family generation and their mothers, fathers, maternal grandmothers, maternal grandfathers, paternal grandmothers, and paternal grandfathers. In analyses of educational mobility between the first and second family generations, we treated educational attainment of the adults in the second family generation as the outcomes and the average educational attainment of their parents (i.e., the maternal grandparents and paternal
grandparents in the first family generation) as predictors. In analyses of educational mobility between the second and third family generations, we treated the educational attainment of the adults in the third family generation as the outcome and the average attainments of grandparents and parents in the first and second family generations, respectively, as predictors. When employed as independent variables, we average the educational attainments of the grandparents and parents in the first and second family generations to reduce collinearity. In supplemental analyses, we tested alternative ways of summarizing educational attainment (e.g., highest, father’s/grandfather’s, mother’s/grandmother’s education), and the results were very similar to those presented here. For the second generation, in models that separate results by sex (e.g., Tables 2 and 3), we follow the matrilineal (all women) or the patrilineal (all men) sides of the family. When separating results by sex for the third generation, we include both maternal and paternal sides of the family (i.e., “combined” models), which we explain further below.

**Ethnic origin** is a family-level measure based on the place of birth and racial-ethnic identification of the grandparents in each family. Ethnic origin is treated as fixed across generations even if the children or grandchildren no longer self-identify with the ethnic group. This is an important strength of our study because it makes it possible to assess the intergenerational mobility of immigrant groups regardless of the level of interethnic marriage or changes in identification (Alba 2020; Duncan and Trejo 2018), factors that are likely to confound the relationship between generational status and educational attainment.

We created separate ethnic origin measures for the matrilineal and patrilineal sides of the family, with the former based on the place of birth and racial-ethnic identity of the maternal grandparents in the first family generation and the latter on the paternal grandparents in the first family generation. We also created a combined measure of ethnic origin for each family based on the origins of both sides of the family. For the matrilineal, patrilineal, and combined measures of ethnic origin, we distinguished among families in which the grandparents in the first family generation were born in Ireland, other parts of Northwest Europe, Central Europe, Eastern Europe, and Southern Europe.

We separated Ireland from the rest of Northwest Europe because of its large group size and unique migration history. The reference group includes families in which both grandparents in the first family generation were non-Hispanic white and born in the United States. For convenience, we refer to the first five groups as “European immigrant families” and the last group as “U.S.-born white families.” Roughly 80 percent of the families across the linked data sets were U.S.-born white families, whereas the remaining were distributed across the five European-origin groups (see Table 1).

The ethnic origin of grandparents in the first family generation is not uniform within families. In about 25 percent of European immigrant families, one of the grandparents was born in the United States, whereas the other was born in Europe. In such cases, we assigned the ethnic origin of the immigrant grandparent. For nine percent of the families in which both grandparents were European immigrants, the grandmother and grandfather were born in different regions of Europe. In these cases, we assigned the ethnic origin in the following order of priority: Ireland, Northwest Europe, Southern Europe, Central Europe, and Eastern Europe. We
### Table 1: Sample descriptives (mean or proportion)

