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Research Article

Segmented assimilation and mobility among men in the early 20th century

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Christina Diaz¹

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Abstract

BACKGROUND

Segmented assimilation theory asserts that children born to immigrants experience divergent paths of incorporation. While some exhibit substantial gains in well-being, others may fare worse than US-origin whites or their own parents. It is certainly true that contemporary immigrants find themselves living in a different context than those who arrived in the United States during the early 20th century. However, it remains an empirical question whether the incorporation process has suddenly become segmented.

METHODS

We select five of the top European sending regions to ask whether socioeconomic outcomes varied between immigrant-origin populations between 1910 and 1930. We use the Integrated Public Use Microdata Series Multigenerational Longitudinal Panel to link men over a 20-year period. Logistic regression is used to predict probabilities of school enrollment in 1910 among US- and immigrant-origin youths. We then rely on a series of OLS specifications to predict the socioeconomic standing of these men in 1930 as well as differences in father–son status. We also compare relative rates of occupational mobility across country of origin.

RESULTS

We find evidence of intergenerational mobility as well as convergence in economic success. Though some immigrant-origin groups fare better than others (e.g., the Irish and those from the United Kingdom versus Italians and Germans), our results largely align with classical theories of assimilation. To the extent that segmented assimilation occurs, it emerges in the especially low levels of attainment among German-origin youths.

CONTRIBUTIONS

Our findings raise important questions about studies that investigate segmented assimilation among immigrant-origin youths. We argue that more work is needed to

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determine whether downward assimilation is a sign of permanent disadvantage or a shortterm consequence from which youths can recover.

1. Introduction

Despite being introduced nearly 30 years ago, segmented assimilation remains a popular lens through which to investigate the experiences of immigrant-origin persons. As a theory, segmented assimilation asserts that children born to immigrants experience divergent paths of incorporation into the American mainstream. While some youths exhibit substantial gains in well-being, others may fare worse than US-origin whites or their own parents (Gans 1992; Kasinitz et al. 2009; Portes and Rumbaut 2001, 2006). Although there continues to be debate surrounding the operationalization of segmented assimilation in empirical work (Diaz 2020; Stepick and Stepick 2010; Waldinger and Feliciano 2004; Xie and Greenman 2011), it is clear that some immigrant populations fare better than others. These disparities in well-being can largely be explained by access to socioeconomic resources (Portes and Fernández Kelly 2008; Rumbaut 2005), family dynamics (Keller and Tillman 2008; Portes, Fernández-Kelly, and Haller 2005; Zhou and Kim 2006), and the context of reception.

One of the most striking claims made by proponents of segmented assimilation is that immigrants who settled in the United States after 1965 experienced a fundamentally different context of reception than earlier arrivals – the majority of whom arrived from Europe (Gans 1992; Portes and Zhou 1993; Zhou 1997). Changes in the American opportunity structure, including declines in manufacturing and the likelihood of economic mobility, have made it increasingly difficult for immigrants and their children to realize their goals (Duncan and Trejo 2015; Long and Ferrie 2013; Restifo, Roscigno, and Qian 2013; van Leeuwen and Maas 2010). Moreover, shifts in the demographic composition of immigrants (Coleman 2006; Lichter, Parisi, and Taquino 2018) and expressions of US racial prejudice (Bonilla-Silva 2010; Brown et al. 2019) each impact how newcomers are received by the host society (Portes and Zhou 1993; Zhou 1997).

It is certainly true that contemporary immigrants find themselves living in a very different context than those who arrived in the United States during the early 20^{th} century. However, it remains an empirical question whether the incorporation process has suddenly become segmented. We draw on literature from multiple disciplines – including demography, economics, history, and sociology – to assess whether socioeconomic outcomes were truly similar among immigrant-origin populations in the early 20^{th} century. We begin by evaluating markers of socioeconomic status across immigrant generation and country of origin for young men living in the United States. We then

estimate and compare differences in socioeconomic status between fathers and adult sons in immigrant- and US-origin families; this allows us to better separate trajectories of mobility from processes of assimilation. Here we ask if immigrant-origin men from supposedly disenfranchised ethnic groups (e.g., Italians) exhibited worse outcomes than those from comparably advantaged populations, such as those of English origin.

To effectively answer these questions, we require indicators of socioeconomic status for fathers and their adult sons as well as information on household characteristics when sons were children. It is also necessary to obtain a sufficiently large number of immigrants from a diverse pool of sending countries. We use the Integrated Public Use Microdata Series (IPUMS) Multigenerational Longitudinal Panel (MLP) to link individuals enumerated in 1910 and 1930 (Helgertz et al. 2020). We believe that focusing on this period is compelling for numerous reasons. First, the US education system rapidly expanded such that high school enrollment skyrocketed, from 10% in 1900 to nearly 50% in 1930. Compared to those in the rest of the world, secondary schools in the United States were open, affordable, and promoted by policy makers and employers alike (Goldin and Katz 1997). This shift in the American opportunity structure provided new opportunities for individuals, especially white men, to become upwardly mobile with respect to their attainment and earnings (Becker and Tomes 1986). Moreover, immigration from Europe remained largely unregulated until the 1920s, which allowed families to settle in the United States with relative ease (Sassler 2006; Ngai 2014). In this way, weak policy restrictions allow us to sidestep concerns surrounding formal barriers to entry and incorporation during this period. Though our study can speak to only men's experiences, findings will shed further light on the complexities of assimilation across time and place.

2. Conceptual framework

2.1 The early context of immigration and human capital accumulation

Between 1850 and 1910, the immigrant population increased from 2.2 million to more than 13.5 million; such dramatic growth meant that nearly one out of every six persons living in the United States was foreign-born (Gibson and Lennon 1999). Most immigrants who arrived during the 19th century had origins in Germany, Great Britain, or Ireland (Mora, Mora, and Davila 2007). However, flows from southern and eastern Europe rapidly increased, such that "new" immigrants accounted for 35% of all foreign-born persons by 1910. Declining costs of international travel and expanding migrant networks are touted as two key factors that facilitated US population growth from a diverse pool of sending countries (Abramitzky and Boustan 2017).

Prior to arrival, foreign-born persons typically held occupations as farmers, laborers, or servants (Kim 2007), and US employers were eager to capitalize on unskilled populations to fulfill demands for cheap labor. At the same time, there was an urgent need to staff new managerial and clerical positions following industrialization (Goldin 1999; Goldin and Katz 1997). Increased demand for white-collar employees – many of whom received sizable pay, benefits, and opportunities for upward mobility – partially contributed to the expansion of US school enrollment (Ruggles 2015). However, others assert that school attendance increased due to technological change favoring specific skills (Fuller 1983; Meyer et al. 1979), because of a desire to instill capitalistic values among future employees (Bowles and Gintis 1976), or because advantaged groups sought to maintain their elevated status (Collins 1971). Nevertheless, efforts to foster public education were wildly successful. Estimates indicate that the United States dramatically outpaced other Western countries in educational attainment and that high school enrollment soared from 10% in 1900 to 30% in 1920 to more than 70% in 1940 (Snyder 1993).

Despite these sweeping changes, access to secondary and postsecondary institutions remained unequal. A highly decentralized public school system meant that high schools were more accessible for students living in northern and western states, while those in the South had fewer choices and opportunities for enrollment (Goldin and Katz 1997). And net of regional factors, racial and ethnic disparities persisted in rates of school attendance and completion. Black and ethnic minority students were subjected to pervasive segregation, lower-quality instruction, and poor school infrastructure (Card, Domnisoru, and Taylor 2018; Margo 1990; Lieberson 1980). Some local governments also took steps to prevent Black literacy during this period (Tyack and Lowe 1986). Given long-standing disparities in human capital accumulation between US-born whites and Blacks in the early 1900s, we suspect that immigrant-origin youths also faced the possibility of being sorted into distinct paths of American life.

2.2 The formation of classical and segmented assimilation theory

In response to unprecedented immigration throughout the 19th and 20th centuries, political leaders, policy makers, and academics debated whether new arrivals could effectively adapt to American life. It is thus not surprising that the theory of assimilation, which supposed that foreign-born and later generations would abandon old cultural traditions and eventually secure middle-class status (Gordon 1964; Park 1928), became a leading theory of immigrant incorporation. Although several adaptations exist (Fichter 1957; Glazer and Moynihan 1963; Gordon 1964; Park and Burgess 1921), a core tenet argues that assimilation represents the process by which immigrant-origin and US-born persons

become more similar over time. This decline in ethnic distinction typically occurs when immigrants and their children engage in cultural and economic activities that are embedded within American institutions (Alba 2009; Alba and Duyvendak 2019). At the individual level, immigrants may adopt norms, beliefs, and behaviors that characterize the US-born over time and across generations. However, structural changes also play a critical role in facilitating social mobility and assimilation. It is argued, for instance, that membership within elite schools and clubs, the passage of the GI Bill, and investment in public schools provided some white ethnics with newfound opportunities for mobility throughout the 20th century (Alba and Nee 2003; Alba and Duyvendak 2019).

After the passage of the Hart-Celler Act of 1965, which regulated immigration from the Western Hemisphere and established skill- and family-based quotas, the racial and ethnic composition of newcomers fundamentally changed. While more than 70% of foreign-born persons living in the United States had European origins before 1965, this number had plummeted to fewer than 25% by 1990. Given that the share of foreign-born persons from Africa, Asia, and Latin America steeply increased, some began to question whether these immigrants would have social, economic, or cultural experiences similar to those of their European counterparts.

Portes and Zhou (1993) thus proposed an alternative assimilation framework, one that highlighted multiple trajectories of incorporation for immigrants and their children. The first aligns with the traditional path of assimilation and upward mobility, where immigrant-origin persons culturally and economically integrate into the American mainstream. The second path leads not to social and economic mobility but toward the urban and minority underclass – a process referred to as downward assimilation. Lastly, selective acculturation is predicted to occur when immigrants experience economic integration into the mainstream while preserving ethnic solidarity and cultural values (Gans 1992; Portes and Zhou 1993; Zhou 1997).

Resources that families can access upon arrival, household structure, and the context of reception (Portes and Fernández Kelly 2008; Rumbaut 2005) are three factors that supposedly predict one's assimilation trajectory. More specifically, English language ability, citizenship status, and the socioeconomic status of one's parents determine where families live, the types of schools children attend, and opportunities for later educational and social advancement (Haller, Portes, and Lynch 2011; Rumbaut 1994; Stanton-Salazar 2001; Zhou 1997). Family structure is likely to influence the availability of social support, the allocation of household resources, and youth supervision (Keller and Tillman 2008; Steelman et al. 2002; Zhou and Bankston 1994). And while the context of reception includes laws and attitudes toward immigrants as well as the organization of the labor market (Portes and Zhou 1993; Portes, Fernández-Kelly, and Haller 2005), scholars typically emphasize the school and neighborhood environment in the contemporary

period (Akresh, Do, and Frank 2016; Diaz 2020; Greenman 2011, 2013; Kroneberg 2008; Martinez Jr. and Valenzuela Jr. 2006; Xie and Greenman 2011).

Segmented assimilation was clearly formulated in response to changes in the US economy and immigration after 1965. However, there are reasons to believe that processes of mobility and assimilation already varied in the early 20th century. It will thus be useful to assess evidence related to immigrant assimilation and mobility during this period. For our purposes, we define mobility as the losses/gains in socioeconomic status between parents and their adult children – regardless of nativity or place of birth. Alternatively, we conceptualize differences in human capital accumulation between immigrant- and US-origin persons as reflective of (segmented) assimilation.

2.3 Empirical evidence for classical and segmented assimilation

Efforts to measure classical or segmented assimilation typically focus on differences in well-being across generations or cohorts (Farley and Alba 2002; Hirschman 2001; Kao and Tienda 1998; Mora, Mora, and Davila 2007; Portes and Rumbaut 2001; Tran and Valdez 2017). By relying on generational or cohort comparisons, scholars can broadly assess changes in the immigrant experience. However, both approaches run the risk of conflating intergenerational mobility with processes and/or consequences of assimilation (e.g., Waldinger and Feliciano 2004). Perhaps not surprisingly, a growing body of work now relies on longitudinal assessments between parents and children – often focusing on educational attainment, earnings, or occupational status – to assess mobility and the immigrant experience more effectively (Abramitzky and Boustan 2017; Abramitzky et al. 2021; Collins and Zimran 2018; Duncan and Trejo 2015; Lowrey et al. 2021).

