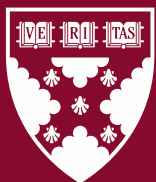


Working Paper 22-029

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Faith and Assimilation: Italian Immigrants in the US*

Stefano Gagliarducci[†] Marco Tabellini[‡]

January 2024

Abstract

How do ethnic religious organizations influence immigrant assimilation? To answer this question, we assemble novel data from the Catholic directories to measure the presence of Italian Catholic churches in the US between 1890 and 1920, when four million Italians moved to America, and anti-Catholic sentiments were widespread. Exploiting variation in the timing of church entry across counties, we find that Italian churches had ambiguous effects on immigrant assimilation. Italian churches reduced social assimilation along dimensions that require more inter-group interactions, such as intermarriage and residential choices, but had no, if anything positive, effects on assimilation outcomes fully under individual control, like names chosen by parents for their US born children. Moreover, while Italian churches increased immigrants' labor force participation, they induced Italians to select jobs with fewer opportunities for occupational upgrading. We provide evidence that enhanced coordination within the Italian community and natives' backlash are plausible pathways for our results. We also identify patterns of selective migration of Italians following church entries. However, these are quantitatively small and cannot explain our findings. Despite the ambiguous effects on adults' outcomes, Italian churches benefited children, raising their literacy and ability to speak English.

Keywords: Economics of religion, religious organizations, immigration, assimilation.

JEL codes: J15, N31, Z12.

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1 Introduction

Rising international migration flows have sparked a heated debate on the effects of immigrants in host societies. One recurring theme in this debate is the concern that cultural differences between immigrants and natives and the lack of immigrant assimilation pose fundamental threats to social cohesion and may erode national identity (Bailey et al., 2022). Such concerns are often linked to ethnic religious organizations, which are frequently blamed for perpetuating ethnic practices and for slowing the adoption of norms prevailing in the host society. Despite the salience of the topic, the effects of religious organizations on immigrant assimilation have remained surprisingly under-studied, at least within economics. Moreover, such effects are *ex-ante* ambiguous.

On the one hand, ethnic religious organizations might act as vehicles for the transmission of values across generations. First, they might actively encourage individuals to follow the prevailing practices, through sermons or formal education (Engelberg et al., 2016). Second, they might promote coordination among group members, possibly influencing individuals' behavior through peer pressure, social image concerns, and self-selection (Abramitzky, 2008; Berman, 2000; Carvalho, 2013; Iannaccone, 1992). Third, they may trigger natives' hostility (Colussi et al., 2021), which might limit immigrant assimilation both directly, through discrimination, and indirectly, by generating resistance within the immigrant community (Fouka, 2020; Sakalli, 2019). On the other hand, ethnic religious organizations may alleviate the cost of immigration by providing spiritual and material support – including the provision of key public goods, such as education (Bazzi et al., 2020b) – thus favoring the permanence of immigrants in the destination country and making adaptation smoother.

In this paper, we study the effects of ethnic religious organizations on immigrant assimilation. To discipline our analysis, we build on the framework presented in Fouka (2022), where assimilation depends on interdependent decisions made by immigrants and natives. Immigrants can adopt norms prevailing in the host country and exert effort to become part of the majority. Natives decide whether to accept immigrants in their group. Mapping this framework to the data, we measure social assimilation along dimensions that vary in the degree of inter-group interactions. First, we consider variables that require strong coordination between immigrants and natives – such as intermarriage and residential integration. We conjecture that, for these outcomes, immigrant assimilation heavily depends on natives' attitudes and behavior. Next, we turn to variables that are fully under the discretion of immigrants – such as the names chosen by parents for their children. In this case, we expect the effects of Italian churches to be largely, if not exclusively, mediated by changes in immigrant behavior. Finally, we turn to economic assimilation, and consider two main outcomes – labor

force participation and earnings – which also reflect different degrees of inter-group interactions. For instance, immigrants may be able to find a job within their network, even without interacting with native employers. However, opportunities for occupational upgrading may be more limited in ethnically segmented labor markets.

We focus on Italian Catholic churches in the US between 1890 and 1920, at the peak of the Age of Mass Migration. This setting offers several appealing features. First, during this period, more than 4 million Italians migrated to the United States, representing the single largest national group at the time (Spitzer and Zimran, 2018). Second, while Italian immigrants were homogeneously Catholic, the US was predominantly Protestant at the time because of the heritage from the Anglo-Saxon settlers (Gillis, 2000).¹ This fueled nativism, which had strong religious roots and was intertwined with anti-Catholic rhetoric (Higham, 1955). Finally, the Catholic Church governed several aspects of the every-day life of Italian immigrants, and priests had a central role not only in the spiritual but also in the secular aspects of the Italian community (Herberg, 1983; Vecoli, 1969).

We digitized detailed historical records on the arrival and the presence of Italian Catholic priests and churches across US counties. We combine this novel dataset with the full count US Census of Population, and consider the universe of Italian immigrants living in the United States between 1900 and 1920. For each individual, we count the number of years, within a decade, she was exposed to the presence of an Italian Catholic church in the county of residence.² We then estimate linear, two-way fixed effects (county fixed effects and state by decade fixed effects) regressions that compare individuals living in counties within the same state that were differentially exposed to the presence of an Italian Catholic church in the previous decade.

This strategy nets out any county fixed and any state time-varying characteristic that might have jointly influenced the assimilation of Italian immigrants and the establishment of an Italian Catholic church. We also account for a host of variables potentially related to the presence of an Italian church, such as the religiosity, the affluence, and the homogeneity of the Italian community (Francesconi, 1983; Tomasi, 1975), allowing counties to be on differential trends along these (and many other) characteristics. In addition, to assuage concerns that churches may have opened earlier in areas with growing Italian enclaves, we control for the Italian population share predicted exploiting the timing of railroad expansion across counties and Italian immigration at the national level.

Our empirical design is motivated by abundant historical evidence that indicates that

¹Notable exceptions were the (Catholic) Irish and the Jewish communities. These were, however, minority groups, also opposed by natives because of their religious affiliation (Higham, 1955).

²We define an Italian church if it was *i*) an Italian national church as classified by the Catholic directories; or, *ii*) a church with at least one Italian priest. See Section 3 for more details.

the *timing* of church arrivals within a decade was largely dictated by idiosyncratic factors. For instance, as discussed in Section 2, the timing of the entry (and exit) of Italian churches was influenced by the scarce supply of Italian priests, by uncertainty over American bishops’ approval of the petition to open the church, by the death of a priest, or by the destruction of an existing church due to a fire. To isolate the timing – and not the location – of church entries, our preferred specification restricts attention to counties that received at least one Italian church between 1890 and 1920. In addition, we include county-specific linear trends, which net out any remaining underlying pattern in county penetration.

One concern with our empirical strategy is that, even after controlling for county-linear trends and the set of fixed effects and variables included in the analysis, we may still be partly capturing community-level efforts, coordinated by local religious (and non-religious) leaders, that affect the timing of church entry and shape the trajectories of assimilation of Italian immigrants. While we cannot entirely rule out this possibility, we perform several exercises to support the validity of our design. First, as noted above, we allow counties to be on differential trends depending on factors that may proxy for community-level efforts, such as the homogeneity, the religiosity, and the affluence of the enclave. We also verify that results are unchanged when accounting for the presence of individuals holding influential occupations (such as journalists, judges, and public administration workers), who might have coordinated efforts to attract churches earlier. Second, we provide evidence that the timing of church arrivals within a decade is uncorrelated with either the 1880-1900 change or the 1900 level of many county characteristics. Third, we verify that pre-1900 changes in the assimilation and the characteristics of Italians do not predict church exposure in subsequent years. Fourth, we document that church entries are not predicted by *yearly* changes in either the Italian immigrant population or the ethnic and religious content of names chosen by Italian parents for their offspring. Finally, we verify that results are not due to the spurious correlation between church arrival and other factors, such as stronger labor demand.³

We begin by focusing on intermarriage, which has been defined as the “ultimate stage” of social assimilation (Gordon, 1964) and requires both immigrants and natives to be willing to interact with members of the other group. We find that Italian churches lowered the probability that Italian immigrants were married to natives of native parentage. We obtain similar results when considering another proxy for social assimilation that requires strong between-group coordination: the probability that an Italian immigrant had at least one native neighbor of native parentage. According to our estimates, five additional years

³We also check that results are robust to accounting for: heterogeneous effects across cohorts (de Chaisemartin and D’Haultfoeuille, 2020; Goodman-Bacon, 2021), potential spatial correlation in the error term, and geographic spillovers across counties. We describe these and additional robustness checks in detail below, after presenting the main results.

of exposure to an Italian Catholic church – slightly less than the sample mean – reduce intermarriage rates and residential integration by .5 and 2 percentage points, respectively (or 61% and 13% relative to the 1900 mean).

Next, we examine a dimension of cultural assimilation that is fully under immigrants’ control: the names chosen by parents for their children. Following the existing literature, we interpret this variable as a proxy for parents’ desire to vertically transmit their culture across generations (Abramitzky et al., 2020a; Bazzi et al., 2020a; Fouka, 2020). We implement an event study design that compares the ethnic (or religious) content of names chosen by the same Italian parents for their children born in the US before and after the arrival of an Italian church. Perhaps surprisingly, Italian churches did not induce Italian parents to give more religious or more Italian names to their children. If anything, children born from Italian parents after the arrival of a church received more American sounding names, compared to their siblings born (in the US) from the same parents before the arrival of an Italian Catholic church.

The seemingly contrasting results described in the previous two paragraphs are consistent with the conceptual framework laid out in Fouka (2022) and with earlier work in economics (Lazear, 1999) and sociology (Waters, 1990). They suggest that Italian churches reduced social assimilation only along margins that require inter-group interactions and for which natives’ acceptance is key. If, as we discuss below, church entry triggered natives’ backlash, the lower rate of social integration may be driven, at least in part, by natives’ higher hostility. A second, complementary mechanism is that Italian churches increased horizontal socialization. In turn, this may have reduced parents’ efforts to vertically transmit their culture to the next generation. This idea is in line with models of cultural transmission (Bisin and Verdier, 2001), and might explain why, despite the lower social integration between Italians and natives, Italian parents did not choose more religious or ethnic names for their children.

Turning to economic outcomes, we document that Italian churches increased Italians’ labor force participation, but reduced the quality of their jobs. Italian churches also induced immigrants to specialize in more typically “Italian” occupations (such as bootblacks, barbers, or fruit graders). These patterns resonate with those for social assimilation presented above: by reducing immigrant-native interactions, Italian churches may have limited immigrants’ ability to enter the non-ethnic labor market, in turn lowering opportunities for occupational upgrading. They are also consistent with anecdotal accounts indicating that Italian priests made it easier for immigrants to find jobs via their ethnic networks, but that such jobs limited the opportunities for occupational upgrading (Francesconi, 1983). While the drop in income scores might reflect compositional changes, due to the entry in the labor force of less skilled Italians, our evidence suggests that this is unlikely to be the main mechanism at

play. Indeed, there is no decline in income scores for the age groups experiencing the larger increase in labor force participation, while the reduction in income scores is concentrated among workers for whom the increase in labor force participation is smaller.

In the second part of the paper, we investigate the mechanisms. First, we consider selective in- and out-migration of Italians. To test this channel, we use a sample of Italian men that could be linked across Census years from 1900 to 1920. Implementing a design similar to that in Bazzi et al. (2020a), we compare the characteristics of Italian immigrants moving from counties without churches to counties that received a church in a given decade. We document that movers had more Italian sounding names and were less likely to be intermarried, to speak English, and to be naturalized, relative to stayers. Using the same strategy, we uncover similar dynamics for selective out-migration. However, since few Italians (no more than 3-4% of a county Italian population, on average) in- and out-migrated before or after the arrival of a church, the impact of selective migration at the county level was quantitatively small, and cannot, alone, explain our main results. Confirming this conjecture, we replicate the analysis by restricting the sample to Italian immigrants that lived in the same county both at the beginning and at the end of each decade, and verify that results are unchanged.

Next, we turn to the possibility that churches increased coordination within the Italian community, acting as a catalyst for immigrants. The parish was “*the center for various institutions for assisting Italians*,” a place where “*from morning till evening there is a steady coming and going of Italians*” (Francesconi, 1983). While the Sunday Mass was the most important event, churches and priests facilitated the interaction among immigrants in many other ways, such as celebrating weddings, promoting lay associations, and organizing festivities and other recreational activities for both adults and children.

We provide evidence for this mechanism by showing that intermarriage and residential integration declined more where the size of the Italian community was larger. At the same time, church exposure did not reduce economic assimilation more in counties with a larger baseline Italian population. This is consistent with the idea that, even though lower social integration may have limited opportunities for economic assimilation, coordination also facilitated the (ethnic) matching in the labor market, more so in larger enclaves. We provide additional evidence for the role of coordination by showing that churches reduced the integration of Italians not only with natives, but also with other immigrant groups.

Finally, we examine whether Italian churches increased the salience of the immigrant community in the eyes of natives, reinforcing the (negative) stereotypical association between Italian immigrants and Catholicism (Higham, 1955). In turn, natives’ hostility may have hindered the prospects of immigrant assimilation. Using the local press to measure natives’

attitudes, we document that the presence of Italian churches increased the joint appearance of references to the Catholic Church and Italians in local newspapers. Moreover, consistent with natives’ backlash, church entry raised the probability that disparaging ethnic stereotypes, such as “crime” and “violent”, appeared together with the word “Italian”. We corroborate this interpretation by documenting that higher exposure to Italian churches increased the probability that a KKK klavern opened in the county during the second era of the Klan (1915-1940), which was characterized by a strong anti-Catholic stance (Higham, 1955).

If Italian churches did not promote the assimilation of adult immigrants, they may have nonetheless fostered that of immigrant children, through the provision of education. As highlighted by the historical literature, Catholic churches often had annexed schools that immigrant children could attend (Vecoli, 1969). In the last part of the paper, we show that immigrant children born in Italy and growing up in counties with a longer exposure to an Italian church were more likely to speak English and to be literate. This pattern was driven by churches with an annexed school. In addition, Italian churches increased children’s ability to speak English – but not literacy – more in counties belonging to states that had compulsory English laws in place.

Our results complement the literature on the economics of religion (Barro and McCleary, 2003; McCleary and Barro, 2006).⁴ Since the seminal contribution of Weber (1930), many papers have examined the role of the Protestant Reformation on economic growth and economic activity (Becker and Woessmann, 2009; Cantoni et al., 2018; Dittmar and Meisenzahl, 2020). Squicciarini (2020) and Valencia Caicedo (2019) among others have analyzed the conditions under which religion can promote or hinder human capital accumulation, scientific knowledge, and long run economic development. We shed light on the importance of religious organizations for the transmission of norms and values within ethnic communities.

Our work also speaks to the literature on immigrant assimilation. Existing works have considered a number of forces that shape the inclusion or exclusion of minorities into the majority group – such as time spent in the host country (Abramitzky et al., 2014, 2020a), inter-group contact (Bursztyn et al., 2021), ethnic enclaves (Edin et al., 2003), and government policies (Alan et al., 2021; Bandiera et al., 2019; Lleras-Muney and Shertzer, 2015). To the best of our knowledge, we are the first to examine the impact of ethnic religious organizations. Since ethnic churches mediate the transmission of values and the persistence of national culture, our paper is also related to works on cultural transmission (Bisin and Verdier, 2001; Fernandez and Fogli, 2009; Giuliano and Nunn, 2021; Grosjean, 2014; Rapoport et al., 2020).

Finally, we complement the literature on the Age of Mass Migration (Abramitzky and

⁴See also Becker et al. (2021), Iannaccone (1998), and Iyer (2016) for comprehensive reviews.

Boustan, 2017), in particular Spitzer and Zimran (2018) and Pérez (2021), who have studied the patterns of selection and assimilation of Italian immigrants during this historical period.

2 Historical Background

2.1 The Age of Mass Migration

During the Age of Mass Migration, from 1850 to 1920, around 30 million Europeans migrated to the United States (Hatton and Williamson, 1998).⁵ The Age of Mass Migration was triggered by a number of factors, including innovations in steam technology that reduced the cost of shipping (Keeling, 1999) and rising per capita income in Europe (Hatton and Williamson, 1998). Between 1850 and 1890, most immigrants came from Northern and Western Europe, but, after 1890, their composition shifted increasingly towards Southern and Eastern Europe (Figure A.1).

The change in the composition of immigrants was coupled with a dramatic increase in their numbers, especially after 1900 (Figure A.2). These forces raised natives' concerns about the assimilation of immigrants, particularly those from new and culturally more distant countries. In 1917, US Congress introduced a literacy test requiring immigrants to be able to read and write (Goldin, 1994). When the literacy test was introduced, European immigration was very low, because of World War I (WWI). After the war, however, immigration returned to its pre-1914 levels, fueling again natives' backlash. As a result, in 1921 and 1924, the Quota Emergency and the National Origins Acts introduced temporary and, then, permanent immigration restrictions.⁶ The combined effects of WWI and the quotas were dramatic, and marked the end of the Age of Mass Migration (Abramitzky and Boustan, 2017).

2.2 Italian Immigrants and Italian Churches in the US

Between 1875 and 1914, about 13 million Italians left the country, in what is known as the largest voluntary emigration in recorded world history (Foerster, 1919; Livi-Bacci, 1961). Especially before 1890, many went to other European countries and South America. However, more than 4 million Italians migrated to the United States, eventually becoming the single largest immigrant group (Spitzer and Zimran, 2020). The original Italian settlements,

⁵During this period, another 20 million Europeans moved to Latin America or Canada. The Age of Mass Migration was characterized by the lack of legal restrictions for European immigrants to migrate to the United States. Immigration to the US was instead restricted for Chinese and Japanese immigrants, following the 1882 Chinese Exclusion Act and the 1907 Gentleman's Agreement respectively (Abramitzky and Boustan, 2017).

⁶The 1921 Emergency Quota Act mandated that European immigrants from each country entering the US in a given year could not exceed 3% of the stock from that country living in the US in 1910. With the 1924 National Origins Act, the limit was lowered to 2%, and the base year was moved to 1890, so as to further restrict immigration from new sending countries. Furthermore, the total number of immigrants that could be admitted in a given year was capped at 150,000 (Goldin, 1994).

dating back to the mid-nineteenth century and driven by the 1859 gold-rush, were concentrated in the South-West. Other early Italian communities were found in Louisiana and other Southeastern states (Connell and Pugliese, 2017). This distribution remained almost unchanged until the end of the century when, with the growth of large cities, the North-East became the epicenter of Italian immigration (Figure 1).

The unprecedented exodus of migrants triggered immediate reactions among Italian institutions (Connell and Pugliese, 2017). The Catholic Church, in particular, was worried to lose followers, both in Italy and abroad. Pope Leo XIII coordinated many initiatives to increase the presence of Italian Catholic churches in the US. In 1887, the Pope approved the foundation of a new religious institute, the Missionaries of St. Charles Borromeo, also known as Scalabrinians (from the name of the founding Father, Giovanni Battista Scalabrini). By 1900, the order had dozens of parishes, schools, and missions, both in the US and in South America. Soon after, Pope Leo XIII urged another institute, the Missionary Sisters of the Sacred Heart of Jesus, founded by Mother Theresa Cabrini in 1880, to help Italian immigrants in the US. Mother Cabrini and her Sisters arrived in New York City in 1889, opening several hospitals, orphanages, and schools. Many other religious institutes reached the US independently between 1890 and 1920 (Vecoli, 1969).⁷

By the late nineteenth century, the American Catholic Church was highly organized and had developed a clear hierarchical structure. Its first diocese had been established already in 1789 in Baltimore.⁸ The diocese became an archdiocese in 1809, and its archbishop was given precedence over most other figures (except cardinals) within the American Catholic Church by Pope Pius IX in 1858. When Italian immigrants started entering the US in large numbers, the Irish controlled most of the seminaries and colleges in the American Catholic Church. Irish bishops often viewed the Roman Church with suspicion, and were concerned about its influence overseas (Tomasi, 1975). For this reason, even though hundreds of Catholic parishes were created during the nineteenth century, they were for the most part tailored to the needs of the Irish Catholic community and were organized independently from the Roman Church (Lazerson, 1977). Indeed, when Pope Leo XIII tried to coordinate the establishment of Italian churches, he encountered the opposition of the American Catholic Church (Francesconi, 1983). Since (Irish) American bishops and archbishops were reluctant to help the Pope coordinate his efforts, the diffusion of Italian Catholic churches was largely organized in Italy, and rested on the efforts of individual bishops and denominations.⁹

⁷Among them, the most notable ones were the Society of the Catholic Apostolate (better known as Pallottines), the Order of Friars Minor (better known as Franciscans), and the Society of Jesus (better known as Jesuits).

⁸In the Catholic Church, a diocese is an ecclesiastical district under the jurisdiction of a bishop.

⁹Similar dynamics occurred for other ethnic churches, such as the German, the French, and the Canadian ones. Gradually, the American Catholic Church became characterized by a plurality of ethnic parishes, where the corresponding language (rather than English) and the home-country culture remained prevalent, at least until the mid-1920s (Lazerson, 1977; Tomasi, 1975).

Figure 2 plots the presence of Italian churches across US counties between 1900 and 1920. Following the classification adopted in the Catholic directories, we define a church as Italian if it was *i*) an Italian national church; or, *ii*) a church with at least one Italian priest (see Section 3 and Appendix C for more details). Perhaps not surprisingly, the arrival of missions and churches often mirrored the distribution of Italian settlements. Yet, churches did not always follow the footsteps of Italian migration. For example, Italian churches remained absent from the South-West, where many Italians had settled. At first, Italian churches were confined to large urban centers like Boston, New York, Chicago, or San Francisco, but then reached many more locations, without an apparently obvious pattern.