<table>
<thead>
<tr>
<th></th>
<th>Matrilineal side</th>
<th>Patrilineal side</th>
<th>Combined (both sides)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Third family generation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2000 census and 2001-to-2017 ACS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years of education</td>
<td>14.2 (2.5)</td>
<td>14.2 (2.4)</td>
<td>14.1 (2.5)</td>
</tr>
<tr>
<td>Year of birth</td>
<td>1962.0 (6.2)</td>
<td>1963.0 (6.2)</td>
<td>1963.0 (6.4)</td>
</tr>
<tr>
<td>Age</td>
<td>45.0 (8.8)</td>
<td>43.7 (8.7)</td>
<td>44.1 (8.8)</td>
</tr>
<tr>
<td>Male (proportion)</td>
<td>0.51</td>
<td>0.51</td>
<td>0.51</td>
</tr>
<tr>
<td>Household size in childhood</td>
<td>4.70 (1.73)</td>
<td>4.85 (1.62)</td>
<td>4.73 (1.66)</td>
</tr>
<tr>
<td>Region in childhood (proportion)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northeast</td>
<td>0.30</td>
<td>0.29</td>
<td>0.29</td>
</tr>
<tr>
<td>Midwest</td>
<td>0.39</td>
<td>0.39</td>
<td>0.38</td>
</tr>
<tr>
<td>South</td>
<td>0.20</td>
<td>0.21</td>
<td>0.21</td>
</tr>
<tr>
<td>West</td>
<td>0.11</td>
<td>0.11</td>
<td>0.11</td>
</tr>
<tr>
<td>Two parents in childhood</td>
<td>0.58 (0.49)</td>
<td>0.50 (0.50)</td>
<td>0.37 (0.48)</td>
</tr>
<tr>
<td>Ethnic origin (proportion)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S.-born non-Hispanic white</td>
<td>0.80</td>
<td>0.80</td>
<td>0.76</td>
</tr>
<tr>
<td>Northwest Europe</td>
<td>0.06</td>
<td>0.07</td>
<td>0.08</td>
</tr>
<tr>
<td>Ireland</td>
<td>0.02</td>
<td>0.01</td>
<td>0.02</td>
</tr>
<tr>
<td>Eastern Europe</td>
<td>0.02</td>
<td>0.02</td>
<td>0.03</td>
</tr>
<tr>
<td>Central Europe</td>
<td>0.05</td>
<td>0.05</td>
<td>0.06</td>
</tr>
<tr>
<td>Southern Europe</td>
<td>0.05</td>
<td>0.05</td>
<td>0.06</td>
</tr>
<tr>
<td><strong>Second family generation (CPS)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years of education</td>
<td>12.4 (2.3)</td>
<td>12.8 (3.1)</td>
<td>12.6 (2.7)</td>
</tr>
<tr>
<td>Year of birth</td>
<td>1933.0 (5.8)</td>
<td>1932.0 (6.4)</td>
<td>1932.0 (6.1)</td>
</tr>
<tr>
<td>Age</td>
<td>47.0 (7.3)</td>
<td>48.4 (7.6)</td>
<td>47.7 (7.5)</td>
</tr>
<tr>
<td>Household size in childhood</td>
<td>5.67 (2.15)</td>
<td>5.70 (2.24)</td>
<td>5.68 (2.01)</td>
</tr>
<tr>
<td>Region in childhood (proportion)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northeast</td>
<td>0.31</td>
<td>0.30</td>
<td>0.30</td>
</tr>
<tr>
<td>Midwest</td>
<td>0.40</td>
<td>0.41</td>
<td>0.39</td>
</tr>
<tr>
<td>South</td>
<td>0.20</td>
<td>0.20</td>
<td>0.21</td>
</tr>
<tr>
<td>West</td>
<td>0.09</td>
<td>0.09</td>
<td>0.09</td>
</tr>
<tr>
<td>Two parents</td>
<td>0.9 (0.3)</td>
<td>0.9 (0.3)</td>
<td>1.0 (0.2)</td>
</tr>
<tr>
<td>CPS year</td>
<td>1980.0 (5.5)</td>
<td>1980.0 (5.5)</td>
<td>1980.0 (5.5)</td>
</tr>
<tr>
<td><strong>First family generation (1940 census)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years of education</td>
<td>8.6 (3.1)</td>
<td>8.4 (3.1)</td>
<td>8.5 (2.9)</td>
</tr>
<tr>
<td>Year of birth</td>
<td>1903.0 (9.0)</td>
<td>1902.0 (9.4)</td>
<td>1902.0 (8.8)</td>
</tr>
<tr>
<td>Age</td>
<td>37.4 (9.0)</td>
<td>38.4 (9.4)</td>
<td>37.8 (8.8)</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>11,000</td>
<td>12,500</td>
<td>17,500</td>
</tr>
</tbody>
</table>

**Notes:** Standard deviations are shown in parentheses next to the means for continuous variables only. Because of rounding rules set forth by the Census Bureau’s Disclosure Review Board, not all column proportions may add up to 1. Vintage 1 data from the Immigrant Generations across the 20th Century Project (IGENS-20) (three-generation families; 1940 census; 1973, 1979, 1981-to-1990 CPS; 2000 census; 2001-to-2017 ACS). Approved for disclosure on November 2, 2020; review number: CBDRB-FY21-039.
followed the same decision rules to create the matrilineal, patrilineal, and combined measures of ethnic origin; for the combined measure, we took into consideration the place of birth and racial-ethnic identity of all four grandparents rather than just the two maternal grandparents or the two paternal grandparents.

Finally, in regression analyses we accounted for a number of demographic factors: year of birth (continuous), place of residence in childhood (region, state, county), household size in childhood (continuous), whether the person lived with two parents in childhood, and year of the CPS. For the analyses of second-generation attainments (based on the CPS samples), we include sample-year indicators to account for any secular increases in educational attainment that may have occurred during the time period covered in the CPS samples, 1973 to 1990. Means for all analytic variables are presented in the online supplement.

**Analysis**

Because women’s opportunities in schooling and the labor force were more constrained than men’s, especially before the 1970s (Fischer and Hout 2006), we conducted all analyses separately for women and men. Ethnicity is defined using the matrilineal measure for women and the patrilineal measure for men.