Overall, there is considerable evidence that European immigrants and their children integrated into American life during the late 19th and early 20th centuries (Alba and Nee 2003; Catron 2020; Glazer and Moynihan 1963; Hirschman 1983). Though foreign-born individuals earned lower wages upon arrival, many experienced faster wage growth and later reached earnings parity with US-origin workers (Hatton 1997; Minns 2000). The employment positions of these immigrants were similar to those of the US-born, which allowed their children to secure upward mobility and gain socioeconomic profiles that resembled (or exceeded) those of established populations (Abramitzky and Boustan 2017). In a groundbreaking study, Abramitzky and colleagues (2021) assess patterns of intergenerational mobility in the United States across two centuries; they argue that children of immigrants typically had higher rates of mobility and outearned children of US-origin parents regardless of ethnicity or origin country. Similar patterns are observed when assessing changes in educational attainment over time. For instance, Lowrey and colleagues (2021) assert that by the second and third generations, European immigrants

experienced pronounced gains in attainment that virtually eliminated educational disparities between US-origin and European-origin groups. It is important to stress that Black families are notably excluded from most of this work.

However, a nascent literature suggests that mobility patterns may have been much more complex. After all, many European immigrants exhibited a significantly higher degree of occupational mobility than US-born Black families (Zunz 1982; Bodnar, Simon, and Weber 1982). Not only does this highlight structural barriers enacted to prevent Black families from achieving economic success, but it also points to the dual segments of American society that immigrants and their children could assimilate toward. Moreover, Catron (2016) draws on the employment histories of three manufacturing firms from 1900 to 1950 to argue that southern, central, and eastern European immigrants were less likely to begin their careers in managerial/professional positions and to experience upward mobility than were US-origin whites and those with western European origins.

With respect to educational outcomes, pronounced variation emerges when scholars assess differences across country of origin. Italians generally exhibited the poorest school performance of all white ethnics (Covello 1967; Edson 1979) while Russian Jews had among the highest rates of secondary school completion in the early 1900s (Lieberson 1980; Perlmann 1988). Sassler (2006) similarly argues that Italian and Irish immigrant-origin youths were less likely to be enrolled in school than their English counterparts. And while immigrant-origin persons living in the United States were ethnically white – with some supposedly occupying an in-between space in the Black–white hierarchy (e.g., Roediger 1999) – limited English language ability posed a major attainment roadblock for the first and second generation (Mora, Mora, and Davila 2007). Although most studies draw on cross-sectional data to make these claims, evidence suggests that American life may have already been segmented for some immigrant and US-born families at the turn of the 20th century.

2.4 Possible explanations for group differences

The question remains, however, why European-origin persons from different countries may have experienced distinct outcomes. To begin with, some argue that Irish immigrants were racialized by Protestant Americans as nonwhite during the 19th century (Garner 2004; King-O'Riain 2019). It was not until the Irish population experienced pronounced growth, vis-à-vis continued immigration and natural increase, that co-ethnics could successfully organize to garner political and economic influence; this allowed the Irish to occupy a dominant space in American society (Hirota 2020; King-O'Riain 2019). We thus anticipate observing favorable educational and occupational outcomes among Irish

sons (high mobility) and that these outcomes should exceed those of US-origin men and other immigrant groups.

Italian immigrants and their children also faced discrimination during the 19th and early 20th centuries. However, they were seen as criminals whose political beliefs remained incongruent with mainstream American values (Seguin and Nardin 2022; Webb 2002). Despite phenotypical whiteness, Italians were coded as racially inferior to Anglo-Saxon populations (Ignatiev 1995; Roediger 1999; Guglielmo 2003). Some argue that in addition to their racially ambiguous status, Italians faced discrimination due to their religious traditions and affiliation with the Catholic Church (Gillis 2000; Higham 1988). Non-Italian Catholics, for instance, believed that Italians practiced a folk religion with origins in paganism (Hirschman 2004; Vecoli 1969). Given that multiple generations were exposed to pervasive anti-Italian sentiment, we suspect that Italian fathers and sons will accrue less human capital than other immigrant populations (or US-origin whites) and that second-generation Italians will be most at risk for downward assimilation. We also anticipate observing relatively low mobility compared to other immigrant populations.

Unlike the Irish or Italians, Germans were well integrated into American culture until the onset of World War I (Abramitzky, Boustan, and Eriksson 2016; Fouka 2019; Higham 1988). Not only were thousands of German-born persons arrested and interned (Glidden 1973; Nagler 1993) during the war, but anti-German sentiment led to the prohibition of German language courses in schools (Lleras-Muney and Shertzer 2015), a reallocation of school resources (Schmick and Shertzer 2020), employment discrimination (Moser 2012), and significant job loss (Kazal 2004). We thus anticipate observing downward mobility among second-generation adults who could not capitalize on their family's prewar success. Moreover, the economic outcomes that characterize the second generation may closely resemble those of US-origin Blacks – a population that continued to face violence, discrimination, and deep-seated racism in American society.

Finally, there is some indication that individuals who migrated from Scandinavian regions were significantly more impoverished than those who remained in their home countries; these migrants continued to earn lower wages than US-born persons years after settlement (Abramitzky, Boustan, and Eriksson 2012; Abramitzky et al. 2021). Due to pronounced income inequality – particularly in Norway – those emigrating from northern Europe may have been among the most disadvantaged of all European immigrants in the 1900s. We thus hypothesize that fathers from Sweden and Norway will exhibit exceptionally poor outcomes but that their sons will achieve upward mobility in large numbers. While the sons may not fare as well as US-origin whites, we suspect that their socioeconomic profile will resemble that of English-origin persons, who faced fewer barriers to incorporation than other populations.

3. Data and measures

Given our substantial data requirements, we use the IPUMS MLP. The larger MLP project allows users to link enumerated individuals across historical census records between 1900 and 1940 (Helgertz et al. 2020). We begin by obtaining complete count (100%) census data from 1910 and 1930; these records reflect ongoing collaboration efforts of IPUMS, Ancestry.com, and FamilySearch to provide accessible ancestral data to the larger research community. We then use the IPUMS crosswalk file to link male respondents (sons) who were enumerated in 1910 and again in 1930. The creation of the crosswalk thus allows us to effectively follow sons from adolescence to adulthood over a 20-year period.

In generating the crosswalk file, Helgertz and colleagues (2020) begin by using individual, household, and geographical characteristics to link a randomly selected group of men between 1900 and 1910. After these high-confidence matches can be verified, they are used to identify and link remaining household members who were unable to be matched in the first stage. When compared to strategies used elsewhere (Abramitzky, Boustan, and Eriksson 2014; Feigenbaum 2016), this approach yields a high degree of accuracy and nearly twice as many matches (Helgertz et al. 2020). A similar procedure is used to link individuals recorded in later census years.

Although we can link women between 1910 and 1930, we made the decision to solely focus on men given their relatively high rates of labor force participation; approximately 86% of men and only 22% of women were actively engaged in the labor market during this period (Olivetti 2013). Perhaps more importantly, there is growing evidence that the assimilation process – and associated outcomes – remains fundamentally different for men and non-men (Stepick and Stepick 2010; Valdez and Tran 2020). For these reasons, we believe focusing on men is a compelling analytic decision.

3.1 Measuring socioeconomic status

Because there are many ways to measure socioeconomic status, we rely on four unique outcomes collected in 1910 and 1930. To examine how childhood conditions and family life impact schooling, we first assess whether young men (aged 15–18) attended school in 1910. In the absence of detailed information collected on educational completion/attainment, we rely on this outcome as a proxy for high school enrollment. Next we use the occupational education score (EDSCOR), which denotes the percentage of persons in each occupation category who completed at least one year of college; this is specified continuously for adult men in 1930. The young men captured in our measure

of school enrollment are also included in this outcome but have reached the ages of 35–38.

We then generate a continuous outcome that captures the difference in occupational education scores between adult men in 1930 and their fathers in 1910 ($EDSCOR_{son} - EDSCOR_{dad}$); positive scores indicate an upward trajectory of mobility for adult sons while negative scores are suggestive of downward mobility.³ Given our interests in educational attainment and human capital accumulation, we choose to assess occupational scores that are linked to education rather than income or prestige.

Finally, we rely on a categorical measure of occupational status among adult respondents aged 20 and older in 1930 to better assess individual transition probabilities. We use a revised version of the widely used Erikson, Goldthorpe, and Portocarero (EGP; 1979) class schema (Erikson and Goldthorpe 1992). We construct the EGP categories from census occupation codes based on Morgan and Tang's (2007) coding scheme (Torche 2011; Rauscher 2015). Similar to Rauscher's analysis (2015), our data cannot distinguish the self-employed or managers based on employee size. Thus the EGP category IV is excluded from our analysis. This classification scheme leads to eight categories: higher-grade professionals (I), lower-grade professionals (II), high-routine nonmanual workers (IIIa), low-routine nonmanual workers (IIIb), lower-grade technicians/supervisors (V), skilled manual workers (VI), semi- and unskilled manual workers (VIIa), and agricultural workers (VIIb). These are further collapsed into five occupational categories: upper nonmanual, lower nonmanual, skilled manual, unskilled manual, and agriculture. (See Table S1 for a detailed description.) Our last two outcomes directly highlight intergenerational mobility among US-origin and immigrant-origin families.

3.2 Predictors and covariates

Like all those who study intergenerational mobility, we are especially interested in assessing the correlation between fathers' and sons' attainment. Depending on the exact outcome measured, we treat a father's socioeconomic status as either a key predictor or a control measure. When conducting analyses of school attendance and EDSCORs among adult sons, we control for the father's EDSCOR in 1910; supplemental analyses reveal that results are substantively similar if we include the father's occupation as an alternative control. We also include an indicator to denote whether the father was employed at the time of survey. However, we treat the father's occupation as a key

³ Given well-known debates surrounding the measurement and use of socioeconomic indicators, we replicated this set of analyses using Duncan SEI scores and OCCSCORE. Results, which are available upon request, are similar in direction and magnitude.

predictor in our mobility analysis. A father's occupation in 1910 is recoded to mirror the categories specified for his adult sons in 1930: upper nonmanual, lower nonmanual, skilled manual, unskilled manual, and agriculture.

Other predictors of interest are country of origin and generational status. We distinguish between immigrant generations by relying on information about the respondent's country of birth as well as his father's birthplace. For the present analysis, we retain focal respondents who are US-born and have fathers with origins in either the United States or another country. While fathers who were born outside the United States are classified as the first generation, their sons are coded as the second generation. US-born sons with US-born fathers are referred to as the third or a higher generation.⁴ In many ways, restricting analyses to sons who are US-born best aligns with segmented assimilation's claims that the second generation's familial, schooling, and contextual experiences are distinct from those of the first or the 1.5 generation (e.g., Gans 1992).

We define country of origin by using the birthplace of fathers and focus on the top five sending regions during this period: Germany, Ireland, Italy, Norway/Sweden, and the United Kingdom (England, Scotland, and Wales). In total, these five groups account for more than 51% of the immigrant population living in the United States during this period. And because Portes and Zhou (1993: 82) predict that children of immigrants could assimilate toward either the white majority or the Black "underclass," we include US-origin white and Black sons in all analyses.

Of course, it is important to control for attributes that are associated with later socioeconomic status. Whenever possible, we include the number of siblings living in the household and whether there were any nonfamily boarders co-residing with the family in 1910.⁵ We believe that both measures capture family structure as well as potential competition for household resources and investment. We control for whether the household is in an urban area (versus a nonurban area) and include state dummies, as geographical indicators are correlated with immigrant patterns of settlement, labor market opportunities, and compulsory schooling regulations (Abramitzky et al. 2021; Goldin and Katz 1997).

A continuous measure of son's age is included when we examine later socioeconomic status, but we rely on a categorical expression when examining school attendance. Based on existing literature, we incorporate two predictors of economic wellbeing and success: father's citizenship status and his ability to speak English. To distinguish between citizens and respondents who are not yet citizens, those who are born

⁴ Data limitations prevent us from directly examining the generational status of fathers who are US-born. While this information could be collected from men who co-reside with their fathers (focal children's grandfathers), we would be forced to limit analyses to multigenerational households that are unlikely representative of the larger population.