Opening a church was an expensive process, since it was necessary to buy the building (or the land) and to pay for the priest’s living expenses (Tomasi, 1975). On the other hand, missions often targeted poorer areas, where Italian immigrants were more in need of spiritual and material support (Francesconi, 1983). Hence, while the affluence of the Italian community might have influenced the probability of receiving a church, the direction in which this force operated is ambiguous. The homogeneity of the Italian enclave is another factor that might have affected the probability of church entry. In order to open a church, communities had to submit a petition to the (American) bishop of the corresponding diocese. This process, whose outcome and timing were highly uncertain, tended to be smoother when Italian immigrants came from the same region in Italy.¹⁰ The degree of religiosity of the Italian community represents a third factor that might have influenced the arrival of Italian churches.¹¹ Even though one may expect churches to be present only (or, mostly) where the local community demanded them, strategic considerations might have induced the Roman Church to send priests in less religious areas, so as to preserve the Catholic culture (see also Section 2.3).

Given the importance of income, religiosity, and homogeneity of Italian communities for church entry, in our empirical strategy we pay special attention to these variables, allowing counties to be on differential trends and conducting placebo exercises to rule out that richer, more religious, or more homogeneous enclaves received a church earlier within a decade. Our strategy is instead motivated by the abundant historical evidence that indicates that the *timing* of church arrivals (within a decade) was often dictated by idiosyncratic factors.

First, the size and the conditions of Italian communities were hard to predict. For instance, when discussing the possibility of opening a mission in Erie (PA), Father Gibelli

¹⁰For example, in Buffalo (NY), it took more than two years for the local community, formed for a major part by emigrants from Sicily but also composed of individuals from several non-southern regions (such as Veneto, Lombardy, and Tuscany), to agree upon the arrival of a priest from Sicily called by his relatives. Similar episodes occurred in many other places, such as Syracuse (NY) and Fredonia (MA). See also Francesconi (1983) for more details.

¹¹Compared to other groups, most Italian immigrants in the US were highly religious; yet, there existed significant variation across places, and layman organizations sometimes opposed the clergy (Francesconi, 1983; Tomasi, 1975).

wrote that he was “*not sure about the number of Italians. Some people say there are six hundred, others eight hundred, and others over one thousand.*”¹² Such uncertainty interacted with the limited supply of priests. “*There remained the problem of finding a priest*” lamented Father Gambera in his 1900 *Memorie*, who also noted how “*The scarcity of priests was our most serious and damaging problem.*”¹³

In addition, which communities received a priest first depended on the region of origin of the priest leaving Italy, who would go where many emigrants from his region, or even town, were living.¹⁴ In many instances, the establishment of a church depended on the entrepreneurial spirit of the missionaries. In Somerville (MA), Father Properzi “*had improvised a small altar; a Crucifix, an image of the Blessed Mother, four candlesticks: and that made up the whole furnishing of the new Italian church [...] The first step was taken!*” (Properzi, 1916). In Framingham (MA), Father Maschi decided to promote the construction of an Italian church after the collapse of a building that killed several Italians (Francesconi, 1983).

Even before finding a priest, long negotiations between Italian religious institutions and local authorities were needed. On the one hand, the land to build the church (or an existing building) had to be purchased. Reports of such lengthy negotiations are available for many US cities – from Hartford (CT) to St. Louis (MO) to Philadelphia (PA) to Thornton (RI). On the other hand, Italian religious orders had to be granted permission to open a church by the diocese – again, a process whose outcome and duration were highly uncertain.

Finally, just as some Italian churches arrived in a county, others left or disappeared. For instance, an Italian national church might have lost its ethnic official status, may have been destroyed by a fire or by a gas explosion, or an Italian priest might have died or been relocated somewhere else. This explains why, although we observe a net increase in the presence of Italian churches in the US between 1890 and 1920 – with many churches settling down permanently – we also register a non-negligible turnover, with multiple entries and exits across counties and decades.¹⁵

2.3 Italian Churches and Immigrant Assimilation

Pope Leo XIII hoped that Italian churches would preserve the faith and reinforce the legacy of the Catholic culture among Italian immigrants. As the Pope wrote in the 1888 Encyclical *Quam Aerumnosa*, specifically addressing the Italian migration to the Americas, “*Among*

¹²Letter from Father Gibelli to Father Vicentini, 1893, reported in Francesconi (1983).

¹³See *Memorie* by Father Gambera, reported in Francesconi (1983).

¹⁴For example, as described in Francesconi (1983), when Father Antonio Castelli moved to the United States, he was assigned to “*Utica to assist the emigrants from his own towns* [in the surroundings of Caserta, Campania].”

¹⁵Between 1890 and 1920, we observe 547, 141, and 13 single, double, and triple church entries, respectively. There were also 463 single, 125 double, and 14 triple exits.

all these evils, however, that is by far the most calamitous which [...] renders it not as easy as it should be to obtain the saving assistance of God's servants who are unable to speak to them the word of life in the Italian tongue."

When establishing the religious institute of the Scalabrinians in 1887, the Pope also noted that the Catholic Church was "*determined to send from Italy to that land many priests to console their countrymen in their own tongue, to teach the faith and the obligations of the Christian life.*" Led by Bishop John Baptist Scalabrini, the Missionaries of St. Charles Borromeo soon started their missions in the US. One of the main goals of the institute, consistent with that of Pope Leo XIII, was to preserve "*the Christian traditions and principles of Catholicism [...] in the millions of Italians living in the American Continents.*"¹⁶ Special attention was paid to young migrants, who were considered by the Church at risk of abandoning their Italian culture for the American one.¹⁷

These and similar accounts suggest that Italian Catholic churches may have hindered the Americanization of Italian immigrants, favoring the transmission of Italian culture both vertically and horizontally. For one, priests reminded immigrants about their roots, reducing incentives to learn English or to apply for citizenship. As noted by Tomasi (1975), Italian parishes were the "*first line of defense behind which the immigrants could organize themselves and preserve their group identity.*" By reinforcing their Catholic faith, Italian churches may have also reduced the probability of intermarriage between Italian immigrants and natives, as religious differences were usually the single most important obstacle to mixed marriages according to historical accounts (Casassa, 1905). Furthermore, the presence of the church likely increased coordination within the Italian community, raising the probability of interactions among fellow Italians. Such coordination was often promoted by priests, who would "*ascend the pulpit after the Gospel for the reading of the Sunday announcements to inform the people about feasts, days of fast and abstinence, meetings of societies, the dates of the monthly communion*" (Francesconi, 1983).

The arrival of Italian Catholic churches may have also increased the salience of the immigrant community, triggering natives' backlash and discrimination. At the time, anti-Catholic sentiments were widespread, to the point that the KKK openly targeted Catholic immigrants (Higham, 1955). Natives' backlash may have further lowered the prospects of integration among Italian immigrants, both directly and indirectly, for instance by reducing incentives for Italian immigrants to learn English and attempt to become Americans.

At the same time, the intent of many institutes was to take care of the Italian community

¹⁶Letter by Bishop Scalabrini to Archbishop of Ireland, 1889, in Francesconi (1983).

¹⁷For instance, Father Morelli wrote in a letter to Bishop Scalabrini in 1888: "*If we do not quickly establish kindergartens and schools to prevent our children from falling into their (protestant) hands, the future of our community, its faith and national character, will be destroyed*" (Francesconi, 1983).

abroad, rather than explicitly preserving the Italian (and Catholic) culture: “*How well did they know [...] always tormented by that fatal disease we call homesickness? They were dreaming of their native country that could not provide their livelihood, imploring for the ministers of their ancestors’ religion to mitigate the agony.*”¹⁸ Moral and material support may have increased immigrants’ prospects for a permanent stay in the US, inducing them to exert more effort to fit in the American society.¹⁹ In addition, missionaries often emphasized that more schools were needed to facilitate the adaptation of Italian immigrants.²⁰ Especially after 1910, many US states required public and private institutions, including ethnic schools, to teach also – if not exclusively – in English (Edwards, 1923). Since Italian immigrants often sent their children to ethnic and religious schools, Catholic churches may have promoted skill acquisition and, contrary to the intents of Pope Leo XIII, favored assimilation, more so in states where schools were required to teach (also) in English.

The impact of Italian Catholic churches is *ex-ante* ambiguous also for economic assimilation. On the one hand, a more segregated community and limited social integration may have prevented Italians from finding well-paying jobs with opportunities for skill and occupational upgrading. On the other hand, priests actively helped Italian immigrants find a job.²¹ Moreover, by increasing coordination within the Italian community, churches may have facilitated the matching process in the ethnic labor market.

3 Data

This section describes the key variables used in the paper, which are then presented in more detail, and together with other variables, in Appendix C. Tables C.1 and C.2 report the list of outcome and control variables.

US Census. Socioeconomic and demographic characteristics of Italian immigrants and county historical variables come from the full count US Census of Population (Ruggles et al., 2020). We restrict attention to the universe of Italian immigrants living in the US in each Census year 1900, 1910, and 1920.²² We measure immigrant social assimilation in different ways, distinguishing between variables that reflect actions of both immigrants and natives from those that, instead, are more exclusively under immigrants’ control.

¹⁸Lecture by Bishop Scalabrini, 1898, in Francesconi (1983).

¹⁹Return migration was especially high among immigrants from new sending regions (Bandiera et al., 2013), who were labelled “birds of passage” and blamed for being unwilling to assimilate (Ward, 2017).

²⁰“*An English-Italian school was opened, with the Archbishop’s blessing, at the beginning of the school year, 1892-1893. It was attended by one hundred pupils – and it was the only thin thread of hope for the betterment of our colony*”, wrote Father Gambera in a 1892 letter (Francesconi, 1983).

²¹After visiting several Italian Catholic parishes in the US, Father Giuseppe Capra summarized his impressions in 1916 as follows: “*The pastor and missionary is not only the counselor of the doubtful, the comforter of the afflicted [...] but he is also [...] the protector who looks around to find them [the Italians] a job, work, and salary increases*” (Capra, 1916).

²²We fix county boundaries to 1930 using the procedure developed in Perlman (2016).

First, we consider variables that require high levels of inter-group interactions and coordination: intermarriage between an Italian immigrant and a native spouse of native parentage, and the probability that an Italian immigrant had at least one native neighbor of native parentage.²³ Second, we focus on an outcome that captures parents’ desire to transmit culture across generations and that is fully under immigrants’ control: the ethnic (or religious) content of names chosen by parents for their US born children (Abramitzky et al., 2020a; Fouka, 2020; Fryer and Levitt, 2004). In Appendix C.1, we define: *i*) an index based on the Italian distinctiveness of children’s names (Italian name index, INI); and *ii*) a dummy equal to one if a child was named after a Catholic saint (Catholic score). Below, we also examine an index that measures the American (rather than Italian) distinctiveness of children’s names (American name index, ANI).²⁴

As additional proxies for immigrant assimilation, we consider naturalization rates and ability to speak English. While ability to speak English depends largely on the actions of immigrants, naturalization requires natives’ inputs as well.²⁵ Although applications for citizenship were rarely rejected at the time (Biavaschi et al., 2017; Fouka, 2019), historical accounts underscore the importance of natives’ involvement in the process of immigrant naturalization. Both in large cities and in smaller towns, local politicians sought to expand their electoral base through the naturalization of immigrants, offering the new citizens “patronage jobs” and similar benefits in exchange for votes (Reid Jr and Kurth, 1992; Shertzer, 2016).

Finally, to study the impact of Italian churches on immigrant economic assimilation, we consider labor force participation and the log of occupational income scores.²⁶ These variables reflect different degrees of coordination and interactions between immigrants and natives. Immigrants may find a job even without interacting with native employers, for instance through ethnic networks. However, labor market segregation may limit opportunities for occupational upgrading, ultimately hindering economic assimilation.

Catholic Directories. Data on the presence of Catholic churches and priests in the US between 1890 and 1920 was obtained by digitizing *The Official Catholic Directory* of the United States, which contain information on the presence of Italian Catholic organizations

²³For intermarriage, we consider married individuals who were at least 15 years old, but we show that results are unchanged when including both married and unmarried individuals. To avoid double-counting, residential integration is defined only for household heads.

²⁴While the INI and the ANI are negatively correlated with each other, they are not necessarily one the opposite of the other. For instance, parents may choose to give to their children names that are common among other immigrant groups, such as the Irish. In this case, neither the ANI nor the INI would have a high value.

²⁵For naturalization, we restrict attention to immigrant men who were at least 21 years old and had spent at least 5 years in the US, since only these individuals were eligible to apply for citizenship. At the time, immigrant men would file a Declaration of Intent, also known as “first papers” upon arrival or shortly thereafter. Then, within five years, they were eligible to file a Petition for Naturalization (or, “second papers”). Ability to speak English is defined for any individual (of either gender) who is at least 15 years old. See Appendix C.1 for more details.

²⁶The US Census did not collect data on wages or income until 1940. We thus rely on income scores that assign to an individual the median income of his job category in 1950 (Abramitzky et al., 2014).

across counties and over time. From the Catholic Directories, whose detailed description is presented in Appendix C.2 and C.3, we collected: *i*) the number of Italian national churches; *ii*) the number of churches with Italian priests; and, *iii*) the number of other Catholic churches. In all cases, we refer to a church as a physical entity like a parish, a chapel, or a building where religious activities were administered. We replaced the information for missing almanacs – something that never happened for more than two consecutive years – by linearly interpolating between available years. For the analysis, our preferred treatment variable is the number of years between two Censuses with at least one Italian national church or a church with at least one Italian priest. Since the two measures are not mutually exclusive, in our baseline specification we combine them together, but we also present results considering each measure separately.

Summary statistics. Table A.1 reports the summary statistics, presenting individual and household outcomes in Panel A, key county-level controls in Panel B, and additional individual characteristics in Panel C. Throughout the paper, we multiply dummy variables (e.g., intermarriage, residential integration, etc.) by 100. Only about 1% of Italians who were married had a native spouse of native parentage, and only approximately one in five Italian household heads had a native (of native parentage) neighbor.²⁷ Both variables indicate that social assimilation was rather low among Italians at the time. Similarly, only 33% of eligible Italian men were naturalized, and 61% of Italians (who were at least 15 years old) could speak English between 1900 and 1920. Panel A of Table A.1 also documents that the county-level exposure to an Italian church (within the previous decade) was about 6 years. This figure may seem relatively high; yet, note that our sample is restricted to counties with at least one Italian immigrant, where the arrival of an Italian church was more likely.

4 Empirical Strategy

4.1 Difference-in-Differences

To study the effects of Italian churches on the assimilation of Italian immigrants, we match the county of residence of an individual in a given Census year to the arrival of Italian priests and churches within the previous decade.²⁸ For example, the outcomes of an Italian measured in the 1910 Census are matched to her exposure (if any) to an Italian church

²⁷The low intermarriage rates are not due to the fact that most Italians were already married upon arrival. In fact, according to statistics available from the US Censuses of 1900 and 1910, about 40% of Italians who were married got married after moving to the US (from the 1920 Census it is instead not possible to infer when a person got married), and intermarriage rates were approximately 1% also for this group.

²⁸Appendix B shows that results are robust to using longer time periods to measure exposure. If an individual arrived in the US after the entry of the church in that county, we define the years of exposure as those between the year of arrival in the US (of the individual) and the Census year.

between 1901 and 1910. This strategy implicitly assumes that individuals always lived in the same county within a decade (from the year of arrival to the Census year). Although this assumption might be violated in practice, below we verify that results are unchanged when focusing on Italian immigrants that lived in the same county both at the beginning and at the end of a decade.

Stacking repeated cross-sectional individual datasets for 1900, 1910, and 1920, we restrict attention to first-generation Italian immigrants.²⁹ We estimate:

$$y_{ic\tau} = \alpha_c + \gamma_{s\tau} + \beta_1 T_{c\tau} + \beta_2 X_{i\tau} + \beta_3 X_{c\tau} + \epsilon_{ic\tau} \quad (1)$$

where $y_{ic\tau}$ is the outcome of immigrant i residing in county c in Census year τ ; and $T_{c\tau}$, the key regressor of interest, is the number of years between Census years τ and $\tau - 1$ with at least an Italian church (as defined in Section 3 above) in county c .³⁰ $X_{i\tau}$ is a vector of household and individual level controls (number of adults in the household, gender, and fixed effects for marital status, years in the US, and age). $X_{c\tau}$ includes: *i*) the number of years between τ and $\tau - 1$ with at least a non-Italian Catholic church; *ii*) the predicted Italian population share (described below and in Appendix C.4); and, *iii*) a vast set of 1900 county characteristics interacted with Census year fixed effects.³¹ Table C.2 lists all the controls included in the most stringent specification, reporting individual, household, and county level variables in Panels A, B, and C respectively. α_c and $\gamma_{s\tau}$ are county fixed effects and state by decade fixed effects. Standard errors are clustered at the county level.

Controlling for interactions between Census year dummies and 1900 county characteristics assuages the concern that Italian churches may have arrived earlier in counties that were more urban and had better employment opportunities in a key sector like manufacturing – characteristics that may have independently influenced the pattern of assimilation of Italian immigrants. Likewise, interacting year dummies with the share of European and Irish immigrants and with the average number of years spent in the US by Italian immigrants deals with the possibility that Italian priests and churches systematically targeted areas with initially larger and stronger (Catholic) immigrant communities, where the assimilation of Italians may have been evolving differently for reasons unrelated to church arrivals.

We also allow counties to be on differential trends depending on baseline homogeneity, affluence, and religiosity of the Italian community – three variables that historical accounts

²⁹To limit potential endogeneity concerns, we omit from the analysis Italian immigrants who were clergymen or religious workers, although results remain identical when dropping this restriction.

³⁰Table C.1 presents all the outcomes considered in the paper. We denote a Census year (or decade) with τ to distinguish it from the exact calendar year, t , which we introduce in Section 4.2 below.

³¹When a control referring to Italians' characteristics in the county is missing (e.g., because there were not enough Italians in that county in 1900), we assign the county mean, and control for a dummy for missing status of this variable. All results are unchanged when excluding observations with missing data.

associate with the presence of Italian Catholic churches (Tomasi, 1975). First, to address the concern that more homogeneous communities were better able to coordinate community-level efforts to request a priest, we develop a Herfindahl–Hirschman index based on the 1900 distribution of Italian surnames in the county (see Appendix C.5 for more details). Second, we use baseline occupational income scores of Italians to measure the economic conditions prevailing in the Italian community. This deals with the possibility that richer enclaves were better able to afford the expenses associated with the entry of a church, and might have also been on different assimilation trajectories.³² Third, we include two proxies for religiosity to assuage concerns that Italian churches arrived earlier in more religious places, where immigrants might have been more resistant to cultural change. The first proxy is the average share of Italian children named after a Catholic saint in 1900. The second one is the 1890 share of Catholics in the county (taken from the Census of Religious Bodies).³³ Finally, to tackle the concern that churches arrived earlier in counties where the Italian enclave was growing faster, we control for the Italian population share predicted by interacting national immigration flows with railroad expansion across counties.³⁴

The inclusion of county fixed effects and state by decade fixed effects implies that the coefficient of interest, β_1 , captures the effects of exposure to Italian churches within the same county over time, as compared to other counties within the same state in a given Census year. The set of interactions and controls described above further narrows the comparison to counties (within the same state) that were on similar trends depending on a wide array of variables. Our preferred specification restricts attention to counties that received at least one Italian church during our sample period, and includes county linear trends estimated using observations before and after treatment, similarly to Dobkin et al. (2018). That is, our preferred specification only exploits residual variation in the *timing* (and not the location) of arrival of an Italian church within a given decade, after controlling for constant growth rates in county penetration.

³²On the other hand, as discussed in Section 2, churches might have arrived earlier in poorer communities, if missionaries targeted areas where the Italians were more in need of (material and spiritual) support.

³³In unreported analysis, we verify that results remain unchanged when controlling for the measure of religiosity based on the religious content of first names used in Berkes et al. (2022). This is calculated as the excess frequency a given name appears among Canadian Catholics, relative to the overall population, as inferred from the Population Census of 1881, 1911, and 1921, which report the religious affiliation and nationality of each individual.

³⁴This strategy builds on that first introduced in Sequeira et al. (2020) for overall European immigration between 1860 and 1920. See Appendix C.4 for a detailed description. Results, not reported for brevity, are unchanged when using actual Italian population, when interacting year dummies with the 1900 Italian population share, or when predicting the Italian immigrant share using a shift-share methodology similar to that in Tabellini (2020).

4.2 Event-Study: Exploiting Yearly Variation

The granularity of the data collected from the *Official Catholic Directories* allows us to exploit yearly variation in church arrivals. We combine this with yearly variation in birth dates of children born in the US from (first-generation) Italian parents between 1890 and 1920. Similar to Bazzi et al. (2020a), we reshape the data from Census-year-individual to calendar-year-individual level. This makes it possible to implement a proper event-study analysis, adding transparency to our DD design and further probing the validity of our identification strategy.

Then, we estimate the following regression:

$$y_{ihct} = \alpha_c + \gamma_{st} + \theta_h + \sum_{k=-4}^{+6} \beta_{t+k} T_{c,t+k} + \beta_2 X_{it} + \beta_3 X_{ct} + \epsilon_{ihct} \quad (2)$$

where y_{ihct} is the Italian name index (INI), the Catholic score, or the American name index (ANI) of child i born in the US from household h in calendar year t , and $T_{c,t+k}$ are event dummy variables. As we can only identify ten coefficients out of eleven, we restrict the coefficient in the year before entry (β_{t-1}) to zero.³⁵ To make the exercise sharper, we restrict attention to the first church arrival in the county over the 1890-1920 period, conditional on having no churches between 1880 and 1890. This leaves us with a sample that is about one fifth relative to the one used when estimating equation (1).