We first compared mean education levels across generations by ethnic origin to assess changes in ethnic group differences in educational attainment (Figures 2 and 3) and estimated regression models that assess whether the descriptive findings hold after adjusting for demographic factors (Table 2). Second, we assessed the extent to which the second- and third-generation disadvantages or advantages are explained by differences in intergenerational mobility as opposed to family class origins or starting points versus differences in upward mobility. To do this, we controlled for parents’ educational attainment. In models predicting the third generation’s attainment, we controlled for both parents’ and grandparents’ educational attainment (Table 3). Third, we investigated heterogeneity in the mobility process. We were particularly interested in whether European immigrants’ disadvantages compounded or were compensated for in subsequent generations, so we tested interactions between parental education and ethnic origin. To interpret the results, we generated and graphed predicted values for significant interaction effects while holding all controls at their mean levels (Figures 4 and 5).

Finally, we conducted a number of supplementary analyses and robustness tests. For reasons we discuss below, we assess results that relied on matrilineal versus patrilineal definitions of ethnic origin (Table S4 of the online supplement), restricted the sample to immigrants who were born before 1903 and therefore most likely arrived before the 1924 Johnson-Reed Act, and restricted the sample to immigrant families in which the second-generation child was aged 10 or younger in 1940. Additionally, to assess the degree that ethnic differences may be explained by geographic differences in educational opportunities, we estimated models that include state and county fixed effects (Table S5 of the online supplement).
Results

Educational Attainment across Generations

To what extent did differences in educational attainment between immigrant groups and U.S.-born whites change across generations? To answer this question, we display the average years of education for women by generation (first-generation maternal grandparents, second-generation mothers, and third-generation women) in Figure 2 and the same information for men (first-generation paternal grandparents, second-generation fathers, and third-generation men) in Figure 3. Each figure shows the absolute levels of education on the left and relative levels compared with U.S.-born whites on the right. Ethnic origin is based on the origins of maternal grandparents for women and paternal grandparents for men. Significant differences between the European immigrant origin and U.S.-born white families are indicated by the X-shaped markers in the left-hand graph or an asterisk (*) in the right-hand graph.

Overall, the results show evidence of accelerated upward mobility among immigrant families. European-origin immigrant groups, including those with the lowest (e.g., Southern and Central Europeans) and midlevel (Eastern European) status in 1940, not only converged with U.S.-born whites but leapfrogged over them. This occurred as early as the second generation for Eastern European women and Eastern and Central European men and by the third generation for nearly all groups.

Intergenerational Mobility

To what extent are group differences in educational attainment in the second and third generation attributable to differences in intergenerational mobility, as opposed to differences in parental and grandparental disadvantages? To answer this question, we added the educational attainment of prior generations to the models. Results are shown in Table 3 separately for women (Panel A) and men (Panel B). For reference, model 2 is repeated from Table 2; it includes the ethnic origin dummy variables and demographic controls (coefficients for controls not shown; full models shown in Tables S2 and S3 of the online supplement). For models predicting the educational attainment of second-generation parents, model 3 adds the average educational attainment of the first family generation, or in other words, the parents of the second generation (maternal for women and paternal for men). For models predicting the educational attainment of third-generation adults, model 3 adds the average education of the second family generation, or the parents of the third generation, and model 4 adds the average education of the first family generation, that is, the grandparents of the third generation (both maternal and paternal sides).

We first focus on results for second-generation parents (first two columns of Table 3). Recall that Southern European women lagged behind their U.S.-born white counterparts, whereas other groups were either on par with or exceeded them (this is also reflected in model 2). However, after we accounted for the significant effects of first family generation education (i.e., parents’ education) in model 3 ($b = 0.283$ for women and $b = 0.380$ for men), ethnic origin variations diminished and nearly
**Figure 2:** Years of education among women by generational status and ethnic origin. *Significant difference between European immigrant origin and U.S.-born white families.

**Figure 3:** Years of education among men by generational status and ethnic origin. *Significant difference between European immigrant origin and U.S.-born white families.
Table 2: Educational attainment by ethnic origin among second and third family generation women and men (ordinary least squares regression models)