⁵ We do not control for marital status because nearly 99% of fathers are married in 1910. Results, which are available upon request, are substantively similar if we drop nonmarried households from analyses.

to American parents or have been naturalized are assigned a value of 1. Father's English ability is included as a binary measure, where those who do not speak English are assigned as the reference category. Finally, we account for differences in the settlement and incorporation process among immigrant-origin families by including the father's year of migration and age at arrival to the United States. Because this information does not apply to US-born fathers, we assign these men the overall mean value of migration year (1888) and age at arrival (18.54) reported by foreign-born fathers in 1910. Supplemental analyses, which are available upon request, confirm that specifying values in this way does not shift predicted values of interest. In total, these covariates are among the most significant predictors of segmented assimilation.

4. Analytic approach

Given that early childhood conditions are deemed especially important by proponents of segmented assimilation theory (Portes and Zhou 1993; Zhou 1997), we restrict our analytic sample to young men who were 18 years of age or younger in 1910 and who appear in our linked data file 20 years later. It is also important to stress that our analyses require information about a father's attributes – including his place of birth and socioeconomic status – which means that our analytic sample is restricted to sons who co-resided with their father in $1910.^6$

Our analysis begins by simply assessing average socioeconomic status and household characteristics among young men and their fathers by country of origin. We then use logistic regression to predict the probability that adolescents aged 15 to 18 were enrolled in school in 1910 (N = 587,431). When we include covariates in specifications, we include dummies for each state and cluster standard errors accordingly. We are especially interested in assessing whether secondary school enrollment systematically differed across origin countries after controlling for parental resources and household structure. Here we rely on Wald tests to assess differences in the likelihood of attending high school. If some young men fare better than others after controlling for key predictors, it would suggest that segmented assimilation is not entirely unique to post-1965 immigrant-origin populations.

We use a similar approach when predicting occupational education scores 20 years later. To ensure that respondents have had enough time to accrue work experience, we limit our sample to those who are 20 years of age or older in 1930 (N = 3,951,800). We control for parental resources, father's occupational education score, and household

⁶ As Catron (2019) notes, children who do not live with a parent are typically older and accumulate fewer years of education than those who co-reside with at least one parent. Although it is important to examine the mobility of these children, we are unable to do so using the MLP data.

attributes measured in 1910. Whenever possible, we also control for selected demographics of adult men themselves. Next we assess whether the socioeconomic gap between fathers and adult sons is greater among immigrant families than among US-origin families. Here we estimate a set of OLS regressions to predict differences in occupational education scores between fathers in 1910 and their adult sons in 1930 (N = 3,951,800). If segmented assimilation were occurring, we might expect Italian and German immigrant families to experience downward mobility rather than Swedish/Norwegian- and English-origin families, for instance. We would also expect the scores of second-generation Italian and German men to be lower than those of US-origin whites or other immigrant populations.

To compare rates of intergenerational mobility among fathers and their adult sons, we examine variation in the association between origin and destination across racial/ethnic groups. Here, origin represents father's occupation in 1910 and destination represents the occupation of adult sons in 1930. As noted earlier, we rely on a five-category measure of occupation: upper nonmanual, lower nonmanual, skilled manual, unskilled manual, and agriculture. We estimate a set of logit-based specifications containing three-way interactions among origin, destination, and mobility transitions for each origin country (N = 2,760,686). We assess intergenerational mobility in occupation across immigrant groups by comparing goodness-of-fit statistics that allow fluidity to vary across country of origin.

We first specify a conditional independence model, which assumes no association between origin and destination by country. We then apply the log-multiplicative layer effect model (Xie 1992) to allow origin–destination associations to vary across mobility tables for each country of origin. The log-multiplicative layer effect model specifies the three-way interaction of interest as the product of two parameters: (1) an origin–destination parameter that represents the overall association for all mobility transitions, and (2) a table-specific parameter that indicates the deviation in this association for each table. The conditional log odds ratio for the k^{th} table can be written as:

$$\log(\theta_{ij|k}) = \left(\psi_{ij} + \psi_{(i+1)(j+1)} - \psi_{(i+1)j} - \psi_{i(j+1)}\right)\phi_k = \log(\theta_{ij})\phi_{k'}$$

where ψ_{ij} describes the origin–destination association for origin i and destination j, $\log(\theta_{ij})$ is the average origin–destination association for all tables, and ϕ_k indicates the k^{th} table-specific deviation in the association. The larger the value of the table-specific deviation parameter (ϕ_k), the stronger the association between origin and destination, suggesting less mobility across generations.

5. Results

5.1 Descriptive statistics

Table 1 contains selected descriptive statistics collected in 1910 and 1930. Turning first to father's characteristics, we observe pronounced variation across country of origin. On average, occupational education scores are highest among immigrants from the United Kingdom, suggesting that men from these regions are advantaged relative to US-origin and other foreign-born men. Though scores are similar among Italian, Irish, and German fathers, only 48% of Italian men are naturalized citizens and three-fourths speak English. Norwegian and Swedish fathers display the lowest occupational education scores of any immigrant group in our sample – which is consistent with negative selection (e.g., Abramitzky, Boustan, and Eriksson 2012). And because racial discrimination severely constrained the economic advancement of US-born Blacks, it is unfortunately not surprising that Black fathers have the lowest occupational education scores of all origin groups.

With respect to school attendance among sons aged 15–18, we observe striking disparities in enrollment. While more than 63% of US-origin whites attended school within the previous year, fewer than one-half of US-origin Black youths were enrolled in school. Similar rates of school attendance can be found among Irish (49%), Italian (44%), and German (45%) adolescents. Family characteristics also vary across origin country. More than 20% of Italian and nearly 16% of Norwegian/Swedish immigrant families hosted nonrelative boarders in their homes. Given that only 11% of US-origin households accommodated boarders, we suspect that immigrants likely opened their homes to offset economic hardship. While the majority of Irish (85%) and Italian (82%) families clustered in urban areas, around 80% of Black households were established in rural locations. US-origin Blacks were disproportionately located in the South, Irish and Italian families were concentrated in the Northeast, and the majority of those from Norway/Sweden and Germany settled in the Midwest.

We also observe variation in occupational education scores among adult sons in 1930. Irish adults had the highest average score (15.2), followed by those from the United Kingdom (14.8), Italy (12.4), Norway/Sweden (11.7), and Germany (11.3). Much like their fathers, second-generation Italians exhibit the lowest levels of English ability. To gain a more complete assessment of mobility, we turn to examine variation in occupational classes across country of origin.

	US (White)	US (Black)	Norway /Sweden	UK	Ireland	Italy	Germany
	% or Mean (S.D.)						
Father's characteristics in 1910							
Age	39.6 (9.3)	38.5 (10.1)	44.2 (8.8)	42.9 (9.1)	42.8 (8.5)	38.5 (8.5)	44.3 (9.0)
Employed	82.8	88.7	83.6	74.4	74.5	76.2	80.7
Occupational education score	9.8	5.5	7.5	10.4	8.0	8.8	8.0
	(14.7)	(9.3)	(10.1)	(14.1)	(10.0)	(10.9)	(10.6)
Citizen	NA	NA	83.8	80.8	84.6	47.9	86.4
Speaks English	NA	NA	97.2	99.7	99.8	76.5	93.5
Year of migration	NA	NA	1885	1884	1886	1894	1883
-			(9.6)	(11.0)	(10.2)	(8.2)	(9.9)
Age at migration	NA	NA	19.3	17.3	18.5	22.0	17.8
			(8.2)	(9.6)	(7.4)	(8.2)	(9.1)
Son's characteristics in 1910							
Age	7.4	6.5	8.3	8.5	8.3	5.3	9.0
	(5.4)	(5.2)	(5.5)	(5.6)	(5.5)	(4.6)	(5.5)
School attendance (all)	49.0	32.6	55.9	55.5	55.5	37.6	55.8
School attendance (ages 15–18)	63.2	48.2	57.2	54.2	49.2	43.5	44.9
Family characteristics in 1910							
Number of siblings	2.8	3.5	3.5	2.9	3.5	3.4	3.6
	(2.1)	(2.4)	(2.2)	(2.1)	(2.1)	(2.1)	(2.3)
Has boarders	11.5	10.7	15.8	12.0	13.5	20.5	11.2
Lives in urban area	32.7	19.8	39.5	63.6	85.1	82.2	54.9
Region							
Northeast	21.7	4.6	12.9	47.0	69.1	71.6	23.1
Midwest	40.0	6.3	74.9	31.7	21.6	13.6	65.6
South	31.7	88.7	1.3	5.3	3.1	6.2	6.3
West	6.6	0.4	10.9	16.1	6.2	8.6	5.0
Son's characteristics in 1930							
Age	27.2	25.9	28.2	28.3	28.0	25.0	28.9
	(5.5)	(5.5)	(5.5)	(5.6)	(5.5)	(4.6)	(5.5)
Employed	85.8	86.5	87.4	85.0	81.2	76.1	87.8
Occupational education score	12.2	5.2	11.7	14.8	15.2	12.4	11.3
	(17.3)	(9.3)	(16.3)	(18.2)	(17.6)	(16.3)	(15.1)
Speaks English	NA	NA	93.0	92.9	90.9	89.8	93.4
Has children	36.0	31.9	28.6	34.7	20.8	17.1	35.5
N	3,934,293	213,943	150,247	114,139	127,956	86,101	361,967

Table 1: Descriptive statistics by country of origin

5.2 Distribution of occupation classes

Table 2 presents the distribution of occupational classes by country, where origin corresponds to the father's occupation in 1910 and destination represents the occupation of adult sons in 1930. While more than one-fifth of Italian fathers were employed in upper nonmanual occupations, only 9.2% of German, 9.1% of US-origin white, 8.7% of Irish, 6.2% of Norwegian/Swedish, and less than 2% of US-origin Black fathers had jobs in this category. About six times as many Norwegian and Swedish fathers (60.2%) were employed in agricultural occupations compared to Italian men (10.4%). We also observe pronounced variation in the occupational status of adult sons. About 46% of Irish respondents were employed in nonmanual occupations by 1930. However, only 24% of

Norwegian and Swedish men fell into this category; such economic disadvantage may be attributable to the low-skilled work that their fathers navigated 20 years earlier. About 76% of US-born Black fathers and 56% of their adult sons worked in agriculture, and we observe lower rates among US-origin whites (61% and 39%, respectively). It would thus appear that intergenerational mobility rates are indeed higher for some immigrant groups than for others.

	US (White)	US (Black)	Norway/ Sweden	UK	Ireland	Italy	Germany
Origin							
I + ĬI	9.1	1.8	6.2	12.7	8.7	20.8	9.2
Illa + b	5.6	0.6	2.3	8.5	6.8	2.4	3.1
V + VI	15.9	4.2	21.7	36.4	30.9	30.6	23.4
VIIa	8.9	17.3	9.5	14.1	39.4	35.9	13.9
VIIb	60.5	76.1	60.2	28.3	14.2	10.4	50.4
Destination							
1 + 11	10.7	1.9	9.6	15.6	12.4	12.5	9.8
Illa + b	15.3	1.9	14.4	24.1	34.1	22.8	15.1
V + VI	17.3	4.8	16.3	25.8	24.5	30.1	21.7
VIIa	18.2	35.8	13.0	16.1	20.6	28.7	14.9
VIIb	38.5	55.6	46.8	18.4	8.4	5.9	38.5
Ν	2,209,804	130,482	89,707	46,255	52,071	35,992	196,375

Table 2: Distributions of occupational classes of origin and destination

Note: I: higher-grade professionals; II: lower-grade professionals; IIIa: high-routine nonmanual workers; IIIb: low-routine nonmanual workers; V: lower-grade technicians/supervisors; VI: skilled manual workers; VIIa: semiskilled and unskilled manual workers; VIIb: agricultural workers.