The model also includes: county fixed effects and state by decade fixed effects, α_c and γ_{st} ; a vector of child level controls (birth year by gender fixed effects and dummies for state of birth and birth order), X_{it} ; the vector of time-invariant county controls interacted with decade dummies as well as predicted Italian immigration and exposure to non-Italian Catholic churches, X_{ct} (see also Section 4.1 and Table C.2); and, county linear trends. Following Abramitzky et al. (2020a), we also include household fixed effects, θ_h . This implies that the effects of church entry are identified by comparing names of siblings born from the same parents before and after the arrival of the church in a given county within a decade.

4.3 Testing the Identification Assumption

The identification assumption behind our strategy is that, within a decade and conditional on controls and fixed effects, the *timing* of the arrival of Italian Catholic churches is as good as random. The anecdotal evidence discussed in Section 2.2 supports this idea. In what follows, we provide more formal evidence in favor of the empirical design.

³⁵The model also includes two dummies, not reported, for any church arrival before $t - 4$ and after $t + 6$, respectively.

We begin by conducting a balance test, presenting results in Figure 3. We plot coefficients (with corresponding 95% confidence intervals) from separate regressions of the number of years with at least one church in a county (within a decade) against each of the Italian immigrant (Panels A and B) and county (Panels C and D) characteristics reported on the y-axis. In Panels A and C, we consider the 1900 values of each variable, while in Panels B and D, we turn to their 1880-1900 change.³⁶ As in our preferred specification, all models include county fixed effects and state by decade fixed effects and county linear trends. To ease the comparison of coefficient across variables, we standardize each regressor by subtracting its mean and dividing through its standard deviation.³⁷

Overall, Figure 3 provides support to our identification strategy: when considering 1900 values (Panels A and C), only the share of intermarried Italians is positively and statistically correlated with the number of years of exposure to Italian churches within a decade. In all other cases – including religiosity (proxied for using the frequency of Catholic names), income scores, and regional homogeneity – coefficients are imprecisely estimated and quantitatively small. Moreover, there is no systematic pattern indicating that Italian churches arrived earlier in counties where Italian immigrants were more (or less) integrated or the economic and demographic structure was different. Reassuringly, the statistically significant relationship between intermarriage and years of exposure disappears once we consider the 1880-1900 change (Panel B). It is also important to note that the magnitude of the coefficient on intermarriage, which is sizeable for the 1900 level, drops considerably when focusing on the 1880-1900 change.³⁸ For all other Italian immigrant and county characteristics, there is no evidence of pre-trends: all coefficients are statistically insignificant and, in most cases, quantitatively small. That is, the timing of church entry is not correlated with the change in any of the variables considered in Panels B and D of Figure 3.

One caveat with the balance test just described is that we could only consider changes in county or individual characteristics over a 20-year period. Figure A.3 performs a more granular test, presenting a county-level event study graph that plots the evolution of *yearly* changes in the Italian population in a close window around church entries. The model includes all the state- and county-level controls as in equation (2). Formally, we estimate:

$$y_{ct} = \alpha_c + \gamma_{st} + \sum_{k=-4}^{+6} \beta_{t+k} T_{c,t+k} + \beta_2 X_{ct} + \epsilon_{ct} \quad (3)$$

³⁶We are unable to use 1890, because the Census for that year was destroyed in a fire. Also, we cannot test for pre-trends for residential integration, naturalization status, and ability to speak English, since these variables are not reported in 1880.

³⁷Standard errors are clustered at the county level, and regressions are weighed by the number of observations included in our (individual level) analysis below.

³⁸To further reduce endogeneity concerns, in Appendix B, we show that results are robust to interacting decade dummies with the 1900 average intermarriage rate.

As for the exercise on naming patterns outlined in Section 4.2, we restrict attention to the first church arrival in the county over the 1890-1920 period, conditional on having no churches between 1880 and 1890. Yearly inflows are obtained from a procedure that hinges upon information on county of residence at the time of the Census and year of arrival in the US. The main concern with using year of arrival to recover yearly inflows is that, as time goes by, the number of Italians observed in a Census year by cohort of arrival depletes, because of either return migration or mortality. To account for this, we fit a model with a quadratic rate in the inflow of Italians, controlling for county by year of arrival fixed effects. Predicted values from this model are then used to compute yearly inflows. Reassuringly, there is no sign of anticipation along this dimension, either when considering the number of Italians in levels (Panel A) or when scaling it by the 1900 Italian population (Panel B).

It is important to note that we cannot entirely rule out the possibility that our estimates may partly capture the effects of community-level efforts, potentially coordinated by local (religious or non-religious) leaders, that influence the timing of church arrival and the trajectory of immigrant assimilation. However, the evidence presented in this section supports the idea that, within a decade, there are no county-level trends that explain the timing of church arrivals. Sections 5.1 and 6.3 provide additional evidence consistent with the lack of pre-trends, using the ethnic and religious content of names chosen by Italian parents for their US born children and newspapers' slant, respectively.

An additional concern is that church entries might attract Italian immigrants from other parts of the country (or, from Italy). This would be problematic because we may be attributing to church arrivals the effects of changes in group size on assimilation. To tackle this potential issue, in our analysis, we control for the predicted Italian population share. Moreover, Figure A.3 documents that there is no increase in Italian immigration after the arrival of an Italian church. In Section 6.1, we further explore the possibility that churches triggered selective in- and out-migration of Italians, using a sample of individuals that could be linked across Census years from 1900 to 1920. Even though the entry of Italian churches was indeed followed by selective migration, we conclude that the latter was quantitatively small, and is not driving our results.

Finally, one may be worried that not only church entries, but also exits, might be endogenous to trends in immigrant assimilation within a given county. Anecdotal accounts suggest the opposite. Church exits were often caused by priests' deaths or by the destruction of a church due to a fire or a gas explosion.³⁹ In addition, bishops' decisions to "denationalize" a

³⁹For example, as Father A. Demo wrote in 1907, "*The East Cleveland mission always had a meager existence, because of the few Italians there, poor financing, and above all, we think, Father Gibelli's administrative ineptitude. When he died, in 1907, the Bishop assigned the Church to a diocesan priest.*" Similarly, as described in a 1900 letter from Father Gambera to Bishop Scalabrini, "*There was a gas explosion at the Church of Our Lady of Pompeii on Sullivan Street, New York [...] the priest upon receiving the Last Rites survived, but he died a few years later. The church was abandoned...*" (Francesconi, 1983).

church or to assign it to another religious institution may have resulted from organizational choices made at the diocese level, rather than being the response to specific demands from the Italian community. In line with the anecdotal evidence, Appendix B shows that results are robust to focusing on a sample of counties with at least one church entry but no exits within the decade – a demanding statistical test, since the sample size drops significantly. We summarize additional robustness checks in Section 5.3, after presenting the main results.

5 Main Results

5.1 Social Assimilation

Intermarriage and residential integration. As noted in the introduction, we structure our analysis following the conceptual framework in Fouka (2022), where immigrant assimilation depends on the joint actions of immigrants and natives. In Table 1, we present results for two outcomes that reflect both immigrants’ desire to assimilate and natives’ willingness to accept the foreign born. The dependent variable is a dummy equal to one if an Italian immigrant: is married with a native spouse of native parentage intermarriage (Panel A); has at least one native neighbor of native parentage (Panel B). In column 1, we estimate a parsimonious version of equation (1) that only includes individual controls, county fixed effects, and state by decade fixed effects. In both panels, the coefficient is negative and statistically significant, indicating that a longer exposure to Italian churches reduced intermarriage and increased Italians’ propensity to live in ethnically segregated neighborhoods. Results remain unchanged when including exposure to non-Italian Catholic churches, predicted Italian immigration, and the battery of interactions between 1900 county controls and decade fixed effects (column 2), adding county-specific linear trends (column 3), and restricting attention to counties that received at least one church during our sample period (column 4).

According to our preferred specification (column 4), 5 additional years of exposure to an Italian Catholic church – or, 75% of the sample mean – reduced the probability that an Italian immigrant married a native of native parentage by .5 percentage points, or around 61% relative to the baseline mean. Similarly, 5 extra years of church exposure reduced the probability of having a native neighbor of native parentage by roughly 2.2 percentage points, or 13% relative to the 1900 mean. Notably, the implied magnitude of the effects of church exposure is higher for intermarriage – for which natives’ consent is always required – than for residential integration – for which natives’ consent is important but not always essential. While only suggestive, this pattern is consistent with the idea that assimilation outcomes can be ranked depending on the relevance of natives’ consent.

Following previous work (Fouka et al., 2022), we defined intermarriage rates restricting the sample to individuals who were married in a given Census year. In column 2 of Table A.2, we check that results remain similar to our baseline estimates (reported in column 1 to ease comparisons) when including both married and unmarried Italian immigrants. In Table A.2, we also address the potential concern that our findings might pick up selection of Italians who were already married in Italy. Specifically, we exploit a question available only for 1900 and 1910, which asked individuals the number of years since their first marriage. Combining this piece of information with year of arrival in the US, in column 4, we exclude from the sample individuals who were already married when they left Italy.⁴⁰ Reassuringly, the coefficient remains negative and highly statistically significant; if anything, it becomes larger (in absolute value).⁴¹ Finally, in column 5, we conduct a placebo check, and verify that church exposure had no effect for individuals who were already married when they arrived in the US.

Naming patterns. Next, we examine the effects of Italian churches on a dimension of cultural assimilation that depends only on immigrants’ actions: the ethnic or religious content of names chosen by Italian parents for their offspring. As discussed above, this variable has often been used in the literature as a proxy for parents’ desire to vertically transmit the culture of the home-country (Abramitzky et al., 2020a; Fouka, 2019). We implement the event-study design described in equation (2). This strategy exploits yearly variation in church arrivals across and within counties, combined with yearly variation in birth dates of children born in the US from first-generation Italian parents. Since our analysis includes household fixed effects, the impact of Italian churches is identified by comparing the name chosen by the same parents for children born in the US within the same decade before and after the arrival of the church. The final sample is made of 64,921 households, for a total of 206,582 yearly observations.

We report results in Figure 4, where we plot coefficients (with 95% confidence intervals) for the effects of the first church entry in the county, depicted by the black vertical line. In Panels A and B, the dependent variables are the INI and the Catholic score. Reassuringly, in both cases there is no evidence of pre-trends: naming patterns are not changing differentially prior to the arrival of the church. After the arrival of the first Italian church, we do not detect any statistically significant or quantitatively meaningful change in either name index.⁴² In Panel C, we consider the ANI, which captures the American content of names. Again, there are no pre-trends. However, coefficients indicate that children born after the arrival of a

⁴⁰In column 3, we replicate our baseline specification for years 1900 and 1910.

⁴¹Note, however, that the implied percent change relative to the mean is similar to that in our baseline specification (since, as expected, the average intermarriage rate is higher for this sample).

⁴²The coefficient for the Catholic score jumps in the year of church entry (even though the p-value is .113). Yet, it becomes close to zero and imprecisely estimated in the following years.

church had more American sounding names. While the increase in the ANI is surprising, it should be noted that the implied magnitudes are relatively small. According to our estimates, the ANI of a child born after the church entry is one point, or 3.3%, higher than that of her siblings born (in the US during the same decade) before the arrival of the church. For comparison, Abramitzky et al. (2020a) find that 20 additional years in the US lead to a 10-points reduction in the foreign name index (i.e., the opposite of the ANI).⁴³

The patterns observed in Figure 4 may seem in contrast with those in Table 1. However, as already discussed above, they are consistent with the idea that churches lowered social assimilation of Italians only along dimensions where inter-group contact was important. As predicted by models of cultural transmission (Bisin and Verdier, 2001), by increasing horizontal socialization, Italian churches may have reduced parents' incentives to vertically transmit the Italian culture to the next generation. Moreover, if church entries triggered backlash among natives, this might have reduced natives' willingness to accept and interact with Italian (Catholic) immigrants. In response to natives' hostility, immigrant parents may have chosen more American sounding names for their children, in order to shield them from potential discrimination (Fouka, 2019; Saavedra, 2021).⁴⁴

Naturalization and ability to speak English. We complement the previous analysis by considering two additional proxies for immigrant assimilation: an indicator for being naturalized and a dummy for being able to speak English. As for names, the latter variable is almost entirely under the control of immigrants. Instead, naturalization captures not only immigrants' actions but also natives' behavior. At the time, immigrant men who were 21 or older could apply for citizenship after spending 5 years in the United States. As already discussed in Section 3, while it was possible for applications to be rejected, this rarely happened in practice (Biavaschi et al., 2017). Yet, natives were often involved in campaigns or local-level efforts to naturalize immigrants (Reid Jr and Kurth, 1992; Shertzer, 2016). For this reason, even though the degree of coordination between immigrants and natives was lower than in the case of intermarriage, the process of naturalization entailed non-negligible inter-group interactions.

We present results in Table 2, focusing on our most stringent specification (column 4 of Table 1). In column 1, we document that exposure to Italian churches reduced the probability of being a naturalized citizen. According to our estimates, 5 additional years of exposure

⁴³Appendix D.1 shows that church entries had no impact on the fertility of Italian immigrants (Figure D.1). This suggests that results in Panel C of Figure 4 are not driven by changes in family size. In unreported analyses, we explored whether church exposure influenced the spacing of births and whether results differed by the gender composition of children born prior to church entry. In both cases, coefficients were quantitatively small and imprecisely estimated – consistent with the idea that these outcomes do not require interactions with natives or the consent of the latter.

⁴⁴It is also possible that Italian churches triggered opposite reactions within the Italian enclave, and that some parents (who did not share the Catholic values brought by churches) expressed “backlash” against the Italian and Catholic community by giving more American sounding names to their children. We find this explanation unlikely, since, if such backlash were present, we would expect to observe it first and foremost for the Catholic score.

to an Italian church lowered naturalization rates by 2.8 percentage points, or 5.3% relative to the 1900 mean. One interpretation for this result is that immigrants became less interested in (local or national) politics. At the time, corruption was widespread, especially in large cities, where political machines traded the immigrant vote for patronage jobs or other benefits (Menes, 1999; Reid Jr and Kurth, 1992). By offering public goods (such as education), different forms of insurance, and opportunities to find a job within their ethnic network, Italian churches might have reduced the benefits of naturalization. A complementary explanation is that Italian churches triggered backlash among natives, reducing their willingness to interact with and recruit Italian immigrants.

In column 2, we show that Italian churches had no statistically significant effect on ability to speak English. As noted above for names, these patterns are consistent with the idea that Italian churches slowed down immigrant assimilation only, or mostly, along dimensions that entailed at least some degree of inter-group coordination.⁴⁵ The null results obtained for ability to speak English may also be the product of countervailing forces. On the one hand, Italian churches lowered the frequency of interactions between immigrants and natives. On the other hand, they provided education, including at least basic knowledge of English. We examine the role of churches on the provision of education in more detail in Section 7.

5.2 Economic Assimilation

We now turn to the effects of Italian churches on immigrant economic assimilation. Restricting attention to Italian men in working age (15-64), in columns 3 and 4 of Table 2, we report results for labor force participation and the log of occupational income scores, respectively.⁴⁶ The picture that emerges is mixed. While exposure to Italian Catholic churches increased immigrants' labor force participation, it reduced their occupational income scores.

The point estimate in column 3 indicates that 5 additional years of exposure to an Italian church increased labor force participation of Italian men by .8 percentage points (or, almost 1% relative to the baseline mean). The effects of Italian churches on occupational income scores are quantitatively larger (in the opposite direction). According to our estimates, the income score of an Italian man would decline by 1.3% with each additional year of church exposure. For comparison, Eriksson (2019) finds that one standard deviation (or, 3 percentage points) increase in the size of the local ethnic enclave reduced the income score of Norwegian men living in the US in 1920 by roughly 10%.

⁴⁵Interestingly, the implied magnitudes of coefficients for naturalization and ability to speak English are both smaller than those obtained for intermarriage and residential integration. This is again consistent with a framework where assimilation outcomes can be ranked depending on the relevance of natives' consent.

⁴⁶We restrict attention to men because, during this historical period, less than 15% of Italian women were in the labor force. In unreported analyses, we did not find evidence that church exposure affected female labor force participation.

Since income scores capture cross-occupational changes in earnings, our results suggest that the presence of Italian churches pushed Italian immigrants into lower quality jobs, which likely offered fewer opportunities for skill upgrading. One interpretation is that, although ethnic networks – reinforced by the presence of Catholic churches – provided immigrants with more job opportunities within their group, they may have lowered those in the broader economy. Another possibility, not in contrast with the previous one, is that the disparate effects estimated for labor force and income scores reflect compositional changes in the pool of employed Italians. Specifically, if churches increased labor force participation among individuals that had lower earning prospects, the drop in income scores may mechanically reflect the reduction in the productivity of the marginal immigrant worker.

To test this idea, in Table A.3, we replicate the analysis separately by age group. Interestingly, the gains in labor force participation were concentrated among the youngest (15-20 years old) and oldest (45-64 years old) cohorts. However, these cohorts did not experience any meaningful change in their income scores. Instead, exposure to churches had smaller or null effects on labor force participation of workers in the age range 21-44, who witnessed a large decline in their earnings. Albeit only suggestive, this evidence seems inconsistent with the idea that the reduction in income scores was driven mostly by compositional changes in the labor force.

In column 1 of Table A.4, we document that Italian churches had no effect on the probability that Italian men were literate. Since by the age of 15 most individuals had already completed school (Goldin and Katz, 2008), this result is also consistent with our interpretation that the decline in income scores cannot be entirely explained by changes in the composition of the Italian labor force. In the remaining columns of Table A.4, we examine additional labor market outcomes. We find that church exposure had a positive, but quantitatively small, effect on the probability that Italian immigrants were employed in the manufacturing (column 2) and in the unskilled (column 3) sectors. As these were “immigrant intensive” sectors (Fouka et al., 2022; Tabellini, 2020), this pattern supports the notion that Italians became less integrated in the national labor markets. In line with this idea, column 4 documents that church exposure increased the probability of working in occupations that were Italian dominated.⁴⁷

⁴⁷We define the index in column 4 as the ratio of the probability that an Italian immigrant were employed in an occupation relative to the same probability for a non-Italian man. The occupation index ranges from 0 to 100, with higher values referring to more “Italian” occupations. By construction, the Italian occupation index does not include individuals in the labor force with a “non-classified” occupation, explaining why the number of observations in column 4 is lower than in previous columns.

5.3 Summary of Robustness Checks

We already showed above that church exposure is uncorrelated with the 1900 level of and the 1880-1900 change in county characteristics and Italian immigrant assimilation (Figure 3), and that yearly changes in immigration, naming patterns, and fertility decisions among Italians do not predict the timing of church entry across counties (Figures A.3, 4, and D.1). We now summarize additional robustness checks, which are described in detail in Appendix B. First, we document that results are robust to focusing on counties that did not experience church exits (Table B.1, Panel A). Second, we address concerns raised by the recent econometric literature on DD settings with heterogeneous treatment effects (de Chaisemartin and D’Haultfoeuille, 2020, Goodman-Bacon, 2021), following Cengiz et al. (2019) and Deshpande and Yue (2019) in implementing a stacked-by-event strategy (Table B.1, Panel B). Third, we check that our findings are not driven by counties with particularly large Italian population (Table B.2), or by any specific US region (Table B.3) or state (Figures B.1 and B.2). Fourth, we rule out the idea that the timing of church entry might be correlated with the presence of Italians holding influential or prestigious occupations (Table B.4). Finally, we verify that results are robust to: *i*) defining church exposure over longer time horizons (Table B.5); *ii*) including a measure of predicted industrialization (Table B.6); *iii*) controlling for 1900 intermarriage rates, which, as shown in Figure 3, were correlated with the timing of church entry (Table B.7); *iv*) accounting for potential geographic spillovers in the effects of churches across space (Table B.8); *v*) clustering standard errors at the diocese, at the commuting zone, and at the state level (Table B.9); and, *vi*) extending the analysis to second generation immigrants (Table B.10).

6 Mechanisms

In this section, we explore the mechanisms. First, we document that church arrivals were followed by selective in- and out-migration of Italians, but that this force was quantitatively small and is unlikely to explain our findings. Next, we show that Italian churches increased coordination within the Italian community, raising the frequency of contact among fellow Italians. Finally, we provide evidence that Italian churches triggered natives’ backlash. Together, these patterns might explain why we detect a reduction in assimilation only along margins that require both immigrants and natives to be willing to interact with each other.

6.1 Selective Migration

In Section 4.3, we showed that, on average, the arrival of an Italian church was not followed by systematic changes in Italian immigration (Figure A.3). However, it is possible that churches triggered selective in- or out-migration among Italians. On the one hand, Italian churches may have attracted individuals who were more attached to the home-country norms, including religiosity. On the other hand, less religious or more assimilated Italians might have decided to flee counties that received a church, where Catholic faith and Italian values likely became more central to the life of the community.