<table>
<thead>
<tr>
<th>Panel A. Women</th>
<th>Second family generation</th>
<th>Third family generation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
</tr>
<tr>
<td>Ethnic origin (reference = U.S.-born non-Hispanic white)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northwest Europe</td>
<td>0.092</td>
<td>0.025</td>
</tr>
<tr>
<td>Ireland</td>
<td>0.263</td>
<td>0.334†</td>
</tr>
<tr>
<td>Eastern Europe</td>
<td>0.458†</td>
<td>0.480†</td>
</tr>
<tr>
<td>Central Europe</td>
<td>−0.266*</td>
<td>−0.054</td>
</tr>
<tr>
<td>Southern Europe</td>
<td>−0.526†</td>
<td>−0.371†</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.004</td>
<td>0.083</td>
</tr>
<tr>
<td>N</td>
<td>11,000</td>
<td>8,500</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel B. Men</th>
<th>Second family generation</th>
<th>Third family generation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
</tr>
<tr>
<td>Ethnic origin (reference = U.S.-born non-Hispanic white)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northwest Europe</td>
<td>0.491†</td>
<td>0.432†</td>
</tr>
<tr>
<td>Ireland</td>
<td>1.142†</td>
<td>1.047†</td>
</tr>
<tr>
<td>Eastern Europe</td>
<td>1.331†</td>
<td>1.330†</td>
</tr>
<tr>
<td>Central Europe</td>
<td>0.449†</td>
<td>0.635†</td>
</tr>
<tr>
<td>Southern Europe</td>
<td>0.015</td>
<td>0.131</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.007</td>
<td>0.085</td>
</tr>
<tr>
<td>N</td>
<td>12,500</td>
<td>9,000</td>
</tr>
</tbody>
</table>

Notes: Vintage 1 data from the Immigrant Generations across the 20th Century Project (IGENS-20) (three-generation families; 1940 census; 1973, 1979, 1981-to-1990 CPS; 2000 census; 2001-to-2017 ACS). Approved for disclosure on November 2, 2020; review number: CBDRB-FY21-039. Model 1 is unadjusted for demographic controls. Model 2 controls for year of birth, region of residence in childhood (Northeast, Midwest, South, West), household size in childhood, and having two co-residential parents in childhood. † p < 0.01; * p < 0.05.

all European-origin groups attained significantly more years of schooling than their U.S.-born white counterparts. Groups with advantages in model 2 showed even larger advantages in model 3, and groups with disadvantages (Southern European women) or who were on par with U.S.-born whites (Central European women and Southern European men) joined the other groups by showing significant advantages relative to U.S.-born whites in model 3. The only exception was that second-generation Northwestern European women did not differ significantly from U.S.-born whites regardless of whether first family generation education was accounted for. Overall, the results provide evidence that the children of immigrants experienced accelerated upward mobility relative to U.S.-born whites between the first and second generations. If given equal levels of parental education, all groups except Northwestern Europeans would have leaptfrogged the attainments of U.S.-born whites by the second generation. Notably, this includes those who arrived with the lowest status: Southern and Central Europeans.

It is also noteworthy that the European immigrant-mobility advantage was larger for men than for women by half a year of schooling or more (e.g., the advantage for Southern Europeans was 0.502 for women and 1.421 for men). Clogg tests suggest that these gender differences were significant for all groups, implying that, at least during the post–World War II era, the sons of immigrants attained
Table 3: Educational mobility among second and third family generation women and men (ordinary least squares regression models)

<table>
<thead>
<tr>
<th></th>
<th>Second family generation</th>
<th>Third family generation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 2</td>
<td>Model 3</td>
</tr>
<tr>
<td>Panel A. Women</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnic origin (reference = U.S.-born non-Hispanic white)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northwest Europe</td>
<td>0.025</td>
<td>0.117</td>
</tr>
<tr>
<td>Ireland</td>
<td>0.334*</td>
<td>0.518†</td>
</tr>
<tr>
<td>Eastern Europe</td>
<td>0.480†</td>
<td>1.025†</td>
</tr>
<tr>
<td>Central Europe</td>
<td>−0.054†</td>
<td>0.671†</td>
</tr>
<tr>
<td>Southern Europe</td>
<td>−0.371†</td>
<td>0.503†</td>
</tr>
<tr>
<td>Parental and grandparental educational attainment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parental education</td>
<td></td>
<td>0.283†</td>
</tr>
<tr>
<td>Grandparental education</td>
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<td></td>
</tr>
<tr>
<td>R-squared</td>
<td>0.083</td>
<td>0.197</td>
</tr>
<tr>
<td>N</td>
<td>11,000</td>
<td>11,000</td>
</tr>
<tr>
<td>Panel B. Men</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnic origin (reference = U.S.-born non-Hispanic white)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northwest Europe</td>
<td>0.432†</td>
<td>0.652†</td>
</tr>
<tr>
<td>Ireland</td>
<td>1.047†</td>
<td>1.276†</td>
</tr>
<tr>
<td>Eastern Europe</td>
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<td>2.111†</td>
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<tr>
<td>Central Europe</td>
<td>0.635†</td>
<td>1.590†</td>
</tr>
<tr>
<td>Southern Europe</td>
<td>0.131</td>
<td>1.421†</td>
</tr>
<tr>
<td>Parental and grandparental educational attainment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parental education</td>
<td></td>
<td>0.380†</td>
</tr>
<tr>
<td>Grandparental education</td>
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<td></td>
</tr>
<tr>
<td>R-squared</td>
<td>0.085</td>
<td>0.202</td>
</tr>
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<td>N</td>
<td>12,500</td>
<td>12,500</td>
</tr>
</tbody>
</table>