5.3 Predicting school attendance

Table 3 presents results from a series of logistic regressions that assess the relationship between country of origin and school attendance among second-generation and US-origin adolescents in 1910. Prior to the inclusion of covariates, young men of immigrant origin are much less likely to attend school than their US-origin white counterparts (Model 1). Additional tests (not shown; available upon request) indicate that the likelihood of enrollment for all US- and immigrant-origin groups statistically differs from group to group. Though respondents from Norway/Sweden and the United Kingdom exhibit lower odds of attending school than US-origin whites, they are more likely to be enrolled than US-origin Black youths or the second generation from Italy, Ireland, or Germany.

	Mode	Model 1		del 2
	Odds Ratio	95% CI	Odds Ratio	95% CI
Country of origin				
US Black	.574	[.556, .592]	.500	[.412, .606]
Norway/Sweden	.743	[.722, .763]	.655	[.606, .707]
UK	.663	[.643, .684]	.742	[.669, .824]
Ireland	.546	[.529, .564]	.809	[.755, .865]
Italy	.418	[.393, .445]	.619	[.543, .705]
Germany	.450	[.443, 458]	.492	[.448, .541]
Father's characteristics				
Occupational education score			1.030	[1.028, 1.032]
Employed			1.069	[1.034, 1.104]
Citizen			1.185	[1.114, 1.261]
Speaks English			1.532	[1.278, 1.836]
Year of immigration			.996	[.992, 1.000]
Age at migration			.991	[.988, .995]
Age				
15			8.710	[7.462, 10.166]
16			3.585	[3.336, 3.853]
17			1.764	[1.714, 1.816]
Family characteristics				
Lives in urban area			.568	[.512, .630]
Number of siblings			.944	[.928, .960]
Has boarders in household			1.054	[1.020, 1.090]
Ν	587,4	431	587	,431

Table 3:Predicting odds of school attendance

Notes: State dummies are included but not shown; robust-clustered standard errors used (Model 2). Reference categories: country of origin (US white), age (18), state (Alabama).

We then include key confounders that capture parental resources, household structure, and state variation (Model 2). Figure 1, which illustrates predicted probabilities of school attendance by country of origin, again suggests that US-origin Black and immigrant-origin adolescents are less likely to attend school than US-origin whites. It is particularly striking that probabilities of enrollment do not significantly or substantively differ between and US-origin Black (0.51) and German-origin (0.51) adolescents. And while Italian (0.57) and Norwegian/Swedish youths (0.58) are predicted to enroll in secondary school at rates that exceed those of Germans, their enrollment remains significantly lower than that of other immigrant populations. In this way, Italian, Norwegian/Swedish, German, and US-born Black adolescent boys appear particularly disadvantaged – a finding documented by historians as well as social scientists (Fouka 2019; Seguin and Nardin 2022). Finally, probabilities in enrollment among those from Ireland (0.63) and the United Kingdom (0.61) suggest that opportunities for human capital accumulation were prevalent among relatively established immigrant populations.



Figure 1: Predicted probability of school attendance

The associations of age, father's attributes, and family characteristics are largely consistent with prior literature. Younger individuals are predicted to have higher odds of school attendance than adolescents who are 18 years of age. Respondents whose fathers were employed, were naturalized citizens, spoke English, and had higher occupational education scores are more likely to be enrolled in school than those who do not have access to such resources. And while larger sibships are negatively associated with school enrollment, the presence of boarders is positively correlated with school attendance.

5.4 Predicting occupational education in 1930

We then predict 1930 occupational education scores of adult men by country of origin (Table 4). Here it is important to note that we control for household structure and parental resources when respondents were 18 years of age or younger in 1910. Prior to the inclusion of covariates, results indicate that all immigrant groups – except those from Germany and Norway/Sweden – are predicted to have a *higher* score than US-born whites. While Irish- and UK-origin adults fared especially well, ongoing structural

barriers prohibited the socioeconomic advancement of US-origin Black men in 1930. Additional results (not shown) indicate that occupational education scores between all US- and immigrant-origin groups statistically differ from each other.

	Mo	odel 1	Mo	odel 2
	Coef.	95% CI	Coef.	95% CI
Country of origin				
US Black	-6.794	[-6.879, -6.709]	-3.922	[-4.237, -3.608]
Norway/Sweden	439	[536,343]	.387	[151, .925]
UK	2.729	[2.616, 2.842]	.521	[.225, .818]
Ireland	3.185	[3.077, 3.294]	.778	[.417, 1.139]
Italy	.321	[.192, .449]	786	[-1.232,339]
Germany	857	[921,793]	-1.304	[-1.530, -1.078]
Father's characteristics				
Occupational education score			.307	[.297, .316]
Employed			520	[639,402]
Citizen			1.259	[.977, 1.541]
Speaks English			1.625	[1.285, 1.965]
Year of immigration			009	[020, .003]
Age at migration			016	[024,008]
Age			.244	[.227260]
Employed			3.922	[3.483, 4.361]
Family characteristics				
Lives in urban area			5 250	[4 870 5 630]
Number of siblings			594	[665,522]
Has boarders in household			.001	[194, .196]
Constant	12.044	[12.025, 12.063]	12.163	[-8.878, 33.204]
N	3,9	51,800	3,9	51,800

Table 4: Predicting adult son's occupational education score

Notes: State dummies are included but not shown; robust-clustered standard errors used (Model 2). Reference categories: country of origin (US white); state (Alabama).

Figure 2 illustrates predicted occupational education scores by country of origin after the inclusion of covariates (see Table 4, Model 2). Somewhat strikingly, those from Norway/Sweden (12.4), the United Kingdom (12.6), and Ireland (12.8) are predicted to have higher scores than US-origin whites (12.1). These results suggest that second-generation white men with ties to politically and socially influential groups – such as the English and Irish – were able to leverage their social capital for later success. Our findings also indicate that the relatively low occupational education scores among Norwegian/Swedish men can be explained by their family and background characteristics in childhood. Yet again, German-origin adults fared worse than other white ethnics. And given that US-born Black men have occupational education scores that are nearly three points lower than the most disadvantaged immigrant-origin population, it is clear that Black families were systematically excluded from achieving mainstream success.



Figure 2: Predicted son's occupational education score

Results also suggest that older men are more likely to be employed in occupations with larger shares of educated persons. Men whose fathers spoke English, were citizens, and had higher occupational education scores themselves also appear to have a more favorable socioeconomic standing than men who did not have access to such resources in childhood. Moreover, living in an urban area significantly increases occupational standing; this aligns with prior work asserting that young men left home in search of lucrative employment in cities (Ruggles 2015). We also find that the presence of additional siblings and having a father who arrived to the United States at an older age are each associated with a lower occupational education score. Both measures, we suspect, signal that household resources in childhood and adolescence may have been limited.

5.5 Socioeconomic differences between fathers and sons

To test patterns of intergenerational mobility by country of origin, we begin by estimating an OLS regression that predicts the occupational education gap between fathers and sons.

Not surprisingly, US-born white men fare better than their fathers – with scores that are, on average, 2.8 points higher (Table 5, Model 1). Relative to this difference, we observe that gaps between second-generation men and their immigrant fathers are substantively larger and more positive. For instance, adults with origins from Ireland and the United Kingdom experienced the greatest improvement in status relative to all other US-born and immigrant-origin men. And prior to the inclusion of controls, US-born Black men in 1930 are the only population predicted to experience downward mobility – an important reminder that the economic, legal, and political barriers that prevented Black success did not weaken over this period.

Table 5:Predicting difference in occupational educational score between
father and son

	Mo	odel 1	Mo	odel 2
	Coef.	95% CI	Coef.	95% CI
Country of origin				
US Black	-2.952	[-3.044, -2.861]	-1.937	[-2.098, -1.776]
Norway/Sweden	1.562	[1.458, 1.666]	1.958	[1.100, 2.816]
UK	2.037	[1.915, 2.159]	1.262	[1.026, 1.497]
Ireland	4.672	[4.556, 4.789]	3.548	[3.186, 3.909]
Italy	.842	[.703, .980]	.201	[128, .529]
Germany	.579	[.510, .648]	.292	[.002, .582]
Father's characteristics				
Employed			.507	[.380, .635]
Citizen			.307	[032, .645]
Speaks English			.141	[073, .355]
Year of Immigration			.038	[.029, .047]
Age at migration			018	[027,009]
Age			.182	[.167, .197]
Employed			2.985	[2.666, 3.303]
Family characteristics				
Lives in urban area			1 342	[1 011 1 674]
Number of siblings			- 295	[-342 - 247]
Has boarders in household			.025	[095, .144]
			.020	[
Constant	2.809	[2.789, 2.829]	-77.412	[-94.077, -60.747]
N	3,95	51,800	3,9	51,800

Notes: State dummies are included but not shown; robust-clustered standard errors used (Model 2). Reference categories: country of origin (US white), state (Alabama).

Figure 3 contains predicted gaps in father–son occupational education scores after controlling for confounders (see Table 5, Model 2). Overall, we observe that mobility is more pronounced among all immigrant groups than among US-origin populations. Second-generation Irish men are predicted to surpass their father's occupational education score by 6.4 points; this is especially impressive given the relative success of their families. And while not consistent with our expectations, Italian and German men occupy more prestigious positions than their fathers, with gains of 3.0 and 3.1 points, respectively. Additional tests (not shown) indicate that occupational education gaps

significantly differ across some but not all groups. Specifically, differences are not precisely estimated between those from the United Kingdom and those from Norway/Sweden, those from Germany and those from Italy, US-origin whites and Italians, or US-origin whites and Germans. While the mobility of US-origin whites appears minimal, it is important to stress that such families are, on average, more advantaged than their Black or immigrant counterparts. Finally, we find weak evidence that Black men fare better than their fathers. Though the occupational education gain of 0.9 is positive, this is unlikely to translate to improvements in daily life for men or their children in 1930.



Figure 3: Predicted occupational education score gap between father and son

This set of covariates closely resembles results from earlier analyses. For instance, men who are older and employed are more likely to experience mobility than their younger or unemployed counterparts. Occupational education scores are negatively correlated with father's age at migration as well as larger sibships in 1910. And relative to those living in rural areas, men who lived in urban areas during childhood are more likely to exhibit socioeconomic mobility.

5.6 Intergenerational occupational mobility

Finally, Table 6 presents results from the following mobility table analyses: conditional independence, common social fluidity, and log-multiplicative layer effect models. As a baseline, Model 1 assumes there is no association between occupational classes of origin and destination given one's country of origin. Goodness-of-fit statistics suggest that Model 1 yields a very poor fit (L²=1,062,566, df = 112). Model 2 postulates that the strength of the origin–destination association is the same across our seven tables – as indicated by common social fluidity. When compared to our baseline model, it produces a significantly better fit, with L² = 15,429 (df = 96).

Model	L^2	df	р	BIC	rL ²	ID (%)
Conditional independence Common social fluidity Log-multiplicative layer effect Log-multiplicative layer effect without farmer-farmer cells	1,062,566	112	0.00	1,060,904	0.0	25.5
	15,429	96	0.00	14,006	98.5	1.6
	9,729	90	0.00	8,394	99.1	1.4
	2,760	84	0.00	1,514	99.7	0.6

Note: L^2 is the log-likelihood ratio chi-square statistic with the degree of freedom (df) and the p-value (p). L^2 indicates the percentage reduction in L^2 compared to the conditional independence model. ID is the index of dissimilarity, which indicates the proportion of cases misclassified.

Given our substantive interests, we apply the log-multiplicative layer effect model to test whether varying the origin–destination association across country of origin produces a better fit. Model 3 appears to fit the data much better, as the L² decreases from 15,429 to 9,729 and uses only six more degrees of freedom; it is also associated with a lower BIC statistic (8,394) than our previous model (14,006). As a final assessment, we exclude the farmer–farmer cell in each mobility table due to the unique social position: the proportion of farmers with fathers who are also farmers is considerably higher than expected under the assumption of independence between origin and destination (Xie and Killewald 2013; Long and Ferrie 2013). Model 4 is the best-fitting model, with L² = 2,760 (df = 84) and the lowest BIC statistic (1,514). The index of dissimilarity (ID) demonstrates that only 0.6% of cases are misclassified in our preferred model. Overall, there is evidence that the strength of the origin–destination association in occupational mobility does differ by country of origin.