We test this mechanism using a linked sample of Italian men that we observe in at least two consecutive Census years between 1900 and 1920. The linked sample, described in detail in Appendix C.6, was obtained from the dataset made available by Abramitzky et al. (2020b) that has become widely used in the literature (Abramitzky et al., 2021).⁴⁸ We follow an approach similar to that in Bazzi et al. (2020a), and estimate regressions of the form:

$$y_{ic\tau} = \alpha_c + \gamma_{s\tau} + \beta_1 M_{i\tau} + \beta_2 X_{i\tau} + \beta_3 X_{c\tau} + \epsilon_{ic\tau} \quad (4)$$

where $y_{ic\tau}$ is the characteristic of individual i , and $M_{i\tau}$ is a dummy equal to one if, between Census years τ and $\tau + 1$, the individual moved to a county that received a church in that decade from a county that: *a*) did not have any Italian church between Census years τ and $\tau - 1$; and, *b*) did not receive any church between Census years τ and $\tau + 1$. All other variables are as in the baseline specification of equation (1).

Note that the characteristics of individual i are measured at the beginning of the decade, prior to the migration decision. Similarly, county c (and all associated controls) refers to the county of residence at the beginning of the decade. Intuitively, equation (4) considers a county that did not have a church either at the beginning or at the end of a decade. It then compares individuals that stayed in that county to those who moved to a county that received a church in that decade.⁴⁹

We report results in Table 3, focusing on the INI, the Catholic score, and the ANI in columns 1 to 3. The positive and statistically significant coefficient in column 1 indicates that Italian immigrants moving to counties that received a church had more Italian sounding

⁴⁸As discussed in Appendix C.6, individuals in the linked sample differ from those in the baseline (cross-sectional) dataset along some important dimensions. For this reason, in Table A.5, we replicate the analysis using the linked sample. Reassuringly, results remain qualitatively unchanged. The only exception is that the coefficient for labor force participation (column 5) drops to zero and is imprecisely estimated. The coefficient for occupational scores (column 6) is also statistically insignificant; however, it remains negative and close to that in our baseline specification.

⁴⁹Another possibility would be to run a counterfactual exercise and assume that all in-migrants were not integrated and that all out-migrants were fully integrated. One could then benchmark the observed changes against such counterfactual scenarios. However, net of exits from and entries into the country (which are not accounted for in the linked sample), mobility is driven by individuals moving from one county to another. This makes it impossible for us to consider in- and out-migrants as two separate groups of people, and prevents us from conducting the aforementioned counterfactual exercise.

names as compared to individuals living in the same county of origin who did not migrate to the county with a church. Perhaps surprisingly, the coefficient on the Catholic score (column 2) is negative and statistically significant, indicating that in-migrants were less likely to be named after a Catholic saint. Instead, column 3, which focuses on the ANI, confirms the patterns observed for the INI in column 1: in-migrants were less likely to have American sounding names.

Results in Table A.6, Panel A, paint a coherent picture for selected in-migration by focusing on other variables: in-migrants were less likely to be married with and live close to a native of native parentage (columns 1 and 2), were less likely to be naturalized (column 3), and had lower levels of English proficiency (column 4). These patterns are consistent with the literature that has documented negative self-selection of immigrants moving to areas with larger ethnic enclaves (Damm, 2009; Edin et al., 2003), of which Catholic churches clearly represent an important component. Interestingly, instead, we do not find evidence of selection for economic outcomes (columns 5 and 6). In Table A.7, Panel A, we examine additional characteristics of in-migrants. Italians who moved to counties that received a church were less likely to be to literate (column 1) and more likely to hold occupations common among Italians (column 2). Instead, they were not more or less likely to work in influential or prestigious occupations, such as: *i*) teachers, doctors, and journalists (column 4); and *ii*) judges, lawyers, and public administration workers (column 5); or to be religious workers (column 3).⁵⁰

Next, we turn to selected out-migration. We re-estimate equation (4) by focusing on individuals living in counties that *a*) received a church between Census years τ and $\tau - 1$; and, *b*) still had a church by Census year $\tau + 1$. We now define the migration dummy equal to one if an individual living in a county meeting criteria (*a*) and (*b*) moved to a county that did not have a church in either τ or $\tau + 1$. That is, we compare two individuals living in a county that received a church between τ and $\tau - 1$ (and where the church did not disappear in the following decade): one of them remained in the same county, while the other (the migrant) moved to a county that did not have a church.

We present results in columns 4 to 6 of Table 3. As for in-migration, we detect selection according to all name index: Italians leaving counties that received a church had less Italian (and more American) sounding names and were less likely to be named after a Catholic saint, relative to those that stayed. In Panel B of Tables A.6 and A.7, we replicate the analysis conducted for in-migrants, focusing on out-migrants. There is no evidence that out-migrants were positively selected or more assimilated. If anything, Italians leaving counties that received a church were less likely to be naturalized, to speak English, and to be literate.

⁵⁰The lack of selection along these margins likely reflects the fact that very few Italians held these jobs.

However, note that the beginning of decade characteristics (e.g., intermarriage, residential segregation, etc.) may be affected by the arrival of the church before decade τ . For this reason, interpreting these results is complicated.

Results in Table 3 suggest that Italian churches triggered selected in- and out-migration among Italians. The coefficient in column 1 implies that the INI of Italian immigrants moving to a county that received a church was about 5.1 points (or, 7.2%) higher than that of Italians that did not relocate where the church had arrived. Similarly, column 4 indicates that Italians leaving counties that received a church had an Italian sounding name that was 1.3 points (or, 1.6%) lower, relative to that of stayers. Coefficients imply similar quantitative effects for the other name index. These magnitudes suggest that, at the individual level, selection was an important margin.

Yet, this does not mean that the effect of selected migration on the Italian community (and, thus, on our main results) were large. In fact, only 3% of Italians in the linked sample left the county following the entry of a church. Similarly, within our linked sample, Italians moving from a county without a church to a county that received a church (within a decade) represented about 3.5% of the Italian population in the destination county. To more precisely assess the quantitative relevance of selection for our findings, we replicate the baseline specification in equation (1) by restricting attention to individuals that lived in the same county both at the beginning and at the end of a decade. Reassuringly, results, reported in Table A.8, remain similar to those in the full sample.⁵¹

To sum up, the evidence in this section indicates that, even though selection represented an important margin of response at the individual level, it cannot (alone) explain the effects of Italian churches on immigrants' assimilation.

6.2 The Role of Coordination

The presence of an Italian church raised Mass attendance and increased the chances to join ethnic societies (see also Section 2.3). Italian churches also promoted the organization of leisure activities – such as plays and night entertainments or meetings to read Italian books – and the availability of classes (from dancing to cooking to gymnastics) for both teens and adults. In many cases, priests purposefully facilitated coordination by reading announcements and reminding local communities about feasts and other events (Francesconi, 1983). By increasing coordination within the ethnic community, Italian churches may have limited opportunities for inter-group contact, ultimately reducing the social and cultural assimilation of Italians.

⁵¹The only notable difference arises for labor force participation (column 5): in this case, the coefficient is negative, though not statistically significant. However, this pattern is similar to that observed for the full linked sample in Table A.5.

Size of ethnic enclave. If coordination were a mechanism behind our results, one would expect Italian churches to have a more negative effect on immigrant assimilation in communities with a larger number of Italians. On the other hand, while coordination may have hampered the social integration of Italians in larger groups, it may have nonetheless increased economic opportunities there, because the size of the “ethnic market” made within group connections more valuable. To test these ideas, in Table 4, we interact exposure to Italian churches with the 1900 size of the Italian community in the county. We consider absolute and relative (to county population) group size in Panels A and B respectively. To ease the interpretation of results, both variables are normalized by subtracting their mean and dividing through their standard deviation.

Consistent with coordination, Italian churches reduced intermarriage and residential integration more in counties with a larger Italian community (columns 1 and 2). Instead, churches did not have a differential effect on naturalization and ability to speak English (columns 3 and 4), even though the coefficient on the interaction term is negative for naturalization. These findings can be reconciled by noting that coordination may be less relevant for becoming a naturalized citizen or learning English, relative to intermarriage or residential choice. In the latter case, it is indeed crucial to coordinate with another party (the spouse or neighbors). In columns 5 and 6, we turn to labor market outcomes. In this case, the interaction term is positive, although statistically significant only for occupational income scores. These results are consistent with the church making ethnic labor markets more efficient, smoothing potential frictions in the matching process.

Interaction with other groups. In Appendix D.2, we provide additional evidence consistent with the idea that Italian churches increased coordination among Italians and lowered integration not only with natives, but also with other immigrant groups. In Tables D.1 and D.2, we show that church exposure increased the probability of endogamous marriage and of living in residentially segregated enclaves, while reducing the probability of intermarriage with non-Italian immigrants – a pattern driven by non-Catholic Europeans. Perhaps reflecting the stickiness of residential patterns, church exposure did not lead to changes in the probability of having non-native (non-Italian) neighbors.⁵²

Priests, churches, and alternative measures of exposure. Abundant anecdotal evidence suggests that Italians were reluctant to attend the Mass in non-Italian Catholic churches and that only Italian priests were able to establish a tight relationship with their community (Francesconi, 1983). Hence, especially if churches increased coordination among Italians, one would expect our results to be driven by Italian churches and priests. In Ap-

⁵²Another interpretation for the negative effects of Italian churches on inter-group interactions is that other immigrant groups became more reluctant to socialize with Italians, in order to signal to natives that they were “different” (Fouka et al., 2022).

pendix D.3, we compare the effects of the number of years with: at least one Italian national church; no Italian national church but at least one Italian priest; and, at least one Catholic church but neither an Italian church nor an Italian priest. Running a horse race between the three measures, Table D.3 documents that Italian churches and, to a lesser extent priests, drive our findings. Conversely, the presence of non-Italian churches and priests had no effect on Italian immigrants’ assimilation. In Appendix D.4, we also explore whether the number of churches and priests (within a decade) had a differential effect on assimilation. Table D.4 confirms the findings in Table D.3 that, although the number of priests did matter for immigrant assimilation, the number of churches played a more important role.⁵³

6.3 Negative Stereotyping and Natives’ Backlash

In the early twentieth century, anti-immigration sentiments were often intertwined with anti-Catholicism (Higham, 1955). The arrival of an Italian Catholic church, and the subsequent segregation (residential and social) of Italians we documented above, might have made the immigrant community more visible in the eyes of natives, triggering backlash and negative stereotyping. In turn, natives’ hostility may have reduced immigrant assimilation, because of social, economic, and residential exclusion.

Evidence from local newspapers. Due to the lack of systematic survey data to measure natives’ attitudes at the beginning of the twentieth century, we rely on the local press, as in Fouka et al. (2022). Because the language used and the sentiments expressed in newspapers largely respond to readers’ demands (Gentzkow and Shapiro, 2010), the local press should capture, though imperfectly, the public’s attitudes towards Italians.

Using data on local newspapers, described in detail in Appendix C.7, we count the number of articles in which, in a given calendar year between 1900 and 1920, the word “Italian” and the word “Catholic” appeared jointly. Next, we do the same replacing the word “Catholic” with a series of ethnic stereotypes (described in Appendix C.7). To account for changes in the frequency of different words over time, we scale the joint frequency of the word “Italian” and each selected term by the marginal frequency of the latter (in each county-year). This normalization allows us to test if, following the entry of an Italian church, selected disparaging, stereotypical terms became increasingly associated to the Italians.⁵⁴

Then, we apply an event study design similar to the one described in Section 4.3 above

⁵³In Table D.5, we additionally test the possibility that church presence had differential effects depending on the county area or population. Results suggest that the effects of churches did not systematically vary with the size of the county (either in terms of population or in terms of area).

⁵⁴To ease the interpretation of results, we standardize all outcomes by subtracting their mean and dividing through their standard deviation. Regressions are weighed by the number of individuals in our sample, and standard errors are clustered at the county level. As discussed in Appendix C.7, we could not retrieve local newspapers data for the entire sample. Table A.9 verifies that our baseline results are unchanged when considering counties for which newspapers data is available.

for yearly Italian immigration. In Panel A of Figure 5, we consider the effects of church entry on the association between Italians and Catholicism. Reassuringly, there is no clear trend in the joint frequency of the words Italian and Catholic before the entry of an Italian church. The relationship becomes positive and statistically significant in the two years after the arrival of the Church. Then, coefficients become again close to zero and imprecisely estimated. These patterns suggest that Italian churches increased the salience of Catholicism and its association with Italian immigrants, even though the effect was relatively short-lived. Given the widespread anti-Catholicism (Higham, 1955), this may have increased negative stereotyping against Italians.

Panel B of Figure 5 confirms this idea, by reporting the effects of church entry on the average frequency of selected disparaging terms (crime, lazy, mafia, and violent). Also in this case, there are no pre-trends; the coefficient jumps in the calendar year of church entry, remaining positive and statistically significant for the following three years.⁵⁵ Similar to the patterns observed in Panel A, coefficients drop to zero after year 4. This suggests that the salience of Italian churches, and the associated ethnic stereotyping, declined over time.

KKK presence. The increase in the negative and stereotypical association between Italians and Catholicism likely reflects natives’ backlash. In Appendix D.5, we provide suggestive evidence consistent with this interpretation, using the presence of KKK klaverns during the second era of the Klan (1915 and 1940) as a proxy for natives’ hostility, and for anti-Catholic (and anti-Italian) sentiments in particular.⁵⁶ Estimating county-level cross-sectional regressions, Table D.6 reports a positive relationship between the number of years of church exposure up to 1915 and: *i*) the probability of ever witnessing the opening of a KKK klavern (columns 1 and 2); and, *ii*) the number of years between 1940 and the opening of the first klavern in the county (columns 3 and 4). Since we cannot include county fixed effects and exploit the timing of church arrival, results in Table D.6 should be interpreted with caution; yet, they corroborate the idea that Italian churches led to natives’ backlash.

Summary. Taken together, this section suggests that Italian churches increased the association between the Italians and Catholicism, triggering negative stereotyping and natives’ backlash. Natives’ hostility might have, at least in part, arisen from the higher ethnic segregation promoted by Italian churches. On the other hand, natives’ backlash may have increased incentives for Italians to live closer together, reducing inter-group interactions. Because of discrimination, Italians may have faced higher barriers – both socially and economically. We cannot pin down the timing and the relative contribution of either force.

⁵⁵In the year following the entry of the church, the coefficient is statistically significant at the 10% level.

⁵⁶Especially outside the US South, the second Klan, which was originally founded in Georgia in 1915 and then spread throughout the US in the 1920s, held an openly anti-Catholic rhetoric, accusing Catholics (and other minorities) of being “anti-American” (Higham, 1955; Lewis, 2013).

However, our analysis reveals that both coordination within the immigrant community and natives’ backlash are plausible pathways for our results.

7 Italian Churches and the Provision of Education

Our results thus far indicate that Italian churches had ambiguous effects on immigrant assimilation, with a strong, negative impact on dimensions that involved sustained inter-group interactions. Yet, religious organizations tend to provide their community with important public goods, such as (formal or informal) insurance and education (Bazzi et al., 2020b; Cantoni et al., 2018; Meyersson, 2014; Valencia Caicedo, 2019). Italian churches were no exception (Lazerson, 1977; Vecoli, 1969). Education and skill accumulation may, in turn, exert a positive effect on the prospects of integration of ethnic minorities. The average Italian immigrant was typically too old to be in schooling age. However, Catholic schools, often annexed to churches, might have raised literacy among immigrants arriving as children. Moreover, since many Italian priests were aware of the benefits that learning English would have offered to immigrants, and because a growing number of states required schools to teach also (if not exclusively) in English, Catholic schools might have improved English proficiency of Italian children.

In Table 5, we focus on first-generation immigrants who, in a Census year, were between 10 and 14 years old. Estimating our preferred DD specification, we find that church exposure had a strong, positive effect on the probability of speaking English. This effect is quantitatively large: according to the coefficient reported in column 1, 5 additional years of exposure to an Italian church increased the probability of speaking English for first-generation Italian children by 2.3 percentage points, or around 3.1% relative to the mean.

In column 2, we exploit the fact that several states introduced laws requiring English to be a language of instruction between the late nineteenth and the early twentieth century (Edwards, 1923). We interact church exposure with a dummy equal to one if the state of residence of the child required (also) English to be the language of instruction. The coefficient on the interaction term is positive and statistically significant, indicating that the effects of churches were larger where English was required as a language of instruction. Yet, the main effect remains positive and marginally statistically significant, suggesting that, even in states without compulsory English laws in place, church exposure raised immigrant children’s ability to speak English.

From the Catholic directories, we were able to extract information on whether the church had an annexed school. This allows us to derive a variable that counts the number of years

with (at least) one Italian Catholic school.⁵⁷ In column 3, we augment our preferred specification, by including the interaction between church exposure and the presence of a parochial school. The coefficient on exposure to a church remains positive, but becomes smaller in magnitude and statistically insignificant. The coefficient on the interaction between years of exposure and presence of schools is also positive, somewhat larger in magnitude, and marginally statistically significant. This suggests that, as expected, schools represented an important vehicle for Italian churches to increase English proficiency among Italian children.

In columns 4 to 6, we replicate columns 1 to 3 using as dependent variable an indicator for being able to read and write. In column 4, the coefficient on church exposure is positive, but imprecisely estimated and smaller in magnitude than that for ability to speak English. Also, the impact of churches on literacy did not vary with the presence of English language requirements (column 5). This is to be expected if the effectiveness of churches in instructing children were independent of a state’s English laws. Instead, the presence of a school was essential for the improvement in children’s literacy. This is captured by the statistically significant and positive coefficient on the interaction between church exposure and school presence, in column 6.

Overall, these results paint a nuanced picture of the role of Italian churches. Even though churches increased the probability of endogamous marriage and the likelihood of living in ethnically segregated enclaves for adult immigrants, they provided first generation immigrant children with important skills, which might have favored their economic and social integration later in life.

8 Conclusions

In this paper, we study the effects of ethnic religious organizations on immigrant assimilation, focusing on the early twentieth century US. Exploiting variation in the timing of church arrivals, we find that Italian Catholic churches had ambiguous effects on the assimilation of Italian immigrants. Churches slowed down social assimilation along dimensions that entail frequent inter-group interactions and coordination, like intermarriage and residential integration. However, they had no, or even positive, impact on dimensions of assimilation that are under immigrants’ control, such as the names chosen by immigrants for their US born children. We find similarly ambiguous effects for economic assimilation. Although churches increased labor force participation of Italian men, they induced immigrants to find jobs with fewer opportunities for occupational upgrading. While the effects of Italian churches were

⁵⁷There are no instances of Italian Catholic schools present without a corresponding church. On the other hand, it is possible for an Italian church to be established without a school.

ambiguous for adults, churches benefited immigrants arriving as children by raising their literacy and their ability to speak English.

An important question related to our findings is how (if at all) the effects of Italian Catholic churches may differ from those of other, non-religious ethnic organizations. On the one hand, both religious and non-religious organizations have the potential to promote coordination within the ethnic community, increasing residential segregation and lowering inter-group contact. For this reason, one might expect our results to apply also to non-religious institutions. On the other hand, a large literature in the economics of religion has emphasized that religious organizations might be more effective in enforcing social norms and fostering coordination, relative to non-religious ones (Berman, 2000; Chen, 2010; Iannaccone, 1992). Moreover, at least within the context of our paper, Italian churches did not merely act as “attraction points”; rather, they provided education to immigrant children, potentially offering them tools to become more integrated in the host country society when adults.

Comparing the effects that religious and non-religious ethnic organizations might have on immigrant assimilation goes beyond the scope of our paper, and we leave this topic to future research. We also believe that our findings raise a number of intriguing questions. First, we focused on the effects of religious organizations in the short-run. It might be important to understand the long-run effects of religious organizations on immigrant assimilation. Second, we have not examined how the arrival of Italian Catholic churches influenced other ethnic groups. While other immigrant groups, especially non-Catholic ones, may have benefited from the change in natives’ perceptions, the opposite scenario may have occurred as well. Finally, more evidence is needed from other contexts, in order to compare patterns obtained across time and space.