Notes: Vintage 1 data from the Immigrant Generations across the 20th Century Project (IGENS-20) (three-generation families; 1940 census; 1973, 1979, 1981-to-1990 CPS; 2000 census; 2001-to-2017 ACS). Approved for disclosure on November 2, 2020; review number: CBDRB-FY21-039. All models control for year of birth, region of residence in childhood (Northeast, Midwest, South, West), household size in childhood, and having two co-residential parents in childhood (1 = yes). First-generation grandparental education is the average of first-generation grandparents’ education (maternal grandparents for second-generation mothers, paternal grandparents for second-generation fathers, and all grandparents for third-generation women and men). Second-generation parental education is the average of second-generation mother’s and father’s education. † p < 0.01; * p < 0.05.

higher levels of education relative to their U.S.-born white counterparts than the daughters of immigrants.

To explore the mobility of the second generation further, we tested interactions between parental education and ethnic origin, and they were highly statistically significant. Full model results are shown in Table S2 of the online supplement. To facilitate interpretation, we graphed predicted values generated from these models in Figures 4 (women) and 5 (men). Figure 4 omits the Irish because their values were no different than the U.S.-born. Results indicate that the children of immigrants for most groups attained particularly high levels of education relative to U.S.-born whites when their parents had low levels of education. At higher levels of parental
Figure 4: Predicted years of education by maternal education. US-born NH-White indicates U.S.-born non-Hispanic white. Approved for disclosure on November 2, 2020; review number: CBDRB-FY21-039.

Figure 5: Predicted years of education by paternal education among second family generation men. US-born NH-White indicates U.S.-born non-Hispanic white. Approved for disclosure on November 2, 2020; review number: CBDRB-FY21-039.
education, European-origin attainments were more similar to (yet still higher than) those of U.S.-born whites, among men; the same holds among women with the exception of the children of Southern European immigrant mothers. It is possible that for women in groups with already higher overall levels of attainment, the second generation had less room for improvement (as speculated by White and Mullen [2016]), especially when their parents (the first generation) had high levels of education.

Overall, this pattern of accelerated upward mobility between the first and second generation is consistent with past research on contemporary children of immigrants. Labeled an “immigrant paradox” and attributed to unique family and community dynamics among immigrants (i.e., due to cultural factors, selective migration, or ethnic social capital), this phenomenon is the primary reason European immigrant families were able to make up for their initial status disadvantages so quickly, often within a single generation.

More surprisingly, we found that the mobility advantage observed for the second generation extended into the third generation. As shown in the models estimated for third-generation adults (last three columns in Table 3), parental education (model 3) and grandparental education (model 4) have significant and independent effects on third-generation educational attainment. Thus the expectations of the status attainment model for the importance of parental education and even grandparental education are borne out in these results. As shown in other work (Anderson, Sheppard, and Monden 2018), socioeconomic status (including educational attainment) of both parents and grandparents matter although the effects of grandparental attainment are only about one-eighth that of parental attainment. Yet we also see evidence of accelerated mobility between the second and third generation. The grandchildren of European-origin immigrants continued to display significant advantages of roughly half a year of schooling or more over their U.S.-born white counterparts, even after the educational attainment of the second and first generation (their parents and grandparents) were accounted for in models 3 and 4. The only exceptions were women in the two highest-status immigrant groups from 1940: those whose grandparents immigrated from Northwest Europe or Ireland. The educational attainment of these two groups was not significantly different from U.S.-born whites after controlling for parental/grandparental attainment.

Also noteworthy is that the gender differences in the immigrant-mobility advantage in the third generation were not nearly as large as they were for the second generation. Compare, for example, the gender difference in the advantage for Southern Europeans. Among second-generation parents, men’s advantage was nearly one year larger than women’s (1.421 − 0.503 = 0.918). This difference reversed and was much smaller among the third-generation adults (0.517 − 0.645 = −0.128). Clogg tests confirm that gender differences in the ethnic origin coefficients in model 4 were not significant for those of Eastern, Central, and Southern European origin. There continued to be significant male advantages among those of Northwestern Europe and Irish origin, however.

Finally, we tested interactions between parental education and origin group, but they were not significant (results not shown). This suggests that the advantages of
being a grandchild of a European-origin immigrant were similar regardless of class origins (i.e., educational attainment).

**Supplementary Analyses**

In our main analyses, we coded parental education and grandparental education as the average of up to two parents and four grandparents, taking information from all parents and grandparents that we could observe in our data. But in preliminary work, we also tested measures based on the highest level of education of the two parents or four grandparents, mother’s/maternal grandmothers’ education, and father’s/paternal grandfathers’ education, and results were similar to those presented here.