We then compare table-specific parameters estimated under our final model (Model 4) to examine cross-group differences in occupational fluidity. Table 7 presents the normalized measures of table-specific deviation parameters, where $\sum \Phi_k^2 = 1$. A greater value indicates a stronger origin–destination association and less fluidity in occupational mobility. After accounting for the occupational immobility of farmers, US-origin Black men are estimated to have the strongest origin–destination association. This lends further

support for results that find virtually no difference between the occupational education scores of fathers and those of their adult sons. Compared to US-origin populations, however, immigrant-origin men exhibit a weaker association between origin and destination; this may suggest that opportunities for advancement are relatively open for newcomers. Mobility appears particularly substantial for Irish (0.28) and Italian (0.31) men. Though findings align with our earlier estimates for Irish men, we observe higher mobility rates than expected among Italians. One explanation could be that Italian men achieve impressive mobility gains between classes/groups but do not transition into positions that require high levels of formal education.

Table 7:Measures of occupational immobility from log-multiplicative layer
effect model

Country of origin	Φ_k
US white	0.433
US Black	0.488
Norway/Sweden	0.339
UK	0.360
Ireland	0.278
Italy	0.312
Germany	0.394

Of all immigrant-origin groups, fluidity is estimated to be especially weak among those of German origin (0.39); this is consistent with our prior findings and expectations surrounding the short- and long-term consequences of WWI-related xenophobia. If anything, Germans more closely resemble US-origin whites than other immigrant-origin populations. And despite likely experiencing some discrimination, German-origin adult men did not occupy a position of severe disadvantage as did US-origin Black men. Finally, Norwegian/Swedish (0.34) and British (0.36) men exhibit a modest amount of mobility; these patterns are also consistent with our earlier findings on occupational education scores.

6. Discussion

Theories of assimilation generally presume that European immigrants successfully integrated into the American mainstream within a few generations. Despite ongoing discourse, it remains an empirical question whether immigrants and their children experienced a single, upward path of mobility at the turn of the 20th century. While a lack of historical data makes it difficult to trace immigrants and their adult children over time (van Hook and Glick 2020; Lowrey et al. 2021), a few studies that leverage intergenerational comparisons within families reach mixed conclusions. It is against this

backdrop that we ask whether socioeconomic attainment varied across generations and country of origin among European-origin men.

Based on an established literature, we argue that assimilation may have already been segmented in the early 20th century. The continued flow of German immigrants unleashed a surge of xenophobia and discrimination, particularly leading up to the Great War (Curran 1975; King 2000). And while some argue that xenophobia was a constant and prevalent force in the United States (Glazer and Moynihan 1963), others stress that visibly ethnic populations – such as Italian immigrants – experienced severe discrimination (Alba 1990; Alba and Nee 2003; Barrett and Roediger 2005). New arrivals also had to contend with literacy tests, religious intolerance, and forced Americanization, which earlier immigrants largely evaded (Catron 2019; Higham 1988; Ngai 2014). Moreover, many immigrant families found it challenging to support their children – especially those who arrived from poorer countries with few resources (Sassler 2006).

Our findings suggest that school attendance, socioeconomic standing, and rates of mobility varied – albeit modestly – in the early 20th century. German-origin adolescents appeared especially disadvantaged in 1910, and we suspect that pre-WWI tensions or generalized xenophobia may have contributed to their low levels of school attendance. Despite facing early disadvantage, the second generation occupied more prestigious occupations than their fathers and exhibited rates of mobility that were similar to that of US-origin whites. While some may be shocked by the similarity between US-origin Black and German-origin adolescents, it is important to stress that German men were eventually able to bolster their socioeconomic status to move away from Black men and closer to other national origin groups. We suspect that in the absence of WWI effects during their early career trajectories, their occupational education scores and mobility would have been even higher than observed here.

Our hypotheses are also supported for Irish-origin men, as they fared especially well with respect to educational and occupational outcomes. Of all immigrant groups, second-generation Irish men were most likely to enroll in secondary school and had the highest rates of mobility. Although we are unable to directly examine the influence of co-ethnic communities, our findings are consistent with the argument that Irish-origin men leveraged their demographic and political influence for continued socioeconomic success (Hirota 2020; King-O'Riain 2019).

On average, immigrant families from Norway and Sweden were socioeconomically disadvantaged. Despite having modest origins, however, sons whose fathers were from Norway and Sweden occupied positions in the socioeconomic hierarchy that were comparable to the positions of those whose fathers were from the United Kingdom. Men from both regions exhibited similar occupational education scores and made impressive gains relative to their fathers. That men from Norway and Sweden made such rapid progress indicates that mobility was open for (visibly) white immigrants from regions not embroiled in conflict. Finally, results provide mixed support for our hypotheses regarding Italian-origin immigrants. Despite having relatively low rates of school enrollment and occupational education scores as adults, the second generation experienced higher levels of mobility than many other immigrant families. While findings are not entirely consistent with our expectations, we suspect that Italian men may have successfully entered more prestigious occupations – possibly with the assistance of their co-ethnic networks – that did not necessarily require high levels of formal education.

There are, of course, important issues that we cannot address. First, it would be ideal to include individual-level controls in our analysis of intergenerational occupational mobility. While such an estimation strategy has been proposed (e.g., see Breen 1994), it has yet to be adopted in studies that leverage as many comparison categories as we examine here. Despite our robust sample size, including just a few person-level control measures would require an unwieldly number of interaction terms that would be difficult to interpret. Second, these linked data, like all matched datasets, do not represent a random sample of men between 1910 and 1930. Although the data are not shown, we find that fathers and sons in our linked sample are younger and are more (less) likely to live in the Midwest (South) than the overall population. There is also evidence that linked fathers are advantaged with respect to their occupational education scores. To correct for non-representativeness, we re-estimate our main specifications with inverse probability weights that adjust the matched sample using characteristics of the 1910 male population.⁷ Tables S5–S7, which are shown in our supplement, demonstrate that reweighted results are substantively similar to the main results presented here.

Finally, despite the many strengths of the MLP linked data, we are unable to make inferences about men who returned to their ancestral countries of origin. We believe this poses a minor concern. After all, rates of return among western European immigrants were significantly lower than those among immigrants from eastern and southern Europe (Bandiera, Rasul, and Viarengo 2013; Ward 2017). Thus our decision to focus on these five sending regions reduces the likelihood that estimates of assimilation and mobility are contaminated by selective emigration (Bijwaard, Schluter, and Wahba 2014; Lubotsky 2007). Italian immigrants, however, stand out as having exceptionally high rates of return (e.g., Greenwood and Ward 2015). Although we limit our analysis to sons who are born, educated, and work in the United States, making it unlikely that they engage in return migration, it is possible that our data disproportionately capture successful Italian fathers in 1910. This is a weakness shared with many historical studies

⁷ Weights are constructed from our matched sample and the complete 1910 census of males. Specifically, we predict the probability that one is linked across census years based on state of residence, urbanity, son's age, father's occupational education score, and national origin. Our weights are thus based on the predicted probabilities derived from this specification.

of immigration and mobility. Regardless of these limitations, we believe findings from this study can help inform immigration scholarship.

Overall, we find evidence of both intergenerational mobility and convergence in economic standing among the second generation during the early 20th century. Though some immigrant-origin groups fare better than others (e.g., the Irish and those from the United Kingdom versus Italians and Germans), our results best align with classical theories of assimilation. Not only do immigrant-origin men fare substantially better than US-origin Black men, but many exceed the socioeconomic status of US-origin whites. To the extent segmented assimilation occurs, it emerges in the especially low levels of attainment among German-origin youths. Although such a pattern is characteristic of downward assimilation, this disadvantage dissipates as youths age into adulthood. In some ways, our findings raise important questions about studies that investigate segmented assimilation using cross-sectional data. We believe that more work is needed to determine whether downward assimilation is a sign of permanent disadvantage or a short-term consequence from which youths can recover.

Nevertheless, we urge scholars to further refine assimilation theories to acknowledge that some European immigrants faced a hostile context of reception, an evolving occupational structure, and life prospects that were limited by global conflict and xenophobia. By acknowledging these structural obstacles in the early 20th century, we can better understand and measure the disparities that emerge across immigrant populations.

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References

- Abramitzky, R. and Boustan, L.P. (2017). Immigration in American economic history. *Journal of Economic Literature* 55(4): 1311–1345. doi:10.1257/jel.20151189.
- Abramitzky, R., Boustan, L.P., and Eriksson, K. (2012). Europe's tired, poor, huddled masses: Self-selection and economic outcomes in the age of mass migration. *American Economic Review* 102(5): 1832–1856. doi:10.1257/aer.102.5.1832.
- Abramitzky, R., Boustan, L.P., and Eriksson, K. (2014). A nation of immigrants: Assimilation and economic outcomes in the age of mass migration. *The Journal* of *Political Economy* 122(3): 467–506. doi:10.1086/675805.
- Abramitzky, R., Boustan, L.P., and Eriksson, K. (2016). Cultural assimilation during the age of mass migration. Cambridge: National Bureau of Economic Research (NBER working paper 22381). doi:10.3386/w22381.
- Abramitzky, R., Boustan, L.P., Jácome, E., and Pérez, S. (2021). Intergenerational mobility of immigrants in the United States over two centuries. *American Economic Review* 111(2): 580–608. doi:10.1257/aer.20191586.
- Akresh, I.R., Do, D.P., and Frank, R. (2016). Segmented assimilation, neighborhood disadvantage, and Hispanic immigrant health. *Social Science and Medicine* 149: 114–121. doi:10.1016/j.socscimed.2015.12.013.
- Alba, R.D. (1990). *Ethnic identity: The transformation of white America*. New Haven: Yale University Press.
- Alba, R.D. (2009). Blurring the color line: The new chance for a more integrated *America*. Cambridge: Harvard University Press. doi:10.4159/9780674053489.
- Alba, R.D. and Duyvendak, J.W. (2019). What about the mainstream? Assimilation in super-diverse times. *Ethnic and Racial Studies* 42(1): 105–124. doi:10.1080/0141 9870.2017.1406127.
- Alba, R.D. and Nee, V. (2003). Remaking the mainstream: Assimilation and contemporary immigration. Cambridge: Harvard University Press. doi:10.4159/ 9780674020115.
- Bandiera, O., Rasul, I., and Viarengo, M. (2013). The making of modern America: Migratory flows in the age of mass migration. *Journal of Development Economics* 102: 23–47. doi:10.1016/j.jdeveco.2012.11.005.

- Barrett, J.R. and Roediger, D.R. (2005). The Irish and the Americanization of the new immigrants in the streets and in the churches of the urban United States, 1900– 1930. *Journal of American Ethnic History* 24(4): 3–33. doi:10.2307/27501633.
- Becker, G.S. and Tomes, N. (1986). Human capital and the rise and fall of families. *Journal of Labor Economics* 4(3, Part 2): S1–S39. doi:10.1086/298118.
- Bijwaard, G.E., Schluter, C., and Wahba, J. (2014). The impact of labor market dynamics on the return migration of immigrants. *The Review of Economic and Statistics* 96(3): 483–494. doi:10.1162/REST_a_00389.
- Bodnar, J., Simon, R., and Weber, M.P. (1982). Lives of their own: Blacks, Italians, and Poles in Pittsburgh, 1900–1960. Urbana: University of Illinois Press.
- Bonilla-Silva, E. (2010). Racism without racists: Color-blind racism and racial inequality in contemporary America. Lanham, Md.: Rowman and Littlefield.
- Bowles, S. and Gintis, H. (1976). Schooling in capitalist America: Educational reform and the contradictions of economic life. New York: Basic Books.
- Breen, R. (1994). Individual level models for mobility tables and other crossclassifications. *Sociological Methods and Research* 23(2): 147–173. doi:10.1177/ 0049124194023002001.
- Brown, T.N., Bento, A., Gorman Jr., Q., Koku, L., and Culver, J. (2019). 'Who cares?' Investigating consistency in expressions of racial apathy among whites. *Socius* 5: 1–10. doi:10.1177/2378023119839518.
- Card, D., Domnisoru, C., and Taylor, L. (2018). The intergenerational transmission of human capital: Evidence from the Golden Age of upward mobility. Cambridge: National Bureau of Economic Research (NBER working paper 25000). doi:10.3386/w25000.
- Catron, P. (2016). Made in America? Immigrant occupational mobility in the first half of the twentieth century. *American Journal of Sociology* 122(2): 325–378. doi:10.1086/688043.
- Catron, P. (2019). The citizenship advantage: Immigrant socioeconomic attainment in the age of mass migration. *American Journal of Sociology* 124(4): 999–1042. doi:10.1086/701297.
- Catron, P. (2020). The melting-pot problem? The persistence and convergence of premigration socioeconomic status during the age of mass migration. *Social Forces* 99(1): 366–397. doi:10.1093/sf/soz146.