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Tables and Figures

Table 1. Intermarriage and Residential Integration

	(1)	(2)	(3)	(4)
Panel A.	Dep. Variable: Married to Native			
Years w/ Italian Church	-0.122*** (0.011)	-0.119*** (0.011)	-0.144*** (0.013)	-0.099*** (0.013)
Mean Treatment	6.352	6.352	6.352	6.889
S.d. Treatment	3.785	3.785	3.785	3.440
Mean Dep. Variable (1900)	1.086	1.086	1.086	0.807
Observations	2,157,151	2,157,151	2,157,151	1,988,957
Panel B.	Dep. Variable: Residential Integration			
Years w/ Italian Church	-0.412*** (0.078)	-0.387*** (0.073)	-0.468*** (0.083)	-0.438*** (0.091)
Mean Treatment	6.830	6.830	6.830	7.422
S.d. Treatment	3.680	3.680	3.680	3.213
Mean Dep. Variable (1900)	20.02	20.02	20.02	17.15
Observations	1,092,446	1,092,446	1,092,446	1,005,364
State \times Decade FEs	Yes	Yes	Yes	Yes
County FEs	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes
County Controls \times Decade		Yes	Yes	Yes
County Linear Trends			Yes	Yes
Ever Treated				Yes

Notes: The sample includes first-generation Italian immigrants 15+ who were: *i*) married (Panel A); *ii*) the household head (Panel B). Column 4 restricts attention to individuals living in counties that received at least one Italian Catholic church between 1890 and 1920. *Years w/ Italian Church* is the number of years with at least one Italian Catholic church in the county over the ten years before a Census. *Married to Native* (resp., *Residential Integration*) is a dummy, multiplied by 100, for being married with a (resp., for having at least one neighbor) native of native parentage. *Individual controls* include gender and fixed effects of years in the US, marital status, age, and the number of adults in the household. *County controls* include: *i*) interactions between decade dummies and the 1900: logarithm of county population, urban, Black, Irish, and other Europeans share of the population, labor force participation, manufacturing share, the Catholic share of the population; the number of years a county was connected to the railroads as of 1900; and, the 1900 average among Italian immigrants of several variables (the number of years spent in the US, age, the share of married individuals, the share of women, the number of children named after a Catholic saint, and the Herfindahl–Hirschman index of regional homogeneity); *ii*) the number of years with at least one non-Italian Catholic church; and, *iii*) the predicted Italian population share constructed in Appendix C.4. Standard errors, clustered at the county level, in parentheses. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 2. Naturalization, Ability to Speak English, and Economic Assimilation

	(1)	(2)	(3)	(4)
Dep. Variable:	Naturalized	Speak English	In Labor Force	Log Occ. Score
Years w/ Italian Church	-0.568** (0.220)	-0.119 (0.136)	0.158*** (0.050)	-0.013*** (0.004)
Mean Treatment	7.528	6.470	6.236	6.262
S.d. Treatment	3.029	3.571	3.644	3.629
Mean Dep. Variable (1900)	53.39	57.07	85.75	3.070
Observations	1,317,467	2,880,990	1,759,709	1,654,138
State \times Decade FEs	Yes	Yes	Yes	Yes
County FEs	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes
County Controls \times Decade	Yes	Yes	Yes	Yes
County Linear Trends	Yes	Yes	Yes	Yes
Ever Treated	Yes	Yes	Yes	Yes

Notes: The sample includes first-generation Italian immigrants who were: *i*) men 21+ and in the US for at least 5 years (column 1); *ii*) 15+ for both genders (column 2); *iii*) men of age 15-64 (column 3); and, *iv*) men of age 15-64 and in the labor force or with non-missing occupational scores (column 4). The sample is restricted to individuals living in counties that received at least one Italian Catholic church between 1890 and 1920. The dependent variable is a dummy equal to 1 (multiplied by 100) for being: *i*) naturalized (column 1); *ii*) able to speak English (column 2); and, *iii*) in the labor force (column 3). *Log Occupational Score* is the log of the income occupational score (column 4). *Years w/ Italian Church* is the number of years with at least one Italian Catholic church in the county over the ten years before a Census. *Individual controls* include gender and fixed effects of years in the US, marital status, age, and the number of adults in the household. *County controls* include: *i*) interactions between decade dummies and the 1900: logarithm of county population, urban, Black, Irish, and other Europeans share of the population, labor force participation, manufacturing share, the Catholic share of the population; the number of years a county was connected to the railroads as of 1900; and, the 1900 average among Italian immigrants of several variables (the number of years spent in the US, age, the share of married individuals, the share of women, the number of children named after a Catholic saint, and the Herfindahl–Hirschman index of regional homogeneity); *ii*) the number of years with at least one non-Italian Catholic church; and, *iii*) the predicted Italian population share constructed in Appendix C.4. Standard errors, clustered at the county level, in parentheses. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 3. Church Exposure and Selected Migration

	(1)	(2)	(3)	(4)	(5)	(6)
Dep. Variable:	Italian Score	Catholic Score	American Score	Italian Score	Catholic Score	American Score
1[In-migrant]	5.065*** (0.590)	-2.095** (1.061)	-2.064*** (0.469)			
1[Out-migrant]				-1.253*** (0.375)	-1.956*** (0.749)	1.451*** (0.336)
Mean Treatment	0.375	0.375	0.375	0.0412	0.0412	0.0412
S.d. Treatment	0.484	0.484	0.484	0.199	0.199	0.199
Mean Dep. Variable (1900)	69.98	60.01	28.93	77.60	65.01	22.74
Observations	13,952	13,952	13,952	117,812	117,812	117,812
State \times Decade FEs	Yes	Yes	Yes	Yes	Yes	Yes
County FEs	Yes	Yes	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
County Controls \times Decade	Yes	Yes	Yes	Yes	Yes	Yes
County Linear Trends	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The sample includes first-generation Italian immigrant men in the linked dataset made available by Abramitzky et al. (2020b) that could be observed in at least two consecutive Census years between 1900 and 1920. Columns 1 and 2 restrict attention to individuals who, as of Census year τ , lived in a county that: did not have any Italian church between Census years τ and $\tau - 1$; and, did not receive any church between Census years τ and $\tau + 1$. Columns 3 and 4 consider individuals who, as of Census year τ , lived in a county that: received a church between Census years τ and $\tau - 1$; and, still had a church by Census year $\tau + 1$. The variable $1[\text{In-migrant}]$ (resp., $1[\text{Out-migrant}]$) is a dummy equal to one if, between Census years τ and $\tau + 1$, the individual moved from the county of origin to a county that received an Italian Catholic church during that decade (resp., to a county without an Italian Catholic church in that decade). In columns 1 and 4, the dependent variable is the Italian score (Italian name index, ANI) of the individual. In columns 2 and 5, the dependent variable is the Catholic score dummy (multiplied by 100) for being named after a Catholic saint. In columns 3 and 6, the dependent variable is the American score (American name index, ANI) of the individual. All regressions include state by decade and county fixed effects, county linear trends, and the set of individual and county controls described in the notes to Tables 1 and 2. All county controls and fixed effects refer to the county of origin of the individual. Standard errors, clustered at the county level, in parentheses. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 4. Heterogeneity by Group Size

	(1)	(2)	(3)	(4)	(5)	(6)
Dep. Variable:	Married to Native	Residential Integration	Naturalized	Speak English	In Labor Force	Log Occ. Score
Panel A.	Interaction with No. Italians (1900)					
Years w/ Italian Church	-0.095*** (0.013)	-0.390*** (0.082)	-0.595*** (0.210)	-0.123 (0.135)	0.154*** (0.051)	-0.014*** (0.004)
Years w/ Italian Church \times No. Italians (1900)	-0.011* (0.006)	-0.132*** (0.039)	-0.402 (0.247)	0.011 (0.055)	0.016 (0.018)	0.003** (0.001)
Mean Treatment	6.889	7.421	7.528	6.470	6.236	6.262
Mean Dep. Variable (1900)	0.807	17.16	53.39	57.07	85.75	3.070
Observations	1,988,957	1,005,513	1,317,467	2,880,990	1,759,709	1,654,138
Panel B.	Interaction with Fr. Italians (1900)					
Years w/ Italian Church	-0.092*** (0.013)	-0.378*** (0.081)	-0.560*** (0.198)	-0.132 (0.131)	0.151*** (0.050)	-0.015*** (0.004)
Years w/ Italian Church \times Fr. Italians (1900)	-0.019*** (0.006)	-0.164*** (0.047)	-0.337 (0.278)	0.036 (0.101)	0.028 (0.020)	0.006*** (0.002)
Mean Treatment	6.889	7.421	7.528	6.470	6.236	6.262
Mean Dep. Variable (1900)	0.807	17.16	53.39	57.07	85.75	3.070
Observations	1,988,957	1,005,513	1,317,467	2,880,990	1,759,709	1,654,138
State \times Decade FEs	Yes	Yes	Yes	Yes	Yes	Yes
County FEs	Yes	Yes	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
County Controls \times Decade	Yes	Yes	Yes	Yes	Yes	Yes
County Linear Trends	Yes	Yes	Yes	Yes	Yes	Yes
Ever Treated	Yes	Yes	Yes	Yes	Yes	Yes

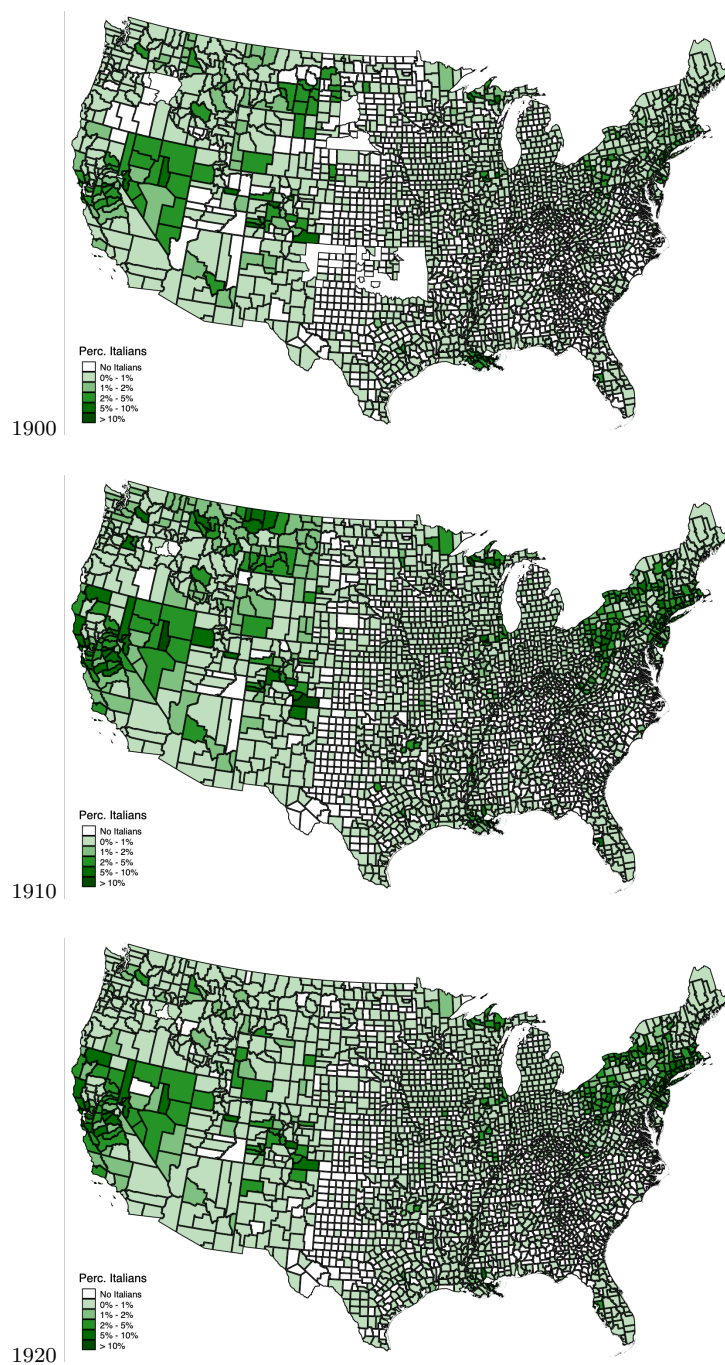
Notes: The table replicates the specifications in column 4 of Table 1 and in columns 1 to 4 of Table 2, augmented with the interaction between *Years w/ Italian Church* and the 1900 number (resp. fraction) of Italians in the county in Panel A (resp. Panel B). *Years w/ Italian Church* is the number of years with at least one Italian Catholic church in the county over the ten years before a Census. *No. Italians 1900* (*Fr. Italians 1900*) is the number (fraction) of Italians in the county in 1900, standardized by subtracting its mean and dividing through its standard deviation. See notes to Tables 1 and 2 for the description of controls. Standard errors, clustered at the county level, in parentheses. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 5. Ability to Speak English and Literacy: Italian Immigrant Children

	(1)	(2)	(3)	(4)	(5)	(6)
Dep. Variable:	Speak English			Literacy		
Years w/ Italian Church	0.462*** (0.168)	0.295* (0.158)	0.265 (0.218)	0.169 (0.115)	0.192 (0.134)	0.033 (0.132)
Years w/ Italian Church \times English Laws		0.511** (0.202)			-0.071 (0.120)	
Years w/ Italian Church \times Presence of School			0.343* (0.205)			0.235*** (0.085)
Mean Treatment	5.270	5.270	5.270	5.270	5.270	5.270
Mean Dep. Variable (1900)	73.89	73.89	73.89	76.19	76.19	76.19
Observations	141,198	141,198	141,198	141,198	141,198	141,198
Age	10-14	10-14	10-14	10-14	10-14	10-14
State \times Decade FEs	Yes	Yes	Yes	Yes	Yes	Yes
County FEs	Yes	Yes	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
County Controls \times Decade	Yes	Yes	Yes	Yes	Yes	Yes
County Linear Trends	Yes	Yes	Yes	Yes	Yes	Yes
Ever Treated	Yes	Yes	Yes	Yes	Yes	Yes

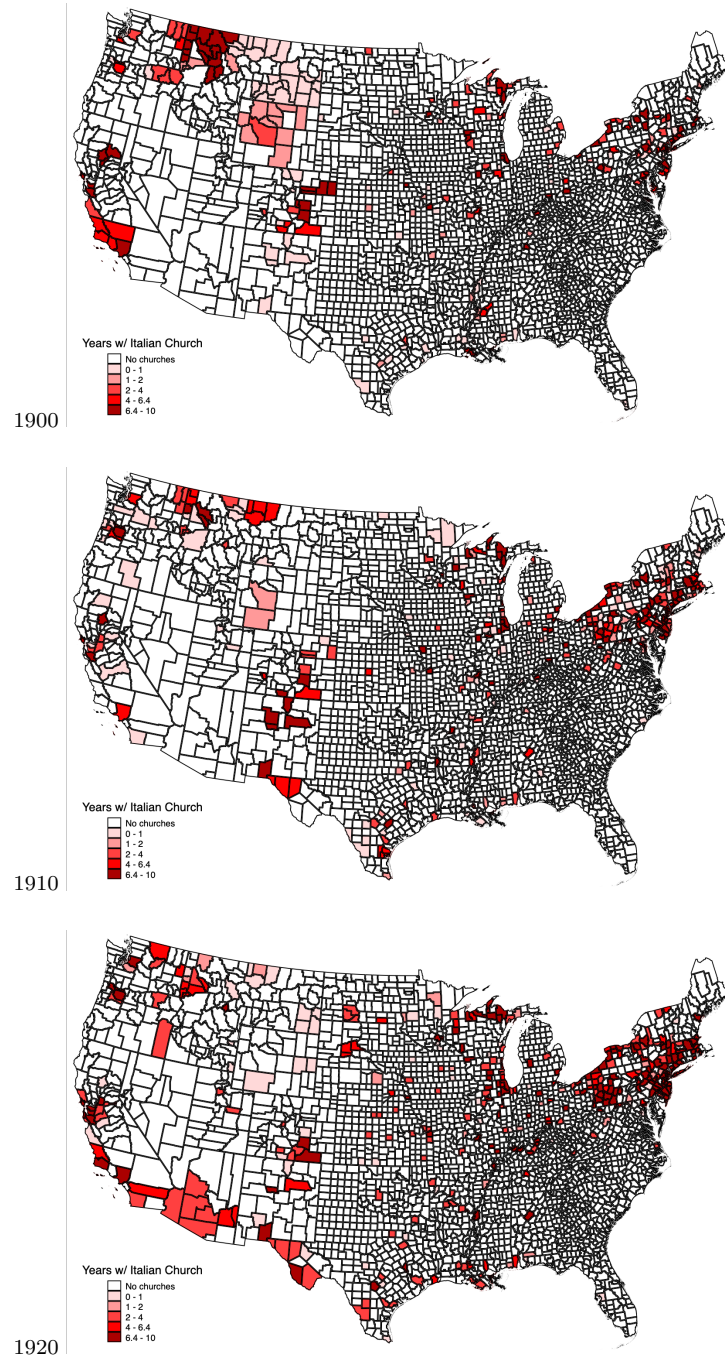
Notes: The sample includes first-generation Italian immigrants of age 10 to 14. In columns 1-3, the dependent variable is a dummy (multiplied by 100) equal to one if the individual is able to speak English. In columns 4-6, the dependent variable is a dummy (multiplied by 100) equal to one if the individual is able to read and write. *English laws* is a dummy equal to one if the individual lives in a county belonging to a state with the requirement to teach (also) in English at the time of the Census year. The data comes from Edwards (1923). *Presence of School* is a dummy equal to one if the individual lives in a county that had at least one parochial school annexed to the Catholic parish for a number of years above the national median in the decade. The table estimates the same specification reported in column 2 of Table 2. See notes to Tables 1 and 2 for the description of controls. Standard errors, clustered at the county level, in parentheses. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Figure 1. Italian Immigrants over County Population, by Decade



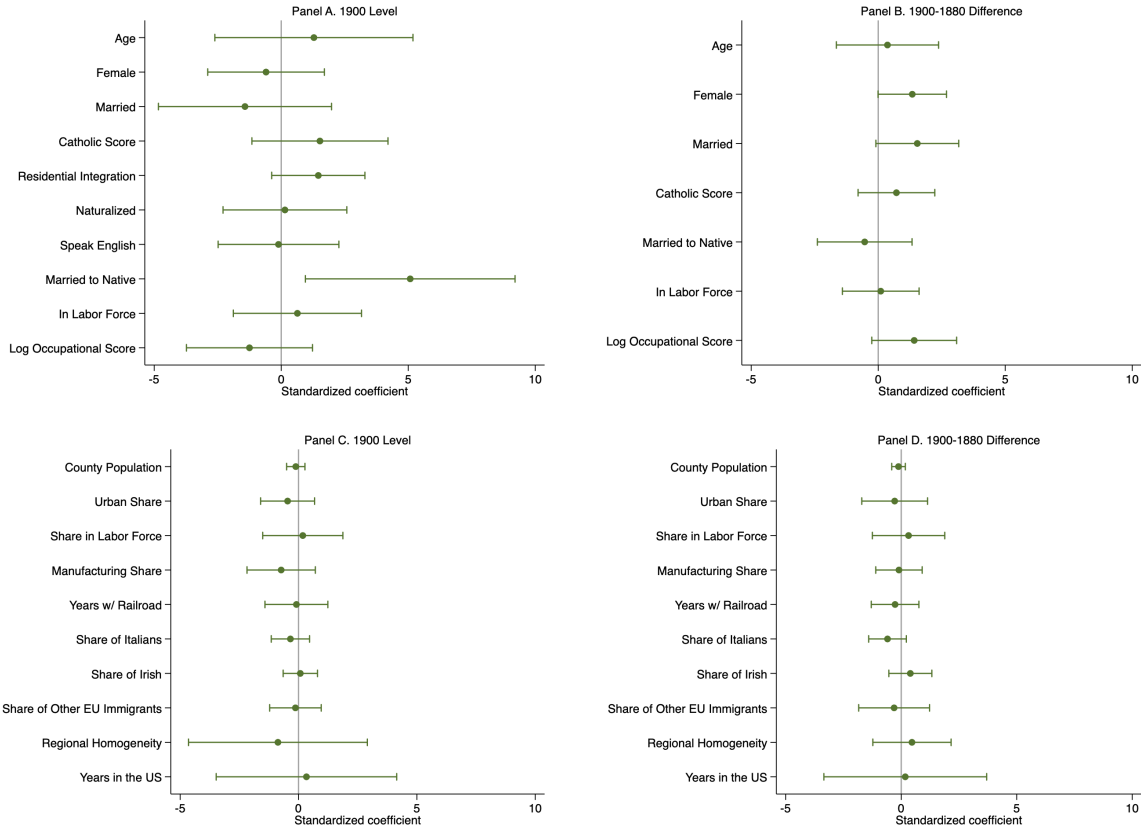
Notes: The figure plots the share of (first-generation) Italian immigrants relative to total county population in each Census year. County boundaries are fixed to 1930 using the procedure in Perlman (2016). *Source:* Authors' calculation from Ruggles et al. (2020).

Figure 2. Italian Catholic Churches



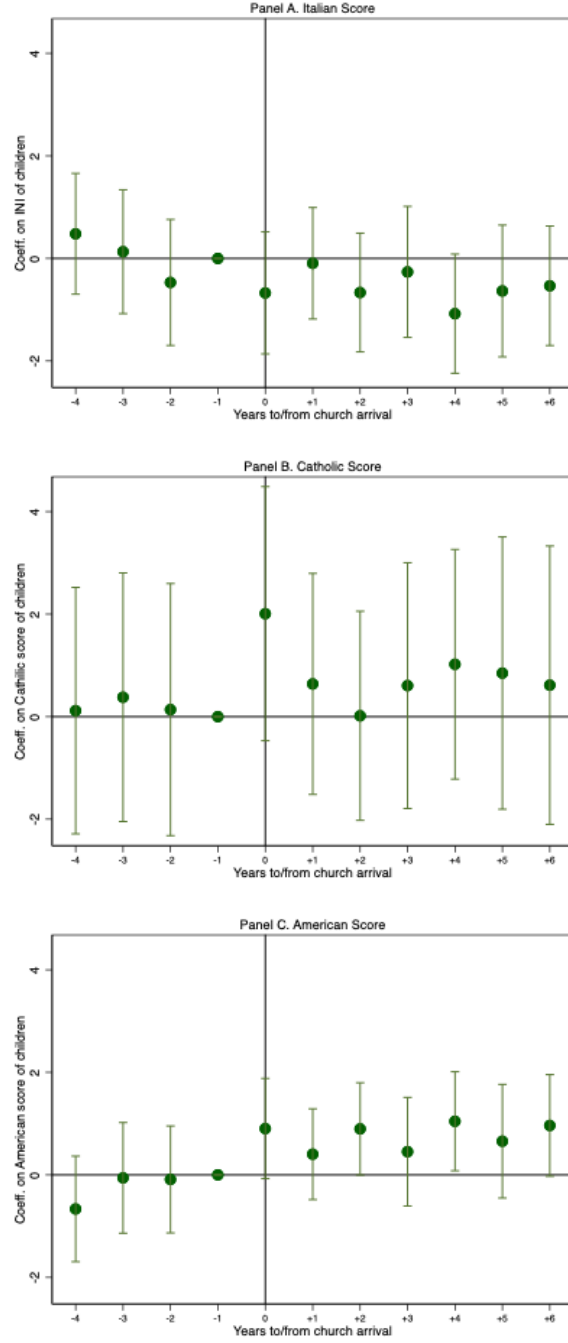
Notes: The figure plots the number of years with at least one Italian Catholic church (*Years w/ Italian Church*) during the ten years prior to each Census year. A church is defined as “Italian” if at least one of the following two conditions is met: *i*) it is an Italian national church; *ii*) the church has at least one Italian priest. See also Section 3. County boundaries are fixed to 1930 using the procedure in Perlman (2016). *Source:* Authors’ calculation from the *The Official Catholic Directory*.