Additionally, in our main analyses, we defined ethnic origin for the third generation based on our combined measure of ethnic origin. The combined measure selects the ethnic origin of the person’s grandparents (on both sides of the family) while giving priority to grandparents who had immigrant origins from certain European regions (i.e., in the order of Ireland, Northwest Europe, Southern Europe, Central Europe, and Eastern Europe). However, this coding scheme could obscure alternative and equally valid ethnic origins. Therefore, we repeated the models for the third generation multiple times, using the matrilineal and patrilineal versions of ethnic origin. Results for model 4 are shown in Table S4 of the online supplement. The coefficients for ethnic origin are consistent across the different models. Additional models (e.g., models 1, 2, and 3) are available upon request, and they show the same level of consistency.

Another possible concern is that, due to the severe immigration restrictions brought by the Johnson-Reed Act of 1924, immigrants who arrived after this time period may have been more positively selected relative to industrial-era immigrants who arrived before this time period. Based on our analysis of the 1930-to-1940 linked data, however, about 87 percent of the immigrant parents in the first generation arrived before 1924, so this seems unlikely (see endnote 5). Nevertheless, to further assess this possibility, we restricted our sample to a group more likely to have arrived before 1924—those born before 1903. This yielded similar results to our main analyses. Even among the pre-1903 group, second-generation Southern, Central, and Eastern Europeans as well as the Irish experienced greater upward mobility than did their U.S.-born white contemporaries for both men and women. The only differences in the third generation were null findings for Eastern and Central Europeans for the women and among Northwest Europeans for the men, denoting no difference in education (yet the coefficients are still relatively large and positive).

Another concern is that the second generation in our sample is restricted to those who were living at home with one or both parents in 1940. Therefore, the sample excludes those who left the home early. This exclusion may bias the results if children who left home at younger ages are less upwardly mobile—and have lower educational attainments—than those who remained at home. To assess this possibility, we limited the 1940 sample to include children of immigrants who are aged 10 or younger (very few children would have left the home by the age of 10).
Again, we find significantly greater upward mobility between the first and second generation for most European-origin groups except Irish men and women as well as Eastern and Northwest European women. Both Central and Southern European men and women have higher educational attainments than U.S.-born whites in the second generation. These supplementary analyses are available upon request.

Finally, other researchers have found that ethnic origin differences on intergenerational mobility in occupational income among industrial-era immigrants are mostly explained by the geographic clustering of immigrants in states and counties, presumably because immigrants tend to settle in places with greater economic opportunity (Abramitzky et al. 2021; Ward 2019). But this may not apply to education. Immigrants are drawn to places with jobs, but not necessarily to places with good schools. In fact, geography does not explain the high levels of educational mobility among contemporary immigrants (Abramitzky et al. 2020). To assess the role of geography for industrial-era European immigrants, we reran the intergenerational mobility models while controlling for state and county fixed effects. Results, shown in Table S5 of the online supplement, show little attenuation of the advantages of being the child or grandchild of an European-origin immigrant for intergenerational mobility in education. Even after adjusting for county fixed effects, the coefficients for nearly all second- and third-generation ethnic groups with significant advantages retained significance and at least 75 percent or greater of their original magnitudes. The only exception was second-generation Southern European women, whose advantage remained significant but was cut in half due to the introduction of county fixed effects.

Discussion

Broad patterns gleaned from Census Bureau data over the course of the twentieth century overwhelmingly suggested rapid educational integration of second- and third-generation European ethnic groups that arrived in the United States during the early twentieth century. Yet limitations in these same data precluded addressing more fine-grained questions about rates of mobility from one generation to the next, ethnic variation in these rates, and the degree to which these groups were able to close initial gaps in attainments with U.S.-born whites. Different methods designed to work around these limitations in previous studies have yielded divergent empirical results—especially regarding the ethnic populations less proximate to the immigrant experience (i.e., the third [grandchild] generation and beyond)—leading to an empirical literature that is marked by an apparent lack of consensus. In the social sciences and the broader American discussion about immigration and diversity that is informed by social science research, this lack of empirical consensus appears to have provided an opening for arguments that immigrants, particularly those arriving with low skills, have not contributed to the vibrancy of the American economy and society (e.g., Borjas 1994; Brimelow 1997).

In this study, we use newly available linkages of several censuses and surveys to bring additional clarity to questions about the educational integration of industrial-era European immigrants. We observe educational attainment across three family generations, something that has been historically difficult to capture due to limita-
tions in data availability (Jiménez 2018). Our data and methods make it possible to connect immigrants’ socioeconomic status as measured by educational attainment with those of their children and grandchildren, without biases that owe to imprecise measurement of generational status or intergenerational changes in ethnic identity, thus providing a clearer assessment than has been available in prior research of the educational progress of both high- and low-skilled European immigrant groups who arrived around the turn of the twentieth century. We find that not only did these immigrants catch up with their U.S.-born white contemporaries; most ethnic groups outpaced them. Notably, this occurred quickly and even for those groups that were initially ranked at the bottom of the status hierarchy via their educational attainment and group origin status, such as Southern and Central Europeans. For many groups and especially among men, integration with and surpassing U.S.-born whites occurred as early as the second generation.