- Coleman, D. (2006). Immigration and ethnic change in low-fertility countries: A third demographic transition. *Population and Development Review* 32(3): 401–446. doi:10.1111/j.1728-4457.2006.00131.x.
- Collins, R. (1971). Functional and conflict theories of education stratification. *American* Sociological Review 36: 1002–1018. doi:10.2307/2093761.
- Collins, W.J., and Zimran, A. (2018). The economic assimilation of famine Irish migrants to the United States. Cambridge: National Bureau of Economic Research (NBER working paper 25287). doi:10.3386/w25287.
- Covello, L. (1967). *The social background of the Italo-American school child*. Leiden: E.J. Bill Publishers.
- Curran, T.J. (1975). *Xenophobia and immigration: 1820–1930*. Boston: Twayne Publishers.
- Diaz, C.J. (2020). Educational expectations among immigrant youth: Links to segmented assimilation and school context. *Social Currents* 7(3): 252–278. doi:10.1177/2329496519900509.
- Duncan, B. and Trejo, S. (2015). Assessing the socioeconomic mobility and integration of U.S. immigrants and their descendants. ANNALS of the American Academy of Political and Social Science 657: 108–135. doi:10.1177/0002716214548396.
- Edson, C.H. (1979). Sociocultural perspectives on work and schooling in urban America. *Urban Review* 11(3): 127–148. doi:10.1007/BF02048452.
- Erikson, R. and Goldthorpe, J.H. (1992). *The constant flux: A study of class mobility in industrial societies*. Oxford: Clarendon Press.
- Erikson, R., Goldthorpe, J.H., and Portocarero, L. (1979). Intergenerational class mobility in three Western European societies: England, France, and Sweden. *British Journal of Sociology* 30: 415–430. doi:10.2307/589632.
- Farley, R. and Alba, R. (2002). The new second generation in the United States. *International Migration Review* 36(3): 669–701. doi:10.1111/j.1747-7379.2002. tb00100.x.
- Feigenbaum, J.J. (2016). Automated census record linking: A machine learning approach. Working Paper. https://scholar.harvard.edu/files/jfeigenbaum/files/feigenbaum-censuslink.pdf.
- Fichter, J.H. (1957). Sociology. Chicago: The University of Chicago Press.

- Fouka, V. (2019). How do immigrants respond to discrimination? The case of Germans in the US during World War I. American Political Science Review 113(2): 405– 422. doi:10.1017/S0003055419000017.
- Fuller, B. (1983). Youth job structure and school enrollment, 1890–1920. *Sociology of Education* 56(3): 145–156. doi:10.2307/2112383.
- Gans, H.J. (1992). Second-generation decline: Scenarios for the economic and ethnic futures of the post-1965 American immigrants. *Ethnic and Racial Studies* 15(2): 173–192. doi:10.1080/01419870.1992.9993740.
- Garner, S. (2004). Racism in the Irish Experience. London: Pluto Press.
- Gibson, C.J. and Lennon, E. (1999). Historical census statistics on the foreign-born population of the United States: 1850 to 1990, Washington, DC: U.S. Census Bureau Population Division (Working paper 29).
- Gillis, C. (2000). Roman Catholicism in America. New York: Columbia University Press.
- Glazer, N. and Moynihan, D.P. (1963). Beyond the melting pot: The Negroes, Puerto Ricans, Jews, Italians, and Irish of New York City. Cambridge: MIT Press.
- Glidden, W.B. (1973). Internment camps in America, 1917–1920. *Military Affairs* 37(4): 137–141. doi:10.2307/1983776.
- Goldin, C. (1999). A brief history of education in the United States. Cambridge: National Bureau of Economic Research (Historical paper 119). doi:10.3386/h0119.
- Goldin, C. and Katz, L.F. (1997). Why the United States led in education: Lessons from secondary school expansion, 1910 to 1940. Cambridge: National Bureau of Economic Research (NBER working paper 6144). doi:10.3386/w6144.
- Gordon, M.M. (1964). Assimilation in American life: The role of race, religion, and national origins. New York: Oxford University Press. doi:10.2307/3510186.
- Greenman, E. (2011). Assimilation choices among immigrant families: Does school context matter? *International Migration Review* 45(1): 29–67. doi:10.1111/j.174 7-7379.2010.00828.x.
- Greenman, E. (2013). Educational attitudes, school peer context, and the 'immigrant paradox' in education. *Social Science Research* 42(3): 698–714. doi:10.1016/j. ssresearch.2012.12.014.
- Greenwood, M.J. and Ward, Z. (2015). Immigration quotas, World War I, and emigrant flows from the United States in the early 20th century. *Explorations in Economic History* 55: 76–96. doi:10.1016/j.eeh.2014.05.001.

- Guglielmo, T.A. (2003). White on arrival: Italians, race, color, and power in Chicago, 1890–1945. New York: Oxford University Press.
- Haller, W., Portes, A., and Lynch, S.M. (2011). Dreams fulfilled, dreams shattered: Determinants of segmented assimilation in the second generation. *Social Forces* 89(3): 733–762. doi:10.1353/sof.2011.0003.
- Hatton, T. (1997). The immigration assimilation puzzle in late nineteenth-century America. *Journal of Economic History* 57(1): 34–62. doi:10.1017/S00220507000 17915.
- Helgertz, J., Ruggles, S., Warren, J.R., Fitch, C.A., Goeken, R., Hacker, J.D., Nelson, M.A., Price, J.P., Roberts, E., and Sobek, M. (2020). IPUMS Multigenerational Longitudinal Panel: Version 1.0 [dataset]. Minneapolis, MN: IPUMS. doi:10.18128/D016.V1.0.
- Higham, J. (1988). *Strangers in the land: Patterns of American nativism, 1860–1925.* New Brunswick: Rutgers University Press.
- Hirota, H. (2020). Limits of intolerance: Nativism and immigration control in nineteenthcentury New York. *Journal of Ethnic and Migration Studies* 47(16): 3771–3787. doi:10.1080/1369183X.2020.1774114.
- Hirschman, C. (1983). America's melting pot reconsidered. Annual Review of Sociology 9: 397–423. doi:10.1146/annurev.so.09.080183.002145.
- Hirschman, C. (2001). The educational enrollment of immigrant youth: A test of the segmented-assimilation hypothesis. *Demography* 38: 317–336. doi:10.1353/dem. 2001.0028.
- Hirschman, C. (2004). The role of religion in the origins and adaptation of immigrant groups in the United States. *International Migration Review* 38(3): 1206–1233. doi:10.1111/j.1747-7379.2004.tb00233.x.
- Ignatiev, N. (1995). *How the Irish became White*. New York: Routledge.
- Kao, G. and Tienda, M. (1998). Educational aspirations of minority youth. American Journal of Education 106(3): 349–384. doi:10.1086/444188.
- Kasinitz, P., Mollenkopf, J.H., Waters, M.C., and Holdaway, J. (2009). *Inheriting the city: The children of immigrants come of age*. New York: Russell Sage Foundation.
- Kazal, R. (2004). *Becoming old stock: The paradox of German-American identity*. Princeton, NJ: Princeton University Press. doi:10.1515/9780691223674.

- Keller, U. and Tillman, K. (2008). Post-secondary educational attainment of immigrant and native youth. *Social Forces* 87(1): 121–152. doi:10.1353/sof.0.0104.
- Kim, S. (2007). Immigration, Industrial Revolution and urban growth in the United States, 1820-1920: Factor endowments, technology, and geography. Cambridge: National Bureau of Economic Research (NBER working paper 12900). doi:10.3386/w12900.
- King, D. (2000). *Making Americans: Immigration, race, and the origins of the diverse democracy*. Cambridge, MA: Harvard University Press.
- King-O'Riaian, R.C. (2019). How the Irish became more than white: Mixed-race Irishness in historical and contemporary contexts. *Journal of Ethnic and Migration Studies* 47(4): 821–837. doi:10.1080/1369183X.2019.1654156.
- Kroneberg, C. (2008). Ethnic communities and school performance among the new second generation in the United States: Testing the theory of segmented assimilation. *The ANNALS of the American Academy of Political and Social Science* 620(1): 138–160. doi:10.1177/0002716208322714.
- Lichter, D.T., Parisi, D., and Taquino, M.C. (2018). White integration or segregation? The racial and ethnic transformation of rural and small town America. *City and Community* 17(3): 702–719. doi:10.1111/cico.12314.
- Lieberson, S. (1980). A piece of the pie: Blacks and White immigrants since 1880. Berkeley: University of California Press. doi:10.1525/9780520352865.
- Lleras-Muney, A. and Shertzer, A.M. (2015). Did the Americanization movement succeed? An evaluation of the effect of English-only and compulsory schooling laws on immigrants. *American Economic Journal: Economic Policy* 7(3): 258– 290. doi:10.1257/pol.20120219.
- Long, J. and Ferrie, J. (2013). Intergenerational occupational mobility in Great Britain and the United States since 1850. *American Economic Review* 103(4): 1109–1137. doi:10.1257/aer.103.4.1109.
- Lowrey, K., Van Hook, J., Bachmeier, J.D, and Foster, T.B. (2021). Leapfrogging the melting pot? European immigrants' intergenerational mobility across the twentieth century. *Sociological Science* 8: 480–512. doi:10.15195/v8.a23.
- Lubotsky, D. (2007). Chutes or ladders? A longitudinal analysis of immigrant earnings. *Journal of Political Economy* 115(5): 820–867. doi:10.1086/522871.

- Margo, R.A. (1990). Race and schooling in the south, 1880–1950: An Economic History. Chicago: University of Chicago Press. doi:10.7208/chicago/9780226505015. 001.0001.
- Martinez Jr., R. and Valenzuela Jr., A. (2006). *Immigration and crime: Race, ethnicity, and violence.* New York: New York University Press.
- Meyer, J.W., Tyack, D., Nagel, J. and Gordon, A. (1979). Public education as nationbuilding in America: Enrollments and bureaucratization in the American States, 1870–1930. American Journal of Sociology 85: 591–613. doi:10.1086/227051.
- Minns, C. (2000). Income, cohort effects, and occupational mobility: A new look at immigration to the United States at the turn of the twentieth century. *Explorations* in Economic History 37: 326–350. doi:10.1006/exeh.2000.0746.
- Mora, A.P., Mora, M.T., and Davila, A. (2007). The English-language proficiency of recent immigrants in the U.S. during the early 1900s. *Eastern Economic Journal* 33(1): 65–80. doi:10.1057/eej.2007.4.
- Morgan, S.L. and Tang, Z. (2007). Social class and workers' rent, 1983-2001. Research in Social Stratification and Mobility 25: 273–293. doi:10.1016/j.rssm.2007.08. 003.
- Moser, P. (2012). Taste-based discrimination evidence from a shift in ethnic preferences after WWI. *Explorations in Economic History* 49(2): 167–188. doi:10.1016/j.eeh. 2011.12.003.
- Nagler, J. (1993). Enemy aliens in the USA, 1914–1918. In: Panayi, P. (ed.). Minorities in wartime: National and racial groupings in Europe, North America and Australia during the two World Wars. Oxford, Providence: Berg Publishers: 191– 215.
- Ngai, M.M. (2014). Impossible subjects: Illegal aliens and the making of modern America. New Jersey: Princeton University Press. doi:10.1515/9781400850235.
- Olivetti, C. (2013). The female labor force and long-run development: The American experience in comparative perspective. Cambridge: National Bureau of Economic Research (NBER working paper 19131). doi:10.3386/w19131.
- Park, R.E. (1928). Human migration and the marginal man. American Journal of Sociology 33(6): 881–893. doi:10.1086/214592.
- Park, R.E. and Burgess, E.W. (1921). Introduction to the science of sociology. Chicago: University of Chicago Press.