Figure 3. Balance Test



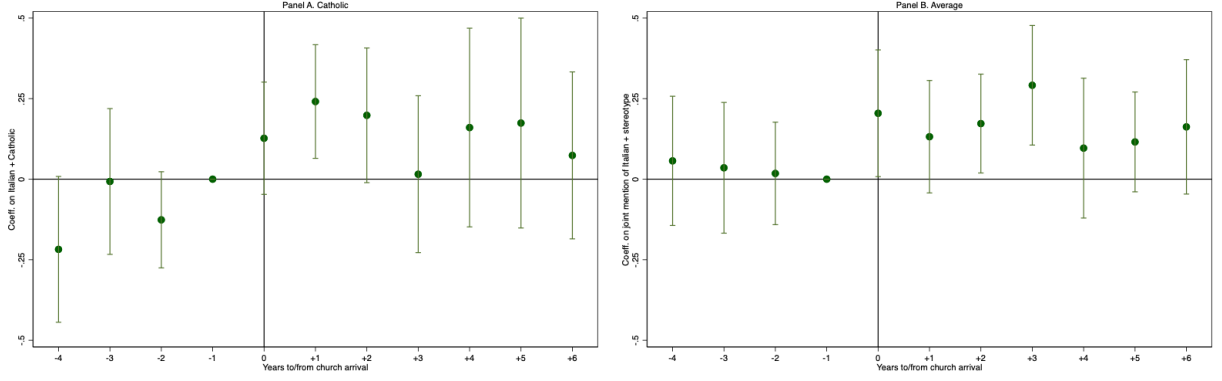
Notes: The figure plots the coefficient, with 95% confidence intervals, of a separate regression of each variable listed on the vertical axis on the *Years w/ Italian Church*, which is the number of years with at least one Italian Catholic church in the county during the ten years before a Census. The sample includes counties that received at least one Italian Catholic church between 1890 and 1920, and with at least one first-generation Italian immigrant, for decades 1900, 1910, and 1920. In Panels A and C the independent variable is the 1900 level, while in Panels B and D the independent variable is the 1900-1880 change. All regressions control for state-specific year fixed effects, county fixed effects and county-specific linear trends. All regressions are weighed by number of individuals included in the analysis reported in Tables 1 and 2. Standard errors clustered at the county level.

Figure 4. Naming Patterns of Italian Children



Notes: The figure plots the coefficient, with 95% confidence intervals, on leads and lags of a dummy equal to one for the entry of an Italian Catholic church in each county-(calendar) year. The sample is restricted to US born children (0-10) with Italian immigrant parents living in counties that experience the first church arrival over the 1890-1920 period, conditional on having no churches between 1880 and 1890. The dependent variable is *i*) the Italian score (Italian Name Index, INI) in Panel A, *ii*) a dummy, multiplied by 100, for being named after a Catholic saint in Panel B, and *iii*) the American score (American Name Index, ANI) in Panel C. Regressions include all controls listed in column 4 of Table 1, and the following additional variables: household fixed effects; birth year by gender, state of birth, and birth order fixed effects for the child. The vertical black line refers to the arrival of the church in the county. Standard errors clustered at the county level.

Figure 5. Relative Frequency of Anti-Italian Terms in the Press



Notes: The figure plots the coefficient, with 95% confidence intervals, on leads and lags of a dummy equal to one for the entry of an Italian Catholic church in each county-(calendar) year. The dependent variable is the average frequency of joint mentions of the root of the word “Italian” and: *i*) the word “Catholic”, in local newspapers of a county in a calendar year; *ii*) the average mention of the words “Crime”, “Lazy”, “Mafia”, and “Violent” in Panel B, scaled by the number of occurrences of the stereotypical keyword, in local newspapers of a county in a calendar year. The regression includes county fixed effects and state by year fixed effects and all county controls described in the notes of Table 1. The vertical black line refers to the arrival of the church in the county. Standard errors are clustered at the county level.

Additional Material

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A Appendix – Additional Tables and Figures

Table A.1. Summary Statistics

	Mean	Std. Dev.	Min	Median	Max	Obs.
Panel A. Main Variables						
Years w/ Italian Church	5.900	3.872	0	7	10	3,159,582
<i>Main Individual Level Outcomes</i>						
Married to Native	1.120	10.523	0	0	100	2,157,151
Residential Integration	20.971	40.71	0	0	100	1,092,446
Naturalized	32.710	46.915	0	0	100	1,453,966
Speak English	61.035	48.767	0	100	100	3,159,582
Log Occupational Score	1.975	2.712	-4.605	2.996	4.382	1,845,522
In Labor Force	94.048	23.659	0	100	100	1,962,346
Italian Name Index	66.391	29.927	0	74.661	100	343,198
Catholic Score	45.235	49.773	0	0	100	343,198
American Name Index	31.814	25.305	0	28.127	100	343,198
<i>Main Household Level Outcomes</i>						
Number of Children	1.793	2.170	0	1	9	3,159,582
Panel B. Main County Level Characteristics						
Black Share	0.035	0.072	0	0.017	0.945	3,159,582
Catholic Population Share (1890)	0.007	0.013	0	0	0.041	3,159,582
County Population	767,120	802,687	97	422,100	3,022,912	3,159,582
Immigrant Share	0.272	0.108	0	0.282	0.540	3,159,582
Irish Immigrant Share	0.033	0.025	0	0.027	0.121	3,159,582
Italian Immigrant Share	0.043	0.025	0	0.041	0.129	3,159,582
Italians' Regional Homogeneity	0.093	0.022	0.069	0.089	1	2,951,209
Italians' Religiosity	45.232	6.606	0	46.153	100	3,159,582
Other Europeans Immigrant Share	0.196	0.079	0	0.199	0.537	3,159,582
Share Native Men 15-64 in Labor Force	0.876	0.047	0	0.893	0.964	3,159,582
Share Native Men 15-64 in Manufacturing	0.158	0.072	0	0.155	0.473	3,159,582
Urban Share	0.776	0.282	0	0.912	1	3,159,582
Years w/ Railroad	53.219	21.667	0	60	70	3,159,582
Years w/ non-Italian Church	6.985	3.371	0	8	10	3,159,582
Panel C. Additional Individual Characteristics						
Age	34.925	12.694	15	33	133	3,159,582
In Manufacturing	18.972	39.208	0	0	100	1,962,346
Literacy	64.163	47.952	0	100	100	3,159,582
Male	63.568	48.124	0	100	100	3,159,582
Married	68.277	46.540	0	100	100	3,159,582
Married to Italian	91.955	27.198	0	100	100	1,889,993
Years in the US	12.205	9.059	0	10	90	3,159,582

Notes: The main sample includes all counties with at least one first-generation Italian immigrant, for decades 1900, 1910, and 1920. *Years w/ Italian Church* is the number of years with at least one Italian Catholic church in the county over the ten years before a Census. For a description of the rest of the variables, see Tables C.1 and C.2. In this table, *Italian Immigrant Share* refers to the actual Italian immigrant population share. The characteristics of Italian immigrants in Panel C are restricted to individuals 15+ (in the case of *In Manufacturing*, we further restrict to men 15-64). The number of observations is different for *Married to Native* than for *Married to Italian*, because the exact country of birth of the spouse is not always available.

Table A.2. Intermarriage: Alternative Samples and Definitions

	Dep. Variable: Married to Native				
	(1)	(2)	(3)	(4)	(5)
	Baseline	Unrestricted	1900-1910 Only	Unmarried in Italy	Married in Italy
Years w/ Italian Church	-0.099*** (0.013)	-0.086*** (0.010)	-0.125*** (0.014)	-0.182*** (0.031)	0.002 (0.007)
Mean Treatment	6.889	6.470	5.573	7.049	4.945
Mean Dep. Variable (1900)	0.807	0.536	0.806	1.872	0.167
Observations	1,988,957	2,880,990	966,106	376,214	549,777
State \times Decade FEs	Yes	Yes	Yes	Yes	Yes
County FEs	Yes	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes
County Controls \times Decade	Yes	Yes	Yes	Yes	Yes
County Linear Trends	Yes	Yes	Yes	Yes	Yes
Ever Treated	Yes	Yes	Yes	Yes	Yes

Notes: The table replicates the specification in column 4 of Table 1, Panel A. The baseline specification is reported in column 1; Column 2 replicates column 1, including first-generation Italian immigrants who were not married; column 3 replicates column 1 focusing on 1900 and 1910 only; column 4 (resp., column 5) replicates column 3 restricting attention to first-generation Italian immigrants who were not married at the time of arrival in the US (resp., who were married at the time of arrival in the US). See notes to Tables 1 and 2 and for the description of controls. Standard errors, clustered at the county level, in parentheses. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.3. Economic Assimilation, by Age

	(1)	(2)	(3)	(4)	(5)
Panel A.	Dep. Variable: In Labor Force				
Years w/ Italian Church	0.473*** (0.142)	0.124* (0.066)	0.196*** (0.068)	0.065 (0.054)	0.363*** (0.092)
Mean Treatment	4.796	5.104	6.096	6.870	7.471
Mean Dep. Variable (1900)	77.83	86.62	87.33	87.42	85.08
Observations	169,508	333,235	482,179	444,278	330,392
Panel B.	Dep. Variable: Log Occupational Score				
Years w/ Italian Church	-0.004 (0.007)	-0.014** (0.005)	-0.016*** (0.005)	-0.017*** (0.005)	-0.002 (0.006)
Mean Treatment	4.633	5.123	6.135	6.905	7.499
Mean Dep. Variable (1900)	3.017	3.047	3.072	3.089	3.096
Observations	139,081	318,944	464,794	427,630	303,569
Age	15-20	21-26	27-34	35-44	45-64
State \times Decade FEs	Yes	Yes	Yes	Yes	Yes
County FEs	Yes	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes
County Controls \times Decade	Yes	Yes	Yes	Yes	Yes
County Linear Trends	Yes	Yes	Yes	Yes	Yes
Ever Treated	Yes	Yes	Yes	Yes	Yes

Notes: The table replicates the specification in columns 3 and 4 of Table 2 in Panels A and B, respectively. The sample is restricted to first generation Italian men between: *i*) 15 and 20 in column 1; *ii*) 21 and 26 in column 2; *iii*) 27 and 34 in column 3; *iv*) 35 and 44 in column 4; and, *v*) 45 and 64 in column 5. See notes to Tables 1 and 2 for the description of controls. Standard errors, clustered at the county level, in parentheses. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.4. Additional Economic Outcomes

	(1)	(2)	(3)	(4)
Dep. Variable:	Literacy	In Manufacturing	Unskilled	Italian Occ. Index
Years w/ Italian Church	0.034 (0.117)	0.262** (0.104)	0.241* (0.141)	0.031** (0.013)
Mean Treatment	6.236	6.236	6.236	6.116
Mean Dep. Variable (1900)	59.90	11.68	60.40	4.136
Observations	1,759,709	1,759,709	1,759,709	1,411,005
State \times Decade FEs	Yes	Yes	Yes	Yes
County FEs	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes
County Controls \times Decade	Yes	Yes	Yes	Yes
County Linear Trends	Yes	Yes	Yes	Yes
Ever Treated	Yes	Yes	Yes	Yes

Notes: The table replicates the specification in column 3 of Table 2. The sample is restricted to first generation Italian men 15-64. The dependent variable is a dummy equal to 1 (multiplied by 100) for being: *i*) literate (column 1); *ii*) unskilled (column 2); *iii*) in manufacturing (column 3). *Italian Occ. Index* in column 4 is an occupation-specific index calculated as the share of Italian men in the labor force holding a specific occupation (relative to all Italians holding a gainful occupation) scaled by the same share for non-Italian men. This variable is defined for individuals who reported an occupation that was classified by the Census as of 1900. Individuals in the labor force but with a “non-classified” occupation are excluded from the analysis for this variable, explaining why the number of observations in column 4 is lower than in previous columns. See notes to Tables 1 and 2 for the description of controls. Standard errors, clustered at the county level, in parentheses. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.5. Baseline Results: Linked Sample

	(1)	(2)	(3)	(4)	(5)	(6)
Dep. Variable:	Married to Native	Residential Integration	Naturalized	Speak English	In Labor Force	Log Occ. Score
Years w/ Italian Church	-0.143*** (0.052)	-0.551*** (0.184)	-1.039* (0.540)	-0.051 (0.209)	0.015 (0.089)	-0.011 (0.007)
Mean Treatment	6.507	6.733	7.250	5.910	5.902	5.928
Mean Dep. Variable (1900)	1.846	17.17	61.45	73.52	85.93	3.117
Observations	84,750	74,581	87,135	130,067	129,181	120,050
State \times Decade FEs	Yes	Yes	Yes	Yes	Yes	Yes
County FEs	Yes	Yes	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
County Controls \times Decade	Yes	Yes	Yes	Yes	Yes	Yes
County Linear Trends	Yes	Yes	Yes	Yes	Yes	Yes
Ever Treated	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The table replicates column 4 of Table 1 and Table 2 considering first-generation Italian immigrant men in the linked dataset made available by Abramitzky et al. (2020b) that could be observed in at least two consecutive Census years between 1900 and 1920. See notes to Tables 1 and 2 for the description of controls. We dropped all the religious workers. All county controls and fixed effects refer to the county of origin of the individual. Standard errors, clustered at the county level, in parentheses. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.6. Church Exposure and Selected Migration: Main Assimilation Outcomes

	(1)	(2)	(3)	(4)	(5)	(6)
Dep. Variable:	Married to Native	Residential Integration	Naturalized	Speak English	In Labor Force	Log Occ. Score
Panel A.	In-migrants					
1[In-migrant]	-1.645*** (0.589)	-3.925** (1.569)	-3.700*** (1.175)	-3.319*** (0.931)	0.201 (0.559)	0.024 (0.044)
Mean Treatment	0.303	0.273	0.297	0.375	0.378	0.378
S.d. Treatment	0.460	0.446	0.457	0.484	0.485	0.485
Mean Dep. Variable (1900)	7.700	49.96	66.02	75.39	85.16	3.043
Observations	8,245	7,107	9,296	14,343	14,173	13,091
Panel B.	Out-migrants					
1[Out-migrant]	0.017 (0.241)	-0.290 (0.798)	-2.737*** (0.701)	-2.851*** (0.843)	-0.645 (0.492)	0.005 (0.029)
Mean Treatment	0.0322	0.0299	0.0343	0.0410	0.0411	0.0405
S.d. Treatment	0.177	0.170	0.182	0.198	0.198	0.197
Mean Dep. Variable (1900)	1.569	14	61.09	73.46	86.01	3.120
Observations	78,718	69,418	80,776	120,321	119,506	111,335
State \times Decade FEs	Yes	Yes	Yes	Yes	Yes	Yes
County FEs	Yes	Yes	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
County Controls \times Decade	Yes	Yes	Yes	Yes	Yes	Yes
County Linear Trends	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The sample includes first-generation Italian immigrant men in the linked dataset made available by Abramitzky et al. (2020b) that could be observed in at least two consecutive Census years between 1900 and 1920. It further restricts attention to individuals who, as of Census year τ , lived in a county that: did not have any Italian church between Census years τ and $\tau - 1$; and, did not receive any church between Census years τ and $\tau + 1$. The variable $1[In-migrant]$ (resp., $1[Out-migrant]$) is a dummy equal to one if, between Census years τ and $\tau + 1$, the individual moved from the county of origin to a county that received an Italian Catholic church during that decade (resp., to a county without an Italian Catholic church in that decade). See notes to Tables 1 and 2 for the description of controls. All county controls and fixed effects refer to the county of origin of the individual. Standard errors, clustered at the county level, in parentheses. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.7. Church Exposure and Selected Migration: Additional Outcomes

	(1)	(2)	(3)	(4)	(5)
Dep. Variable:	Literacy	Italian Occ. Score	Prestigious Occupation	Authority Position	Religious Worker
Panel A.	In-migrants				
1[In-migrant]	-3.797*** (0.811)	0.153*** (0.057)	-0.056 (0.040)	-0.019 (0.055)	0.055 (0.070)
Mean Treatment	0.375	0.378	0.378	0.378	0.378
S.d. Treatment	0.484	0.485	0.485	0.485	0.485
Mean Dep. Variable (1900)	71.50	2.675	0	0.0774	0.0967
Observations	14,343	12,012	14,173	14,173	14,188
Panel B.	Out-migrants				
1[Out-migrant]	-1.923*** (0.683)	0.323** (0.139)	-0.041 (0.071)	-0.061* (0.034)	-0.041 (0.046)
Mean Treatment	0.0410	0.0419	0.0411	0.0411	0.0411
S.d. Treatment	0.198	0.200	0.198	0.198	0.198
Mean Dep. Variable (1900)	67.84	4.653	0.239	0.144	0.0927
Observations	120,321	97,708	119,506	119,506	119,622
State \times Decade FEs	Yes	Yes	Yes	Yes	Yes
County FEs	Yes	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes
County Controls \times Decade	Yes	Yes	Yes	Yes	Yes
County Linear Trends	Yes	Yes	Yes	Yes	Yes

Notes: The sample includes first-generation Italian immigrant men in the linked dataset made available by Abramitzky et al. (2020b) that could be observed in at least two consecutive Census years between 1900 and 1920. It further restricts attention to individuals who, as of Census year τ , lived in a county that: did not have any Italian church between Census years τ and $\tau - 1$; and, did not receive any church between Census years τ and $\tau + 1$. The variable *1[In-migrant]* (resp., *1[Out-migrant]*) is a dummy equal to one if, between Census years τ and $\tau + 1$, the individual moved from the county of origin to a county that received an Italian Catholic church during that decade (resp., to a county without an Italian Catholic church in that decade). *Religious Worker* is a dummy for being either a religious worker (OCC1950=78) or a clergymen (OCC1950=9). *Prestigious Occupation* is a dummy for holding any of the following jobs: education worker (OCC1950=93, 29), doctor (OCC1950=75, 32), journalist (OCC1950=36). *Authority Position* is a dummy for: being lawyer or judge (OCC1950=55), working in law enforcement (OCC1950=771, 773, 782), or working in public administration (OCC1950=250). See notes to Tables 1 and 2 for the description of controls. All county controls and fixed effects refer to the county of origin of the individual. Standard errors, clustered at the county level, in parentheses. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.8. Baseline Results: Stayers

	(1)	(2)	(3)	(4)	(5)	(6)
Dep. Variable:	Married to Native	Residential Integration	Naturalized	Speak English	In Labor Force	Log Occ. Score
Years w/ Italian Church	-0.121* (0.065)	-0.510*** (0.195)	-0.617** (0.289)	-0.135 (0.288)	-0.125 (0.133)	-0.018** (0.008)
Mean Treatment	7.903	7.957	8.122	7.775	7.757	7.812
Mean Dep. Variable (1900)	2.283	20.04	65.43	78.88	85.77	3.137
Observations	81,505	77,994	94,222	105,933	101,933	94,777
State \times Decade FEs	Yes	Yes	Yes	Yes	Yes	Yes
County FEs	Yes	Yes	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
County Controls \times Decade	Yes	Yes	Yes	Yes	Yes	Yes
County Linear Trends	Yes	Yes	Yes	Yes	Yes	Yes
Ever Treated	Yes	Yes	Yes	Yes	Yes	Yes

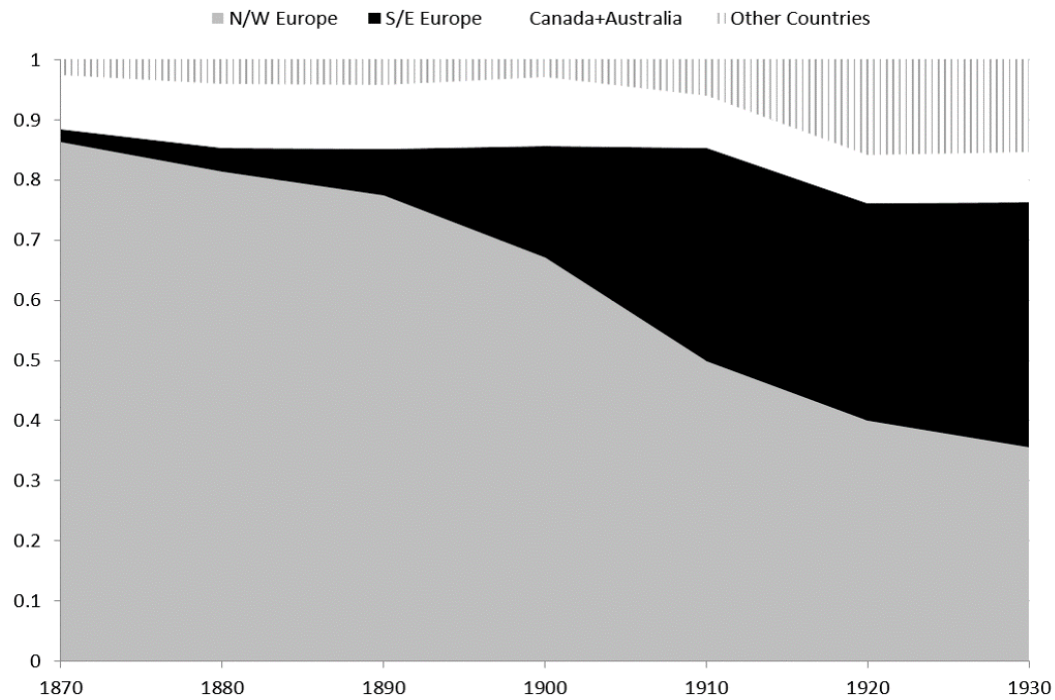
Notes: The table replicates column 4 of Table 1 and Table 2 restricting attention to first-generation Italian immigrant men stayers in the linked dataset made available by Abramitzky et al. (2020b) that could be observed in at least two consecutive Census years between 1900 and 1920, and who were living in the same county both at the beginning and at the end of a decade. See notes to Tables 1 and 2 for the description of controls. All county controls and fixed effects refer to the county of origin of the individual. Standard errors, clustered at the county level, in parentheses. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.9. Baseline Results: Newspapers Sample