Consistent with prior research (Hirschman and Kraly 1990), we find that in 1940, most European immigrant groups had lower levels of education than U.S.-born whites. Central Europeans and Southern Europeans (made up primarily of people originating from the southern regions of Italy and Sicily) were particularly disadvantaged, having educational deficits of 2.5 to 3.5 years. Yet, by the second generation, most European immigrant groups had achieved educational attainments that matched or exceeded those of U.S.-born whites, and by the third generation, nearly all groups exceeded them. Although the results show some evidence of the ethnic “stickiness” that Borjas (1994) discussed, in that the lowest ranked groups among the first generation were also among the lowest ranked in the second generation among the European immigrant groups, the results also show considerable narrowing of differences among immigrant groups and between these groups and those of U.S.-born whites. Moreover, ethnic disadvantages did not persist beyond the second generation, and in many cases, group rankings in the first generation were upended. For example, first-generation Southern Europeans were the lowest performing immigrants in average years of education (and among the most highly discriminated against), yet by the third generation, Southern Europeans outperformed Northwest Europeans and U.S.-born whites, groups with the highest average levels of education, or starting points, in 1940.

These changes in education came about because of the exceptional upward educational mobility among both the children and the grandchildren of immigrants. After adjusting for parents’ and grandparents’ education, nearly all (except Northwest European and Irish) industrial-era European second- and third-generation ethnics had attained higher levels of education than their U.S.-born white contemporaries. As shown in Figure 3, steep upward mobility was particularly evident for sons of immigrants whose parents had the lowest levels of education during the post–World War II era (i.e., those who attended school in the 1940s and 1950s). The preference of sons over daughters for investment in education may have been due to the greater opportunities for men compared with women in higher education and the professional workforce during the middle of the twentieth century, but it may also be related to strategies enacted among immigrant families to invest scarce resources in their sons’ education (Sassler 1995, 2006).
Our data do not permit us to analyze the precise reasons for the success of immigrants and their descendants, but we speculate that it may derive from any of a number of different factors, including the support and assistance of co-ethnic communities, pressure for children to succeed in immigrant families sometimes labeled the “immigrant bargain” in studies of contemporary immigrant families (Louie 2012), and European immigrants’ opportunities for success given the educational expansions occurring in the Northeast during the post–World War II era. The rapid upward trajectory from the bottom to the top of the status hierarchy of Southern European immigrants, a group composed primarily of impoverished tenant farmers in southern Italy and Sicily who occupied industrial and construction occupational niches in early twentieth-century America, is particularly striking. As has been discussed in other work (Alba and Nee 2003), this group may have experienced a confluence of factors that led to their success, including strong family networks and a labor-migration orientation that reinforced obligations to support kin through hard work, a pattern that has perhaps not coincidentally also been observed for contemporary Mexican labor migrants (Van Hook and Bean 2009). Involvement in the Catholic school system, together with the expansion of educational opportunities for men following World War II, may have rerouted such work orientations from industrial and construction jobs into education, particularly among men.

A common explanation for the success of industrial-era European immigrants is that they were concentrated in communities in the northeastern part of the United States where public investments in schooling and compulsory attendance laws took hold much earlier than in other parts of the country. Yet similar to analyses of contemporary immigrants (Abramitzky, Boustan, and Eriksson 2017), the results show significant advantages for children and grandchildren of industrial-era European immigrants even after adjusting for state- and county-level fixed effects. This is not to say that public investment in schooling was not important (for strong evidence to the contrary, see Lleras-Muney and Shertzer [2015]), but just that something other than geography explains the accelerated upward mobility of children and grandchildren of industrial-era European immigrants.

Another possibility is that the patterns we observe derive from selection into our sample. We already apply inverse probability treatment weights to adjust for biases related to the linkage of families across generations, and when we did this, the results did not change. Additionally, our supplementary analyses suggest that our results are robust to potential biases due to the inclusion of immigrant families who arrived following the passage of the Johnson-Reed Act in 1924 and to the absence of second-generation children who had already left their parental home by 1940. But other sources of selection that could help explain the success of immigrant families have not yet been fully explored. For example, we are only able to observe immigrants who moved to the United States and remained there. Between one-third and one-half of European immigrants returned to their countries of origin, and it is possible that only those who were successful in the United States stayed (Abramitzky et al. 2017; Gabaccia 2013).