- Perlmann, J. (1988). Ethnic differences: Schooling and social structure among the Irish, Italians, Jews, and Blacks in an American city, 1880–1935. Cambridge: Cambridge University Press. doi:10.1017/CBO9780511572463.
- Portes, A. and Fernandez-Kelly, P. (2008). No margin for error: Educational and occupational achievement among disadvantaged children of immigrants. ANNALS of the American Academy of Political and Social Science 620: 12–36. doi:10.1177/0002716208322577.
- Portes, A. and Rumbaut, R. (2001). *Legacies: The story of the immigrant second generation*. Berkeley: University of California Press.
- Portes, A. and Rumbaut, R. (2006). *Immigrant America: A portrait*. Berkeley: University of California Press. doi:10.1525/9780520940482.
- Portes, A. and Zhou, M. (1993). The new second generation: Segmented assimilation and its variants. *The Annals of the American Academy of Political and Social Science* 530(1): 74–96. doi:10.1177/0002716293530001006.
- Portes, A., Fernández-Kelly, P., and Haller, W. (2005). Segmented assimilation on the ground: The new second generation in early adulthood. *Ethnic and Racial Studies* 28(6): 1000–1040. doi:10.1080/01419870500224117.
- Rauscher, E. (2015). Educational expansion and occupational change: U.S. compulsory schooling laws and the occupational structure 1850–1930. *Social Forces* 93(4): 1397–1422. doi:10.1093/sf/sou127.
- Restifo, S.J., Roscigno, V., and Qian, Z. (2013). Segmented assimilation, split labor markets, and racial/ ethnic inequality: The case of early-twentieth-century New York. *American Sociological Review* 78(5): 897–924. doi:10.1177/00031224 13501071.
- Roediger, D.R. (1999). *The wages of whiteness: Race and the making of the American working class.* London: Verso.
- Ruggles, S. (2015). Patriarchy, power, and pay: The transformation of American families, 1800–2015. *Demography* 52(6): 1797–1823. doi:10.1007/s13524-015-0440-z.
- Rumbaut, R.G. (1994). Origins and destinies: Immigration to the United States since World War II. Sociological Forum 9(4): 583–621. doi:10.1007/BF01466304.
- Rumbaut, R.G. (2005). Turning points in the transition to adulthood: Determinants of educational attainment, incarceration, and early childbearing among children of immigrants. *Ethnic and Racial Studies* 28(6): 1041–1086. doi:10.1080/0141987 0500224349.

- Sassler, S.L. (2006). School participation among immigrant youths: The case of segmented assimilation in the early 20th century. *Sociology of Education* 79(1): 1– 24. doi:10.1177/003804070607900101.
- Schmick, E.J. and Shertzer, A.M. (2020). The Impact of early investments in urban school systems in the United States. Cambridge: National Bureau of Economic Research (NBER working paper 25663). doi:10.3386/w25663.
- Seguin, C. and Nardin, S. (2022). The lynching of Italians and the rise of antilynching politics in the United States. *Social Science History* 46: 65–91. doi:10.1017/ssh. 2021.43.
- Snyder, T.D. (1993). 120 years of American education: A statistical portrait. Washington, D.C.: U.S. Department of Education.
- Stanton-Salazar, R.D. (2001). Manufacturing hope and despair: The school and kin support networks of U.S.-Mexican youth. New York: Teachers College Press.
- Steelman, L.C., Powell, B., Werum, R., and Carter, S. (2002). Reconsidering the effects of sibling configuration: Recent advances and challenges. *Annual Review of Sociology* 28: 243–269. doi:10.1146/annurev.soc.28.111301.093304.
- Stepick, A. and Stepick, C.D. (2010). The complexities and confusions of segmented assimilation. *Ethnic and Racial Studies* 33(7): 1149–1167. doi:10.1080/01419 871003599518.
- Torche, F. (2011). Is a college degree still the great equalizer? Intergenerational mobility across levels of schooling in the US. *American Journal of Sociology* 117(3): 763–807. doi:10.1086/661904.
- Tran, V.C. and Valdez, N.M. (2017). Second-generation decline or advantage? Latino assimilation in the aftermath of the Great Recession. *International Migration Review* 51(1): 155–190. doi:10.1111/imre.12192.
- Tyack, D. and Lowe, R. (1986). The constitutional moment: Reconstruction and Black education in the South. *American Journal of Education* 94(2): 236–256. doi:10.1086/443844.
- Valdez, N.M. and Tran, V.C. (2020). Gendered context of assimilation: The female second-generation advantage. *Journal of Ethnic and Migration Studies* 46(9): 1709–1736. doi:10.1080/1369183X.2019.1569504.
- Van Hook, J. and Glick, J.E. (2020). Spanning borders, cultures, and generations: A decade of research on immigrant families. *Journal of Marriage and Family* 82: 224–243. doi:10.1111/jomf.12621.

- Van Leeuwen, M.H.D. and Maas, I. (2010). Historical studies of social mobility and stratification. *Annual Review of Sociology* 36: 429–451. doi:10.1146/annurev.soc. 012809.102635.
- Vecoli, R.J. (1969). Prelates and peasants: Italian immigrants and the Catholic Church. *Journal of Social History* 2(3): 217–268. doi:10.1353/jsh/2.3.217.
- Waldinger, R. and Feliciano, C. (2004). Will the new second generation experience 'downward assimilation'? Segmented assimilation re-assessed. *Ethnic and Racial Studies* 27(3): 376–402. doi:10.1080/01491987042000189196.
- Ward, Z. (2017). Birds of passage: Return migration, self-selection and immigration quotas. *Explorations in Economic History* 64: 37–52. doi:10.1016/j.eeh.2016. 09.002.
- Webb, C. (2002). The lynching of Sicilian immigrants in the American South, 1886– 1910. American Nineteenth Century History 3(1): 45–76. doi:10.1080/71399 8981.
- Xie, Y. (1992). The log-multiplicative layer effect model for comparing mobility tables. *American Sociological Review* 57(3): 380–395. doi:10.2307/2096242.
- Xie, Y. and Greenman, E. (2011). The social context of assimilation: Testing implications of segmented assimilation theory. *Social Science Research* 40(3): 965–984. doi:10.1016/j.ssresearch.2011.01.004.
- Xie, Y. and Killewald, A. (2013). Intergenerational occupational mobility in Great Britain and the United States since 1850: Comment. *American Economic Review* 103(5): 2003–2020. doi:10.1257/aer.103.5.2003.
- Zhou, M. (1997). Segmented assimilation: Issues, controversies, and recent research on the new second generation. *International Migration Review* 31(4): 975–1008. doi:10.1177/019791839703100408.
- Zhou, M. and Bankston III, C.L. (1994). Social capital and the adaptation of the second generation: The case of Vietnamese youth in New Orleans. *International Migration Review* 28(4): 775–799. doi:10.2307/2547159.
- Zhou, M. and Kim, S.S. (2006). Community forces, social capital, and educational achievement: The case of supplementary education in the Chinese and Korean immigrant communities. *Harvard Educational Review* 76(1): 1–29. doi:10.17763/haer.76.1.u08t548554882477.
- Zunz, O. (1982). The changing face of inequality: Urbanization, industrial development, and immigrants in Detroit, 1880–1920. Chicago: University of Chicago Press.

Appendix: Supplemental results

Fivefold	Eightfold (EGP category)	Typical occupations
	I. Higher-grade professionals	doctor, accountant, architect
Upper nonmanual	II. Lower-grade professionals	nurse, teacher, science technician
	IIIa. High-routine nonmanual	clerk, bank teller
Lower nonmanual	IIIb. Low-routine nonmanual	cashier, shop salesman
Ckilled menual	V. Lower-grade technicians/supervisors	conductor, foreman
Skilled manual	VI. Skilled manual workers	craftsman, carpenter, plumber
Unskilled manual	VIIa. Semi- and unskilled manual workers	laborer
Agriculture	VIIb. Agricultural workers	farmer, farm laborer

Table S-1: Occupational categories

Table S-2: Predicting odds of school attendance

	Mo	Model 1		del 2
	Odds Ratio	95% CI	Odds Ratio	95% CI
Country of origin				
US Black	.574	[.556, .592]	.500	[.412, .606]
Norway/Sweden	.743	[.722, .763]	.655	[.606, .707]
UK	.663	[.643, .684]	.742	[.669, .824]
Ireland	.546	[.529, .564]	.809	[.755, .865]
Italy	.418	[.393, .445]	.619	[.543, .705]
Germany	.450	[.443, 458]	.492	[.448, .541]
Father's characteristics				
Occupational education score			1.030	[1.028, 1.032]
Employed			1.069	[1.034, 1.104]
Citizen			1,185	[1,114, 1,261]
Speaks English			1.532	[1.278, 1.836]
Year of immigration			996	[992 1 000]
Age at migration			.991	[.988, .995]
Age				
15			8,710	[7.462, 10.166]
16			3 585	[3 336 3 853]
17			1.764	[1.714, 1.816]
Family characteristics				
Lives in urban area			.568	[.512, .630]
Number of siblings			944	[928 960]
Has boarders in household			1 054	[1 020 1 090]
State				[11020, 11000]
AZ			1.226	[1,180, 1,274]
AR			1.149	[1,136, 1,161]
CA			1 085	[1 013 1 163]
0			1 143	[1 084 1 204]
CT			457	[426 490]
DE			1 253	[1 202 1 307]
			1.200	[1.202, 1.007]
FI			1 118	[1.000, 1.000]
GA			727	[720 734]
			2 965	[2 761 2 071]
			2.000	[2.701, 2.971]
IN			608	[.113, .012]
1			1 110	[1.004, .002]
IA			1.119	[1.080, 1.160]

	Mod	Model 1		del 2
	Odds Ratio	95% CI	Odds Ratio	95% CI
State				
KS			1.620	[1.569, 1.672]
KY			.711	[.694, .729]
LA			.530	[.512, .548]
ME			.890	[.859, .923]
MD			.430	[.410, .451]
MA			.753	1.6868251
MI			.805	[.767845]
MN			1.238	[1,178, 1,301]
MS			1 554	[1 520 1 589]
MO			855	[822 890]
MT			1 412	[1 347 1 479]
NE			1 125	[1.047, 1.478]
NV			1.333	[1.279, 1.388]
NH			549	[523 578]
NJ			639	[591 692]
NM			1 394	[1 295 1 500]
NY			641	[594 692]
NC			1 387	[1 376 1 398]
ND			1 963	[1.878 2.052]
OH			750	[713 790]
OK			1 950	[1 800 2 001]
OR			1.500	[1.033, 2.001]
			512	[1.525, 1.005]
			.515	[.405, .542]
80			1 107	[1.001, 1.122]
50			1.107	[1.091, 1.123]
			1.020	[1.000, 1.009]
			1.037	[1.022, 1.032]
			1.150	[1.131, 1.170]
			2.114	[2.001, 2.234]
VI			.605	[.582, .629]
VA			.809	[.799, .818]
VVA			1.539	[1.458, 1.625]
VV V			.822	[.800, .845]
VVI			.642	[.011, .6/4]
VV T			1.441	[1.385, 1.500]
N	587,-	431	587	7,431

Table S-2:(Continued)

Reference category: country of origin (US white), age (18), state (Alabama). Robust-clustered standard errors used (Model 2).