	(1)	(2)	(3)	(4)	(5)	(6)
Dep. Variable:	Married to Native	Residential Integration	Naturalized	Speak English	In Labor Force	Log Occ. Score
Years w/ Italian Church	-0.107*** (0.015)	-0.513*** (0.104)	-0.764*** (0.279)	-0.106 (0.162)	0.141** (0.055)	-0.010** (0.005)
Mean Treatment	7.001	7.516	7.614	6.589	6.365	6.380
Mean Dep. Variable (1900)	0.784	15.33	53.49	58.10	85.34	3.084
Observations	1,907,910	967,698	1,269,354	2,757,691	1,677,365	1,581,976
State \times Decade FEs	Yes	Yes	Yes	Yes	Yes	Yes
County FEs	Yes	Yes	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
County Controls \times Decade	Yes	Yes	Yes	Yes	Yes	Yes
County Linear Trends	Yes	Yes	Yes	Yes	Yes	Yes
Ever Treated	Yes	Yes	Yes	Yes	Yes	Yes

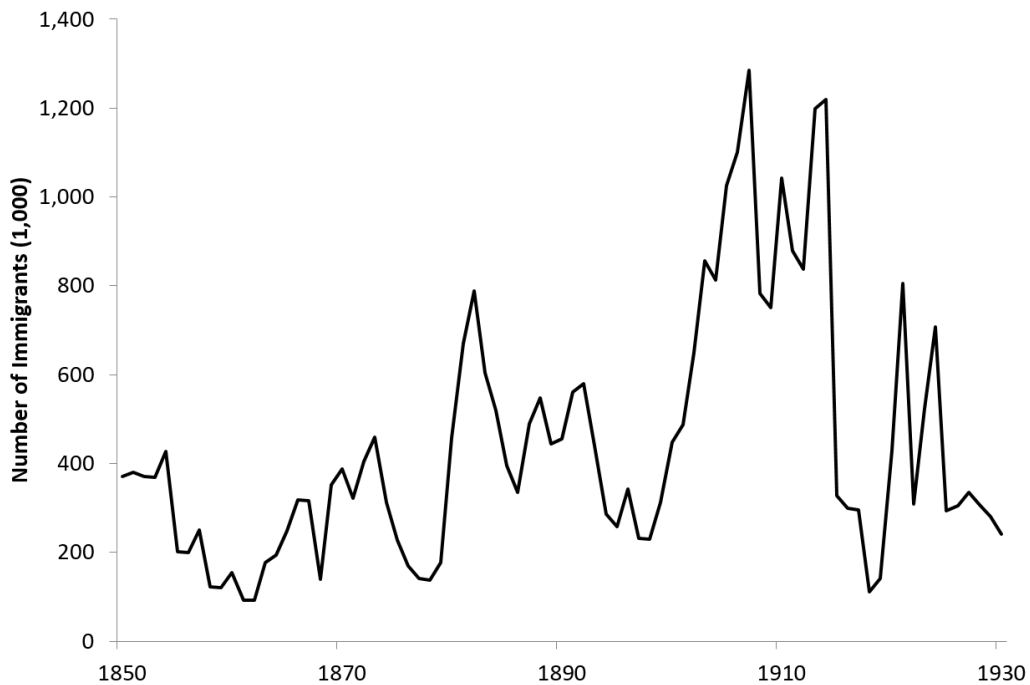
Notes: The table replicates column 4 of Table 1 and Table 2 restricting attention to individuals living in counties for which newspapers data are available. See notes to Tables 1 and 2 for the description of controls. Standard errors, clustered at the county level, in parentheses. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Figure A.1. Immigrants by Region of Origin and Decade



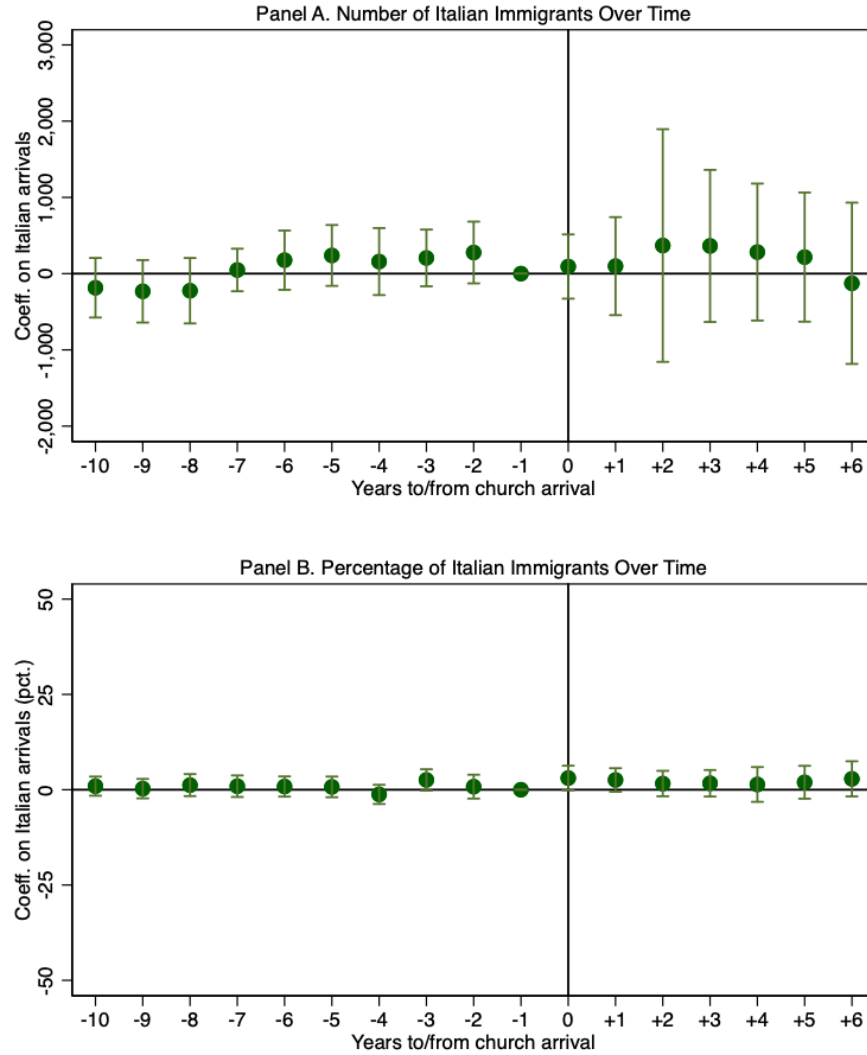
Notes: Share of immigrants (relative to the total foreign born population) living in the United States, by sending region and by decade. Source: Authors' calculations from Ruggles et al. (2020).

Figure A.2. Total Number of Immigrants (in Thousands)



Notes: Annual inflow of immigrants to the United States (1850-1930). Source: Adapted from Tabellini (2020).

Figure A.3. Italian Immigrants Over Time



Notes: The figure plots the coefficient, with 95% confidence intervals, on leads and lags of a dummy equal to one for the entry of an Italian Catholic church in each county-(calendar) year. The dependent variable is the predicted number of Italian arrivals in each county-(calendar) year in Panel A, and the predicted number of Italian arrivals in each county-(calendar) year scaled by 1900 Italian county population in Panel B (see Section 4.3 for more details). The sample is restricted to the first church arrival in the county over the 1890-1920 period, conditional on having no churches between 1880 and 1890. The regression includes all controls listed in column 4 of Table 1, except for individual characteristics and the predicted fraction of Italians. The vertical black line refers to the arrival of the church in the county. Standard errors are clustered at the county level.

B Appendix – Robustness

In Section 4.3, we already presented several exercises to corroborate the validity of our empirical strategy. In what follows, we describe additional robustness checks.

Excluding church exits. We begin by considering the possibility that church exits might be endogenously determined by trends in assimilation of Italians within a given county. Although we lack a direct strategy to address this issue, in Panel A of Table B.1, we replicate our preferred DD specification by focusing on a sample of counties with at least one church entry but no exits within the decade. Reassuringly, results are unchanged. The fact that results are similar when considering only entries – but not exits – needs not be surprising. For one, even after a formal exit, the very same church may have remained open, even though it was no longer (formally) Italian. As long as the Italian community still represented the majority of that church, the fact that the church was not run by an Italian clergy anymore did not undo the mechanisms described in Section 6. Relatedly, even after the physical disappearance of a church, its legacy may have remained both within the Italian community and among natives (e.g., in the form of persistent negative stereotypes).

Heterogeneous effects in DD designs. Next, we address recent concerns on DD settings with staggered treatment adoption. Specifically, de Chaisemartin and D’Haultfoeuille (2020) and Goodman-Bacon (2021), among others, have shown that in any two-way fixed effects estimate of DD already-treated units are kept as controls – something that might introduce bias in the presence of heterogeneous effects across groups experiencing treatment at different points in time. More generally, it can be shown that the two-way fixed effects estimate is a weighted sum of the average treatment effects (ATE) in each group and period, with weights that may be negative (in which case, for example, the estimated coefficient may be negative while all the ATEs are positive). As explained in the main text, our setting is further complicated by the fact that we observe multiple church entries and exits within the same decade. To tackle this issue, we re-frame our exercise into a staggered adoption setting by focusing on first church arrivals.

We follow Cengiz et al. (2019) and Deshpande and Yue (2019) by using a stacked-by-event strategy, creating separate datasets where counties with a first church arrival in a Census year are considered treated, while counties that would eventually experience a first church arrival in following decades serve as controls.⁵⁸ In this setting, event-time dummies are specified relative to the specific year of treatment for that cohort. We then append all datasets to create a unique panel, and estimate our preferred DD specification. Results, reported in Panel B of Table B.1, verify that all coefficients are robust to this approach.

⁵⁸Estimates are not sensitive to the inclusion of never-treated counties.

Robustness to sample definitions. Figure 3 reduces concerns that the timing of church arrival might be systematically related to either the size or the growth of the Italian population before 1900. Moreover, in the analysis we control for the (predicted) Italian population share in each county-decade.⁵⁹ However, one may still be worried that areas with particularly large Italian enclaves may be driving our results. We tackle this concern in three ways. First, in Table B.2, we replicate the baseline specification omitting counties that had a 1900 Italian population share in the top 1% (Panel A) and 5% (Panel B) of the distribution, respectively. Coefficients for naturalization and labor force participation become smaller in magnitude (in absolute value) and are no longer statistically significant in Panel B. Reassuringly, though, they remain in line with those from the full sample, and all other results are unchanged.

Second, in Table B.3, we explore whether results are robust to dropping each US Census division at the time. In Panel A, we replicate the baseline excluding the Northeast. Since many Italians lived in this region, the sample becomes three times smaller, and coefficients are less precisely estimated. Despite the drop in sample size, the effects of Italian churches on both intermarriage and residential integration remain negative and statistically significant. For all other outcomes, except for naturalization, even though coefficients are no longer statistically significant, results remain in line with those from the full sample. Subsequent panels verify that our estimates are not affected by the exclusion of other regions.

Finally, in Figures B.1 and B.2, we replicate the analysis dropping each state at the time (reporting results for the full sample in the first dot from the left).⁶⁰ In almost all cases, results are statistically significant and quantitatively close to those from the full sample. The only notable exceptions are naturalization rates (Figure B.1, Panel C) and labor force participation (Figure B.2, Panel A): when excluding the state of New York, coefficients become closer to zero and are no longer statistically significant. These patterns may not be overly surprising, given how important political machines (Tammany Hall, in particular) were in the state of New York (Reid Jr and Kurth, 1992; Menes, 1999).⁶¹

Summing up, even though in some cases results become less precisely estimated, the evidence provided here indicates that our findings are unlikely to be driven by specific counties. **Controlling for Italians in influential occupations.** In our preferred specification, we control for three factors (interacted with year fixed effects) that might have influenced both the assimilation trajectory of Italians and the timing of church entry: the homogeneity, the

⁵⁹Results, not reported for brevity, are unchanged when controlling for actual Italian population.

⁶⁰To ease visualizations, we report coefficients and confidence interval bars in red when excluding the 5 states with the largest Italian population in 1900. The top 5 states ranked by the size of the Italian population in 1900 are: New York, Pennsylvania, New Jersey, Massachusetts, and Illinois. In the figures below, we order states using IPUMS codes, implying that the 5 red dots refer to: Illinois, Massachusetts, New Jersey, New York, and Pennsylvania.

⁶¹As discussed also in the main text, political machines often exchanged “patronage jobs” for votes. This might explain why both the coefficient for labor force participation and the coefficient for naturalization rates drop when excluding New York state.

affluence, and the religiosity of the Italian community. Despite these controls (and the set of fixed effects and other variables included in the analysis), one may still be worried that the presence of Italians in prestigious or influential occupations facilitated the entry of churches while also shaping the assimilation of members of the Italian enclave.

In Table B.4, we tackle this concern in two ways. First, we interact year dummies with dummies equal to one if, in 1900, the county had at least one (first generation) Italian man holding “influential” or “prestigious” occupations (Panel A). We define such occupations as: *i*) judges, lawyers, or public administration workers; *ii*) teachers or journalists.⁶² Second, we interact year dummies with the share of Italian men 15-64 in the labor force holding any of the occupations in *i*) and *ii*) (Panel B). In both cases, results remain very similar to those from the baseline specification.⁶³

Definition of “exposure”. In our baseline specification, we focused on the number of years a church was present in the county of residence of the individual in the previous decade. It is however possible that results vary as a church is present in a county for longer. In Table B.5, we explore the robustness of our results to defining exposure over different time horizons. In particular, we define exposure as the number of years a church was present in the county over the previous 20 (Panel A) and 30 (Panel B) years.⁶⁴ In particular, for each Italian individual residing in a county in each of the three Census years, 1900, 1910, and 1920, we count the number of years a church was present in the county over the previous two (Panel A) and three (Panel B) decades, respectively.

Two remarks are in order. First, as for our baseline strategy, if an individual entered the United States after the church was opened in her county of residence in a given Census year, we calculate exposure as the number of years between year of arrival and the Census year. Second, and again as in the baseline strategy, we are implicitly assuming that the individual always lived in the county where she resided at the time of the Census.⁶⁵

With these caveats in mind, Table B.5 replicates our preferred specification, and verifies that results remain similar to those in our baseline specification. The only difference is that the coefficient for naturalization (column 3) is no longer statistically significant at conventional levels. Moreover, and not surprisingly, the magnitude of coefficients is smaller than in the main text. This can be either because the effects of Italian churches tend to gradually fade away or because of measurement error, which increases over time of exposure (or both). Finally, in Panel C, we run a horse race between the three measures of exposure

⁶²To classify occupations, we use the OCC1950 variable available from IPUMS. See notes to Table B.4 for more details.

⁶³The number of observations in Panel B is lower than in Panel A because in a few counties there were no Italian men in the labor force in 1900.

⁶⁴Since we are unable to measure exposure to Italian Catholic churches after 1920, we cap exposure to at most three decades.

⁶⁵The longer the period of exposure, the less likely this assumption is to hold, possibly introducing noise in the measurement of exposure over multiple decades.

– one, two, and three decades. Reassuringly, results remain similar to those in the main text. Most importantly for our analysis, both the size and the precision of coefficients on exposure over the previous decade are similar to those in the baseline specification (except for the point estimate for naturalization, which becomes larger, in absolute value).

Controlling for economic growth. In this paragraph, we deal with the possibility that Italian Catholic churches may have been selectively opening (earlier or later) in counties that were experiencing faster or slower economic growth. We proxy for the latter by constructing a measure of predicted growth using a Bartik approach, as in Sequeira et al. (2020). Specifically, we interact the 1900 employment share in each 3-digit industry in the county with the decadal national growth in that industry, and we then aggregate this over all industries within the same county (in each decade). We then augment the baseline specification with this additional control, reporting results in Table B.6. Reassuringly, all our estimates remain very close to those from our preferred specification.

Controlling for 1900 intermarriage. In Section 4.3, we conducted a battery of balance tests to examine the relationship between the timing of church entry and both county characteristics and the assimilation of Italians (both in levels and in changes). Figure 3 documents that there is a positive and statistically significant correlation between church entry and the 1900 average intermarriage rate between Italians and natives of native parentage (Panel A). Although such relationship disappears when considering the 1880-1900 change in intermarriage (Panel B), one may be worried that our results are nonetheless spuriously influenced by churches arriving earlier in counties where Italians were more likely to marry with natives. To address this concern, in Table B.7, we replicate the baseline specification by interacting Census year dummies with the 1900 average intermarriage rate. Reassuringly, all results remain unchanged.

Accounting for geographic spillovers. One additional concern is that the arrival of a church in a county might generate spillovers to neighboring counties. To address this issue, in Table B.8, we augment the baseline specification by controlling for average church exposure in other counties within: *i*) the diocese (Panel A); *ii*) the commuting zone (Panel B); and, *iii*) the state (Panel C).⁶⁶ Also in this case, results are in line with those from the baseline specification. A related concern is that the error term might be correlated across counties. For this reason, in Table B.9, we verify that the precision of results is unaffected when clustering standard errors at: *i*) the diocese (Panel A); *ii*) the commuting zone (Panel B); and, *iii*) the state level (Panel C).

Including second generation Italians. Our baseline sample only includes first generation

⁶⁶In all cases, when computing the average exposure in the relevant geographic unit, we omit exposure to churches in own county. Results are unchanged when defining average exposure using population or area weights. Results are also similar when controlling for average exposure in adjacent counties.

Italians, i.e., individuals born in Italy. In Table B.10, we verify that results are unchanged when including in the sample also second generation Italian immigrants, i.e., individuals born in the US from parents who were both born in Italy.⁶⁷

⁶⁷Since individuals born in the United States were automatically granted citizenship, the sample in column 3 is identical to that in the baseline specification.

Table B.1. Robustness of DD Strategy

	(1)	(2)	(3)	(4)	(5)	(6)
Dep. Variable:	Married to Native	Residential Integration	Naturalized	Speak English	In Labor Force	Log Occ. Score
Panel A.	Excluding Exits					
Years w/ Italian Church	-0.125*** (0.018)	-0.570*** (0.120)	-1.181*** (0.407)	-0.086 (0.179)	0.124* (0.067)	-0.017*** (0.004)
Mean Treatment	7.357	7.900	8.062	6.916	6.686	6.719
Mean Dep. Variable (1900)	0.791	16.56	53.56	57.21	85.59	3.065
Observations	1,397,448	709,484	902,674	2,012,128	1,204,873	1,132,227
Panel B.	Stacked-by-Event Design					
Years w/ Italian Church	-0.098*** (0.017)	-0.440*** (0.083)	-0.625*** (0.210)	-0.195 (0.166)	0.141** (0.070)	-0.014*** (0.005)
Mean Treatment	5.792	6.342	6.365	5.335	5.031	5.069
Mean Dep. Variable (1900)	1.128	24.16	54.90	57.33	84.92	3.046
Observations	1,513,868	751,475	1,035,332	2,249,155	1,449,429	1,358,569
State \times Decade FEs	Yes	Yes	Yes	Yes	Yes	Yes
County FEs	Yes	Yes	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
County Controls \times Decade	Yes	Yes	Yes	Yes	Yes	Yes
County Linear Trends	Yes	Yes	Yes	Yes	Yes	Yes
Ever Treated	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The table replicates column 4 of Table 1 and Table 2. Panel A restricts to counties that ever had an Italian church over the sample period, and never experienced an exit; Panel B duplicates non-treated county-decade observations for each treatment cohort, and additionally includes event-time dummies relative to the specific year of treatment. See the notes to Tables 1 and 2 for the description of controls. Standard errors, clustered at the county level, in parentheses. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table B.2. Dropping Counties with Large Italian Population

	(1)	(2)	(3)	(4)	(5)	(6)
Dep. Variable:	Married to Native	Residential Integration	Naturalized	Speak English	In Labor Force	Log Occ. Score
Panel A.	Excluding counties in top 1% of 1900 Italian immigrant share					
Yrs w/ Italian Church	-0.097*** (0.014)	-0.350*** (0.079)	-0.399** (0.200)	-0.046 (0.137)	0.131** (0.053)	-0.015*** (0.004)
Mean Treatment	6.701	7.253	7.298	6.273	6.019	6.046
Mean Dep. Variable (1900)	0.967	20.37	54.15	57.95	85.92	3.066
Observations	1,619,236	812,904	1,091,991	2,341,522	1,460,603	1,375,656
Panel B.	Excluding counties in top 5% of 1900 Italian immigrant share					
Yrs w/ Italian Church	-0.101*** (0.018)	-0.468*** (0.107)	-0.345 (0.273)	-0.290 (0.178)	0.089 (0.071)	-0.013*** (0.005)
Mean Treatment	5.997	6.545	6.561	5.574	5.327	5.348
Mean Dep. Variable (1900)	1.306	25.99	55.32	57.87	84.84	3.056
Observations	865,351	424,850	605,912	1,277,536	828,542	780,418
State x Decade FEs	Yes	Yes	Yes	Yes	Yes	Yes
County FEs	Yes	Yes	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
County Controls x Decade	Yes	Yes	Yes	Yes	Yes	Yes
County Linear Trends	Yes	Yes	Yes	Yes	Yes	Yes
Ever Treated	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The table replicates column 4 of Table 1 and Table 2. Panel A (resp., Panel B) excludes from the sample individuals living in counties with the 1900 Italian immigrant share in the top 1% (resp., 5%) of the distribution. See the notes to Tables 1 and 2 for the description of controls. Standard errors, clustered at the county level, in parentheses. Significance levels: *** p<0.01, ** p<0.05, * p<0.1.