In addition, Feliciano and Lanuza (2017) point to selection into immigration as key to understanding children of immigrants’ exceptional upward mobility. They argue that even if immigrants’ educational attainments are low relative to the U.S.-
born, immigrants tend to have relatively high levels of education compared with nonimmigrants in their home country. Thus, although their children experience upward mobility in absolute terms, the second generation does not experience upward mobility in relative terms; they merely reproduce their parents’ relative class position. We suspect that this explanation may at least partially underlie the rapid upward mobility of the children and grandchildren of Eastern European immigrants, a group that was composed mostly of Jewish immigrants and who had unusually high literacy rates compared with other Europeans. It is unclear, however, that Feliciano and Lanuza’s explanation applies to Southern European immigrants. As noted above, they originated from the lower rungs of society in southern Italy and Sicily in the late 1800s and early 1900s, which was itself among the poorest regions of Europe at the time. Poverty did not prevent working-age men from emigrating but most likely propelled them to do so, and many, at least initially, financed their trips through a contract labor system whereby they would be obligated to repay their padrone for steamship tickets and connections to jobs after they arrived in their destination (Gabaccia 2013).

Finally, we caution readers that the results presented here about European immigrants may not apply to contemporary immigrants. For example, although there are some important similarities between Mexican and Southern European immigrants (both exhibit high levels of familism, engage in circular labor migration, have comparatively low levels of education, and experience discrimination), there are also some important differences, such as the burdens placed on Mexicans related to the large share with undocumented legal status and the limited educational opportunities for Mexican Americans in the Southwest before the civil rights movements of the 1960s (Perlmann 2005). It thus remains unknown whether immigrants who may experience even greater structural and interpersonal discrimination than did even the least advantaged European-origin groups, such as Mexicans, would fare worse.

Exploring all of these issues extends beyond the scope of this article, but as of now, the results provide evidence of “leapfrogging” among European immigrant groups over U.S.-born whites. This pattern, in which the lowest-status groups rose to become the highest-status groups within three generations, is clearly inconsistent with the idea that immigrant groups with low skills have more difficulty integrating into the American mainstream. It is even somewhat inconsistent with the melting pot model of integration. Instead, it supports an “immigrant exceptionalism” argument, whereby immigrants tended to quickly erase their initial deficits in skills and education by the second generation and even exceed those of the U.S.-born mainstream by the third. For many decades, immigration restrictionists have worried about the American practice of admitting low-skilled immigrants on the basis of their family connections to the United States, and some of them pointed to industrial-era immigrants as evidence for their arguments. Our research helps put to rest some of these concerns about early-arriving European immigrants. Future research should evaluate the extent to which our findings hold across generations for contemporary immigrant groups.
Notes

1 Additionally, labor force participation and occupation changes over time, so single point-in-time measures contain measurement error (Kambourov and Manovskii 2008; Mazumder and Acosta 2015). Moreover, occupational income may not adequately capture heterogeneity within occupational categories (e.g., farmers may vary considerably in the size and success of their operations) and may not adequately capture changes in the relative status of occupations (Charles, Hurst, and Notowidigdo 2013; Sakamoto and Wang 2020) (e.g., clerks were relatively high-status occupations a century ago but now fall toward the middle of the status distribution).

2 A gap in data years is the result of unavailable data (i.e., 1950, 1960, or 1970 census long form), where PIKs have not yet been assigned.

3 We analyzed these restricted data in the Penn State Federal Statistical Research Data Center, and all results presented here were disclosed for review by the Census Bureau’s Disclosure Review Board (CBDRB-FY21-039, approved on November 11, 2020, and CBDRB-FY2021-CE005-019, approved on June 11, 2021).

4 For more information on the linking process, see Wagner and Layne (2014).

5 Unfortunately, our questions about the representativeness of our sample of immigrant parents compared with all industrial-era immigrants cannot be addressed within our analytical sample because the Census Bureau did not ask the question on year of immigration in 1940 (although it did so in 1930). And of course, the 1930 census, alone, cannot shed light on the matter as the Census Bureau did not add a question on educational attainment until 1940. Instead, we used linked 1930-to-1940 data from the IPUMS project at the University of Minnesota. IPUMS has created algorithms and cross-walks to allow users to match records across the 100 percent census files from the decennial censuses of 1910 to 1940. We matched foreign-born individuals enumerated in the 1930 census to their census record (if they were enumerated) a decade later. This produces a matched file of immigrants arriving in the United States before 1930, for whom we know both their year of immigration (from 1930) and their educational attainment (from 1940). Just more than 5,000,000 of the 14.4 million foreign-born individuals enumerated in the 1930 census were matched to their 1940 census record.

6 We employ the country region classifications defined by IPUMS for 1940 (https://usa.ipums.org/usa-action/variables/BPL#codes_section).

References


Lowrey et al. European Immigrants' Mobility


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