	N	lodel 1	M	lodel 2
	Coef.	95% Cl	Coef.	95% CI
Country of origin US Black Norway/Sweden UK Ireland Italy Germany	-6.794 439 2.729 3.185 .321 857	[-6.879, -6.709] [536, -343] [2.616, 2.842] [3.077, 3.294] [-192, .449] [921,793]	-3.922 .387 .521 .778 786 -1.304	[-4.237, -3.608] [151, .925] [.225, .818] [.417, .1.139] [-1.232,339] [-1.530, -1.078]
Father's characteristics Occupational education score Employed Citizen Speaks English Year of immigration Age at migration			.307 520 1.259 1.625 009 016 .244	[.297, .316] [639,402] [.977, 1.541] [1.285, 1.965] [020, .003] [024,008] [.227, .260]
Employed			3.922	[3.483, 4.361]
Family Characteristics Lives in urban area Number of siblings Has boarders in household			5.250 594 .001	[4.870, 5.630] [665,522] [194, .196]
State AZ AR CA CCO CT DE DC FL GA ID IL IN IA KS KY LA ME MD MA MM MN MS MO MT NE NV NH NV NH NJ NM NM NM O C			3.387 074 3.434 1.090 2.396 .850 5.428 2.266 1.653 .637 428 .654 379 .941 561 .723 1.902 1.117 .198 .467 .714 223 .339 1.374 640 2.729 004 2.104 2.104 352 1.172	$ \begin{bmatrix} 3.318, 3.457 \\ [106,042 \\ [3.281, 3.587] \\ [.999, 1.181] \\ [2.184, 2.608] \\ [.747, .952] \\ [5.196, 5.660] \\ [2.213, 2.318] \\ [.499, .528] \\ [.189, .322] \\ [1.520, 1.786] \\ [.554, .720] \\ [.554, .720] \\ [.554, .720] \\ [.554, .720] \\ [.611, .835] \\ [.580, .727] \\ [.429,329] \\ [.857, 1.025] \\ [.641,480] \\ [.611, .835] \\ [1.592, 2.212] \\ [1.015, 1.219] \\ [.046, .349] \\ [.434, .500] \\ [.632, .797] \\ [.317, .128] \\ [.254, .424] \\ [.293, 1.456] \\ [764,517] \\ [2.498, 2.959] \\ [114, .106] \\ [.1890, 2.318] \\ [128,105] \\ [.1060, 1.284] \\ [.402, 4.021] \end{bmatrix} $
OR PA RI			.692 .257 .334	[.603, .780] [.107, .407] [.008, .660]

Table S-3: Predicting adult son's occupational education score

	М	odel 1	N	lodel 2
	Coef.	95% CI	Coef.	95% CI
State SC SD TN TX UT VA WA WV WV WI WY			.309 403 .031 1.366 1.549 552 .428 .722 .659 .130 .039	[.289, .329] [522,284] [006, .069] [1.338, 1.395] [1.431, 1.667] [636,467] [.400, .457] [.595, .849] [.610, .708] [.029, .231] [035, .113]
Constant N	12.044	[12.025, 12.063]	12.163	[-8.878, 33.204] 951,800

Table S-3: (Continued)

Reference category: country of origin (US white), state (Alabama). Robust-clustered standard errors used (Model 2).

Table S-4: Predicting difference in occupational education score between father and son

	N	lodel 1	Ν	Model 2
	Coef.	95% CI	Coef.	95% CI
Country of origin				
US Black	-2.952	[-3.044, -2.861]	-1.937	[-2.098, -1.776]
Norway/Sweden	1.562	[1.458, 1.666]	1.958	[1.100, 2.816]
UK	2.037	[1.915, 2.159]	1.262	[1.026, 1.497]
Ireland	4.672	[4.556, 4.789]	3.548	[3.186, 3.909]
Italy	.842	[.703, .980]	.201	[128, .529]
Germany	.579	[.510, .648]	.292	[.002, .582]
Father's characteristics				
Employed			.507	[.380, .635]
Citizen			.307	[032, .645]
Speaks English			.141	[073, .355]
Year of immigration			.038	[.029, .047]
Age at migration			018	[027,009]
Age			.182	[.167, .197]
Employed			2.985	[2.666, 3.303]
Family characteristics				
Lives in urban area			1.342	[1.011, 1.674]
Number of siblings			- 295	[-342 - 247]
Has boarders in household			.025	[095, .144]
				[
State				
AZ			2.041	[1.975, 2.107]
AR			178	[195,160]
CA			1.493	[1.328, 1.658]
CO			.518	[.416, .621]
CT			2.540	[2.336, 2.743]
DE			1.768	[1.657, 1.879]
DC			3.450	[3.225, 3.674]
FL			.678	[.629, .728]
GA			.047	[.036, .059]
ID			.175	[.114, .236]
IL			1.745	[1.595, 1.895]
IN			1.344	[1.259, 1.429]

	Mo	odel 1	Model 2		
	Coef.	95% CI	Coef.	95% CI	
State					
IA			052	[139, .035]	
KS			.984	[.921, 1.048]	
KY			.260	[.223, .296]	
LA			.473	[.405, .542]	
ME			.151	[.076, .225]	
MD			.870	[.750, .989]	
MA			2.492	[2.235, 2.748]	
MI			1.637	[1.524, 1.751]	
MN			189	[437059]	
MS			.158	[.137, .180]	
MO			.895	[.805, .984]	
MT			678	[791,564]	
NE			.167	[.068, .265]	
NV			.161	[.076, .245]	
NH			.224	[.104, .344]	
NJ			2.282	[2.053, 2.511]	
NM			336	[413,258]	
NY			1.868	[1.647, 2.089]	
NC			.090	[.081, .100]	
ND			813	[-1.127,500]	
ОН			1.707	[1.583, 1.830]	
OK			.918	[.891, .946]	
OR			116	[212,019]	
PA			.838	[.698, .977]	
RI			1.471	[1.201, 1.742]	
SC			.177	[.166, .189]	
SD			702	[872,531]	
TN			.025	[.003, .047]	
тх			.657	[.629, .685]	
UT			1.311	[1.224, 1.397]	
VT			.343	[.275, .410]	
VA			.480	[.454, .505]	
WA			482	[633,331]	
WV			.955	[.931, .980]	
WI			.590	[.446, .734]	
WY			089	[160,018]	
Constant	2.809	[2.789, 2.829]	-77.412	[-94.077, -60.747]	
N	3,9	51,800	3,	951,800	

Table S-4: (Continued)

Reference category: country of origin (US white), state (Alabama). Robust-clustered standard errors used (Model 2).

	М	odel 1	Model 2		M	odel W1	Model W2	
Country of origin	OR	CI	OR	CI	OR	CI	OR	CI
US Black	0.574	[.556, .592]	0.500	[.412, .606]	.556	[.538, .574]	.488	[.403, .592]
Norway/Sweden	0.743	[.722, .763]	0.655	[.606, .707]	.723	[.702, .743]	.651	[.604, .702]
UK	0.663	[.643, .684]	0.742	[.669, .824]	.646	[.626, .667]	.734	[.662, .814]
Ireland	0.546	[.529, .564]	0.809	[.755, .865]	.529	[.513, .546]	.784	[.734, .836]
Italy	0.418	[.393, .445]	0.619	[.543, .705]	.408	[.383, .435]	.618	[.544, .702]
Germany	0.450	[.443, 458]	0.492	[.448, .541]	.436	[.428, .444]	.488	[.444, .536]
Father's characteristics								
Occupational education score			1.030	[1.028, 1.032]			1 029	[1 027 1 031]
Employed			1.069	[1.034, 1.104]			1.067	[1.035, 1.099]
Citizen			1.185	[1.114, 1.261]			1.190	[1.112, 1.273]
Speaks English			1.532	[1.278, 1.836]			1.573	[1.269, 1.950]
Year of immigration			0.996	[.992, 1.000]			.996	[.992, 1.000]
Age at migration			0.991	[.988, .995]			.992	[6.337, 9.119]
Age								
15			8.710	[7.462, 10.166]			7.602	[6.337, 9.119]
16			3.585	[3.336, 3.853]			3.386	[3.117, 3.678]
17			1.764	[1.714, 1.816]			1.739	[1.679, 1.801]
Family characteristics								
Lives in urban area			0.568	[.512, .630]			.583	[.529, .642]
Number of siblings			0.944	[.928, .960]			.957	[.939, .976]
Has boarders in household			1.054	[1.020, 1.090]			1.057	[1.024, 1.092]

Table S-5: Predicting odds of school attendance – unweighted and weighted results

Notes: State dummies are included but not shown; robust-clustered standard errors used (Models 2 and W2).

Reference categories: country of origin (US white), age (18), state (Alabama). Models 1 and 2 represent unweighted results. Models W1 and W2 are estimated using inverse probability weights.

	Model 1		Model 2			Model W1	Model W2	
Country of origin	Coef.	CI	Coef.	CI	Coef.	CI	Coef.	CI
US Black	-6.794	[-6.879, -6.709]	-3.922	[-4.237, -3.608]	-6.808	[-6.861, -6.756]	-4.031	[-4.331, -3.730]
Norway/Sweden	-0.439	[536,343]	0.387	[–.151, .925]	156	[253,059]	.346	[209, .902]
UK	2.729	[2.616, 2.842]	0.521	[.225, .818]	2.911	[2.784, 3.039]	.489	[.174, .804]
Ireland	3.185	[3.077, 3.294]	0.778	[.417, 1.139]	3.330	[3.213, 3.448]	.696	[.339, 1.053]
Italy	0.321	[.192, .449]	-0.786	[-1.232,339]	.750	[.614, .885]	699	[-1.139,259]
Germany	-0.857	[921,793]	-1.304	[-1.530, -1.078]	599	[660,539]	-1.398	[-1.624, -1.171]
Father's characteristics								
Occupational education score			0.307	[.297, .316]			.311	[.301, .320]
Employed			-0.52	[639,402]			531	[646,415]
Citizen			1.259	[.977, 1.541]			1.306	[1.023, 1.588]
Speaks English			1.625	[1.285, 1.965]			1.654	[1.307, 2.002]
Year of immigration			-0.009	[020, .003]			008	[019, .002]
Age at migration			-0.016	[024,008]			020	[028,013]
Age			0.244	[.227, .260]			.207	[.193, .222]
Employed			3.922	[3.483, 4.361]			3.833	[3.346, 4.319]
Family characteristics								
Lives in urban area			5.25	[4.870, 5.630]			5.293	[4.925, 5.661]
Number of siblings			-0.594	[665,522]			532	[616,449]
Has boarders in household			0.001	[–.194, .196]			.095	[113, .302]
Constant	12.044	[12.025, 12.063]	12.163	[-8.878, 33.204]	12.054	[12.034, 12.074]		[-7.376, 32.374]

Table S-6: Predicting adult son's occupational education score – unweighted and weighted results

Notes: State dummies are included but not shown; robust-clustered standard errors used (Models 2 and W2).

Reference categories: country of origin (US white), state (Alabama). Models 1 and 2 represent unweighted results. Models W1 and W2 are estimated using inverse probability weights.

	Model 1		Model 2		ľ	Model W1	Model W2	
Country of origin	Coef.	CI	Coef.	CI	Coef.	CI	Coef.	CI
US Black	-2.952	[-3.044, -2.861]	-1.937	[-2.098, -1.776]	-3.047	[-3.108, -2.986]	-2.101	[-2.256, -1.946]
Norway/Sweden	1.562	[1.458, 1.666]	1.958	[1.100, 2.816]	1.691	[1.591, 1.792]	1.967	[1.106, 2.828]
UK	2.037	[1.915, 2.159]	1.262	[1.026, 1.497]	2.071	[1.933, 2.208]	1.216	[.982, 1.451]
Ireland	4.672	[4.556, 4.789]	3.548	[3.186, 3.909]	4.625	[4.502, 4.748]	3.407	[3.070, 3.744]
Italy	.842	[.703, .980]	.201	[128, .529]	.880	[.734, 1.026]	.140	[254, .534]
Germany	.579	[.510, .648]	.292	[.002, .582]	.602	[.539, .665]	.205	[069, .479]
Father's characteristic	s							
Employed			.507	[.380, .635]			.409	[.285, .534]
Citizen			.307	[032, .645]			.353	[.032, .673]
Speaks English			.141	[073, .355]			.161	[076, .397]
Year of immigration			.038	[.029, .047]			.039	[.030, .047]
Age at migration			018	[027,009]			022	[031,013]
Age			.182	[.167, .197]			.160	[.146, .173]
Employed			2.985	[2.666, 3.303]			2.958	[2.588, 3.328]
Family characteristics								
Lives in urban area			1.342	[1.011, 1.674]			1.413	[1.090, 1.736]
Number of siblings			295	[342,247]			278	[331,224]
Has boarders in household			.025	[095, .144]			.010	[107, .128]
Constant	2.809	[2.789, 2.829]	-77.412	[-94.077, -60.747]	3.024	[3.003, 3.045]	-78.267	[-94.073, -62.461]

Table S-7: Predicting difference in occupational education scores – unweighted and weighted results

Notes: State dummies are included but not shown; robust-clustered standard errors used (Models 2 and W2).

Reference categories: country of origin (US white), state (Alabama). Models 1 and 2 represent unweighted results. Models W1 and W2 are estimated using inverse probability weights.

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