Table B.3. Dropping One Region at the Time

	(1)	(2)	(3)	(4)	(5)	(6)
Dep. Variable:	Married to Native	Residential Integration	Naturalized	Speak English	In Labor Force	Log Occ. Score
Panel A.	Excluding Northeast					
Yrs w/ Italian Church	-0.078** (0.032)	-0.462*** (0.145)	0.006 (0.284)	-0.193 (0.224)	0.098 (0.060)	-0.013 (0.008)
Mean Treatment	5.576	6.016	6.005	5.171	4.946	4.944
Mean Dep. Variable (1900)	1.631	28.37	64.55	62.25	84.60	3.010
Observations	448,470	237,439	337,027	679,275	443,065	416,831
Panel B.	Excluding South					
Yrs w/ Italian Church	-0.083*** (0.012)	-0.422*** (0.093)	-0.655*** (0.230)	-0.207 (0.138)	0.178*** (0.052)	-0.014*** (0.004)
Mean Treatment	7.012	7.559	7.661	6.582	6.344	6.371
Mean Dep. Variable (1900)	0.694	15.18	53.03	56.72	85.71	3.074
Observations	1,912,929	964,485	1,266,509	2,772,918	1,694,361	1,593,057
Panel C.	Excluding Midwest					
Yrs w/ Italian Church	-0.113*** (0.014)	-0.496*** (0.093)	-0.580** (0.231)	-0.110 (0.149)	0.171*** (0.057)	-0.011*** (0.004)
Mean Treatment	6.967	7.489	7.620	6.550	6.321	6.349
Mean Dep. Variable (1900)	0.772	17.16	50.64	56.71	85.91	3.068
Observations	1,745,693	883,929	1,145,413	2,525,321	1,528,871	1,435,773
Panel D.	Excluding West					
Yrs w/ Italian church	-0.103*** (0.014)	-0.405*** (0.096)	-0.688*** (0.231)	-0.169 (0.147)	0.154*** (0.057)	-0.012*** (0.004)
Mean Treatment	7.005	7.574	7.725	6.609	6.397	6.429
Mean Dep. Variable (1900)	0.757	16.16	53.16	56.49	85.95	3.083
Observations	1,859,775	930,231	1,203,442	2,665,446	1,612,829	1,516,752
State x Decade FEs	Yes	Yes	Yes	Yes	Yes	Yes
County FEs	Yes	Yes	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
County Controls x Decade	Yes	Yes	Yes	Yes	Yes	Yes
County Linear Trends	Yes	Yes	Yes	Yes	Yes	Yes
Ever Treated	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The table replicates column 4 of Table 1 and Table 2, by dropping one Census division at the time. Panel A excludes the Northeast (IPUMS region codes 11-12-13); Panel B excludes the South (IPUMS region codes 31-32-33-34); Panel C excludes the Midwest (IPUMS region codes 21-22-23); Panel D excludes the West (IPUMS region codes 41-42-43). See the notes to Tables 1 and 2 for the description of controls. Standard errors, clustered at the county level, in parentheses. Significance levels: *** p<0.01, ** p<0.05, * p<0.1.

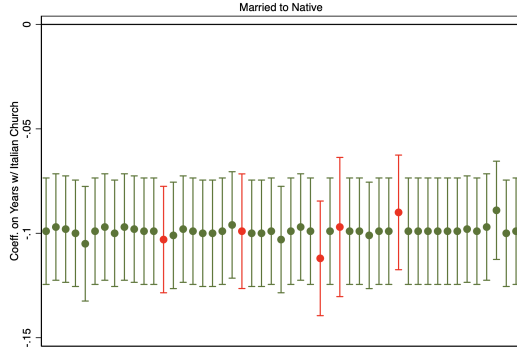
Table B.4. Controlling for Italians in Influential Occupations

	(1)	(2)	(3)	(4)	(5)	(6)
Dep. Variable:	Married to Native	Residential Integration	Naturalized	Speak English	In Labor Force	Log Occ. Score
Panel A.	Influential Occupations Dummy					
Years w/ Italian Church	-0.099*** (0.013)	-0.439*** (0.091)	-0.568** (0.220)	-0.118 (0.136)	0.150*** (0.051)	-0.013*** (0.004)
Mean Treatment	6.889	7.422	7.528	6.470	6.236	6.262
Mean Dep. Variable (1900)	0.807	17.15	53.39	57.07	85.75	3.070
Observations	1,988,957	1,005,364	1,317,467	2,880,990	1,759,709	1,654,138
Panel B.	Influential Occupations Ratio					
Years w/ Italian Church	-0.099*** (0.013)	-0.440*** (0.091)	-0.569** (0.220)	-0.118 (0.136)	0.159*** (0.050)	-0.013*** (0.004)
Mean Treatment	6.892	7.425	7.532	6.474	6.241	6.267
Mean Dep. Variable (1900)	0.806	17.15	53.39	57.07	85.76	3.070
Observations	1,987,804	1,004,799	1,316,528	2,878,932	1,758,120	1,652,664
State \times Decade FEs	Yes	Yes	Yes	Yes	Yes	Yes
County FEs	Yes	Yes	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
County Controls \times Decade	Yes	Yes	Yes	Yes	Yes	Yes
County Linear Trends	Yes	Yes	Yes	Yes	Yes	Yes
Ever Treated	Yes	Yes	Yes	Yes	Yes	Yes

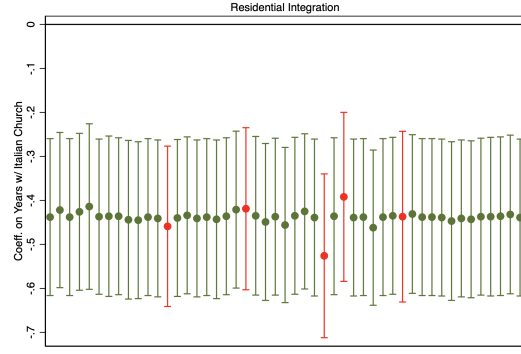
Notes: Notes: The table replicates the specifications in column 4 of Table 1 and in columns to 4 of Table 2, controlling for the interaction between year dummies and: *i*) a dummy for the presence of at least one Italian man (15-64) employed in an influential or prestigious occupation in 1900 (Panel A); *ii*) the share of employed Italian men (15-64) holding an influential or prestigious occupation in 1900 (Panel B). We define influential or prestigious occupations any of the following professions: teacher (IPUMS OCC1950=93), doctor (IPUMS OCC1950=75;32), journalist (IPUMS OCC1950=36), academic (IPUMS OCC1950=10;12-29), lawyer or judge (IPUMS OCC1950=55), law enforcement worker (IPUMS OCC1950=771;773;782), public administration worker (IPUMS OCC1950=250). See the notes to Tables 1 and 2 for the description of controls. Standard errors, clustered at the county level, in parentheses. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Figure B.1. Excluding One State at the Time, Social Assimilation

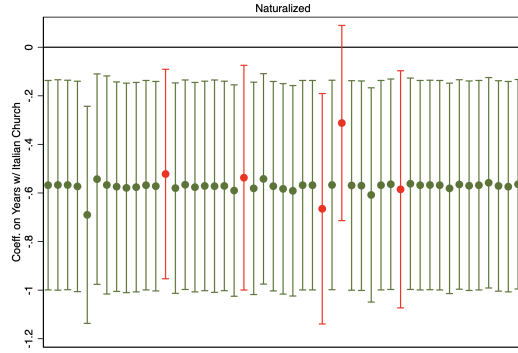
Panel A.



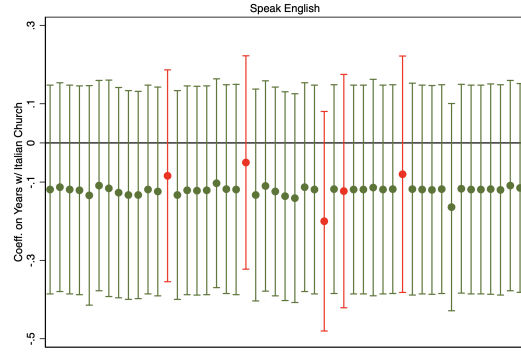
Panel B.



Panel C.

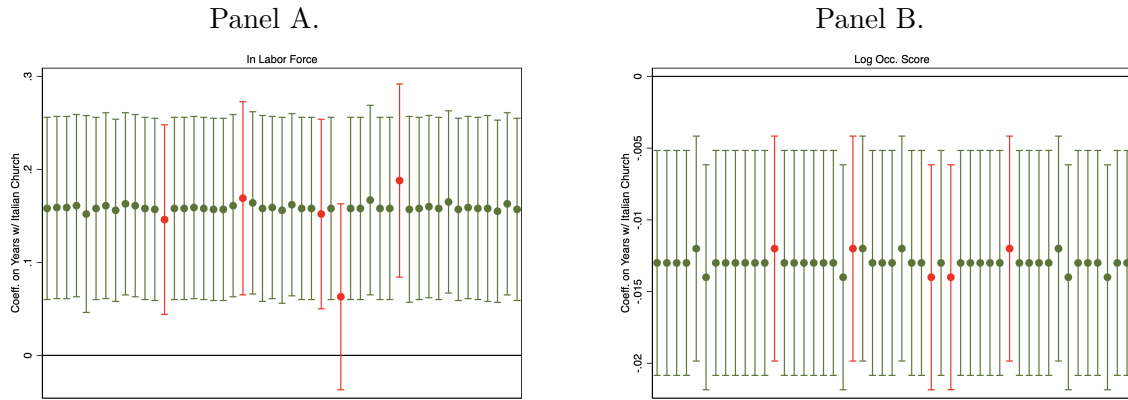


Panel D.



Notes: The figures plot coefficients, with 95% confidence intervals, from the baseline specification of Table 1, column 4, and Table 2, columns 1 and 2. The dependent variables are reported at the top of each panel. In each figure, the first coefficient from the left refers to the baseline specification (full sample). Each subsequent dot replicates the baseline specification by dropping one state at the time (ordered according to IPUMS state FIPS codes). Coefficients and confidence intervals in red refer to regressions that exclude one of the 5 states with the largest 1900 Italian population (from left to right, these are, respectively: Illinois, Massachusetts, New Jersey, New York, Pennsylvania). See the notes to Tables 1 and 2 for the description of controls. Standard errors are clustered at the county level.

Figure B.2. Excluding One State at the Time, Economic Assimilation



Notes: The figures plot coefficients, with 95% confidence intervals, from the baseline specification of Table 2, columns 3 and 4. The dependent variables are reported at the top of each panel. In each figure, the first coefficient from the left refers to the baseline specification (full sample). Each subsequent dot replicates the baseline specification by dropping one state at the time (ordered according to IPUMS state FIPS codes). Coefficients and confidence intervals in red refer to regressions that exclude one of the 5 states with the largest 1900 Italian population (from left to right, these are, respectively: Illinois, Massachusetts, New Jersey, New York, Pennsylvania). See the notes to Tables 2 and 2 for the description of controls. Standard errors are clustered at the county level.

Table B.5. Long-run Exposure

	(1)	(2)	(3)	(4)	(5)	(6)
Dep. Variable:	Married to Native	Residential Integration	Naturalized	Speak English	In Labor Force	Log Occ. Score
Panel A.	Exposure Over 20 Years					
Years w/ Italian Church	-0.084*** (0.008)	-0.358*** (0.056)	-0.268 (0.175)	-0.115 (0.081)	0.075*** (0.023)	-0.006*** (0.002)
Mean Treatment	9.709	10.85	10.66	8.912	8.534	8.573
S.d. treatment	6.347	6.271	5.952	6.336	6.339	6.331
Mean Dep. Variable (1900)	0.927	18.58	32.73	61.13	94	1.950
Observations	1,988,957	1,005,364	1,317,467	2,880,990	1,759,709	1,654,138
Panel B.	Exposure Over 30 Years					
Years w/ Italian Church	-0.058*** (0.007)	-0.263*** (0.049)	-0.133 (0.149)	-0.039 (0.064)	0.056*** (0.018)	-0.004** (0.002)
Mean Treatment	11.03	12.41	11.88	10.12	9.666	9.644
S.d. treatment	7.583	7.743	7.311	7.498	7.420	7.405
Mean Dep. Variable (1900)	0.945	18.77	30.21	61.77	95.35	1.785
Observations	1,731,360	886,417	1,174,168	2,493,008	1,511,863	1,441,600
Panel C.	Differential Exposure					
Years w/ Italian Church in Last 0-10 Years	-0.070*** (0.016)	-0.518*** (0.116)	-1.036*** (0.366)	-0.055 (0.212)	0.146*** (0.043)	-0.010** (0.005)
Years w/ Italian Church in Last 10-20 Years	-0.063*** (0.009)	-0.257*** (0.060)	-0.379* (0.230)	-0.243 (0.162)	0.051** (0.024)	0.001 (0.003)
Years w/ Italian Church in Last 20-30 Years	-0.041*** (0.014)	-0.180** (0.071)	0.464*** (0.165)	0.273** (0.108)	-0.006 (0.034)	-0.008** (0.004)
Mean Treatment 0-10	7.189	7.674	7.702	6.788	6.557	6.548
S.d. Treatment 0-10	3.262	3.031	2.883	3.412	3.501	3.503
Mean Treatment 10-20	3.163	3.783	3.421	2.758	2.605	2.602
S.d. Treatment 10-20	3.798	3.923	3.832	3.668	3.600	3.599
Mean Treatment 20-30	0.814	1.093	0.905	0.695	0.621	0.610
S.d. Treatment 20-30	2.301	2.641	2.424	2.154	2.032	2.010
Mean Dep. Variable (1900)	0.945	18.77	30.21	61.77	95.35	1.785
Observations	1,731,360	886,417	1,174,168	2,493,008	1,511,863	1,441,600
State \times Decade FEs	Yes	Yes	Yes	Yes	Yes	Yes
County FEs	Yes	Yes	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
County Controls \times Decade	Yes	Yes	Yes	Yes	Yes	Yes
County Linear Trends	Yes	Yes	Yes	Yes	Yes	Yes
Ever Treated	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The table replicates column 4 of Table 1 and Table 2 using different time windows to measure exposure to Italian Catholic churches. See the notes to Tables 1 and 2 for the description of controls. Standard errors, clustered at the county level, in parentheses. Significance levels: *** p<0.01, ** p<0.05, * p<0.1.

Table B.6. Controlling for Predicted Industry Growth

	(1)	(2)	(3)	(4)	(5)	(6)
Dep. Variable:	Married to Native	Residential Integration	Naturalized	Speak English	In Labor Force	Log Occ. Score
Years w/ Italian Church	-0.099*** (0.013)	-0.436*** (0.091)	-0.568** (0.220)	-0.118 (0.136)	0.157*** (0.050)	-0.013*** (0.004)
Mean Treatment	6.889	7.422	7.528	6.470	6.236	6.262
Mean Dep. Variable (1900)	0.807	17.15	53.39	57.07	85.75	3.070
Observations	1,988,957	1,005,364	1,317,467	2,880,990	1,759,709	1,654,138
State \times Decade FEs	Yes	Yes	Yes	Yes	Yes	Yes
County FEs	Yes	Yes	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
County Controls \times Decade	Yes	Yes	Yes	Yes	Yes	Yes
County Linear Trends	Yes	Yes	Yes	Yes	Yes	Yes
Ever Treated	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The table replicates column 4 of Table 1 and Table 2 by also controlling for predicted industry growth constructed using a Bartik approach as described in the text. See the notes to Tables 1 and 2 for the description of controls. Standard errors, clustered at the county level, in parentheses. Significance levels: *** p<0.01, ** p<0.05, * p<0.1.

Table B.7. Controlling for 1900 Average Intermarriage Rates

	(1)	(2)	(3)	(4)	(5)	(6)
Dep. Variable:	Married to Native	Residential Integration	Naturalized	Speak English	In Labor Force	Log Occ. Score
Years w/ Italian Church	-0.104*** (0.012)	-0.440*** (0.091)	-0.575*** (0.220)	-0.123 (0.136)	0.159*** (0.050)	-0.013*** (0.004)
Mean Treatment	6.889	7.422	7.528	6.470	6.236	6.262
Mean Dep. Variable (1900)	0.807	17.15	53.39	57.07	85.75	3.070
Observations	1,988,957	1,005,364	1,317,467	2,880,990	1,759,709	1,654,138
State \times Decade FEs	Yes	Yes	Yes	Yes	Yes	Yes
County FEs	Yes	Yes	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
County Controls \times Decade	Yes	Yes	Yes	Yes	Yes	Yes
County Linear Trends	Yes	Yes	Yes	Yes	Yes	Yes
Ever Treated	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The table replicates column 4 of Table 1 and Table 2 by also controlling for interactions between decade dummies and the 1900 average intermarriage rate between Italians and natives of native parentage. See the notes to Tables 1 and 2 for the description of controls. Standard errors, clustered at the county level, in parentheses. Significance levels: *** p<0.01, ** p<0.05, * p<0.1.

Table B.8. Geographic Spillovers

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent Variable:	Married To Native	Residential Integration	Naturalized	Speak English	In Labor Force	Log Occ. Score
Panel A.	Diocese					
Years w/ Italian Church	-0.093*** (0.014)	-0.402*** (0.086)	-0.679*** (0.252)	-0.139 (0.150)	0.134*** (0.051)	-0.014*** (0.004)
Mean Treatment	6.867	7.405	7.467	6.455	6.208	6.233
Mean Dep. Variable (1900)	0.876	18.96	53.48	57.32	86	3.062
Observations	1,823,231	923,610	1,222,057	2,633,170	1,618,070	1,523,663
Panel B.	Commuting Zone					
Years w/ Italian Church	-0.083*** (0.014)	-0.376*** (0.085)	-0.523** (0.207)	-0.199 (0.148)	0.131** (0.052)	-0.014*** (0.004)
Mean Treatment	6.863	7.400	7.462	6.451	6.204	6.229
Mean Dep. Variable (1900)	0.878	18.97	53.50	57.31	86	3.062
Observations	1,825,980	925,071	1,223,911	2,636,852	1,620,373	1,525,877
Panel C.	State					
Years w/ Italian Church	-0.083*** (0.013)	-0.401*** (0.093)	-0.520** (0.218)	-0.176 (0.153)	0.133** (0.053)	-0.013*** (0.004)
Mean Treatment	6.875	7.414	7.478	6.463	6.215	6.241
Mean Dep. Variable (1900)	0.870	18.82	53.49	57.24	86.02	3.062
Observations	1,821,317	922,646	1,220,293	2,629,857	1,615,921	1,521,751
State \times Decade FEs	Yes	Yes	Yes	Yes	Yes	Yes
County FEs	Yes	Yes	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
County Controls \times Decade	Yes	Yes	Yes	Yes	Yes	Yes
County Linear Trends	Yes	Yes	Yes	Yes	Yes	Yes
Ever Treated	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The table replicates column 4 of Table 1 and Table 2 by also controlling for the average exposure to Italian churches in the diocese (Panel A), commuting zone (Panel B), and state (Panel C). See the notes to Tables 1 and 2 for the description of controls. Standard errors, clustered at the county level, in parentheses. Significance levels: *** p<0.01, ** p<0.05, * p<0.1.

Table B.9. Robustness Inference

	(1)	(2)	(3)	(4)	(5)	(6)
Dep. Variable:	Married to Native	Residential Integration	Naturalized	Speak English	In Labor Force	Log Occ. Score
Panel A.	Diocese Level Clustering					
Years w/ Italian Church	-0.098*** (0.016)	-0.432*** (0.108)	-0.558*** (0.180)	-0.095 (0.138)	0.156*** (0.054)	-0.013*** (0.004)
Mean Treatment	6.904	7.435	7.548	6.492	6.266	6.293
Mean Dep. Variable (1900)	0.807	17.15	53.39	57.07	85.75	3.070
Observations	1,982,633	1,002,627	1,312,042	2,867,237	1,748,421	1,643,121
Panel B.	Commuting Zone Level Clustering					
Years w/ Italian Church	-0.099*** (0.015)	-0.437*** (0.080)	-0.568*** (0.203)	-0.119 (0.103)	0.158** (0.063)	-0.013*** (0.003)
Mean Treatment	6.889	7.422	7.528	6.471	6.237	6.263
Mean Dep. Variable (1900)	0.806	17.14	53.39	57.07	85.75	3.070
Observations	1,988,801	1,005,261	1,317,336	2,880,730	1,759,528	1,653,968
Panel C.	State Level Clustering					
Years w/ Italian Church	-0.099*** (0.018)	-0.438*** (0.086)	-0.568** (0.234)	-0.119 (0.120)	0.158** (0.075)	-0.013*** (0.003)
Mean Treatment	6.889	7.421	7.528	6.470	6.236	6.262
Mean Dep. Variable (1900)	0.807	17.15	53.39	57.07	85.75	3.070
Observations	1,988,957	1,005,364	1,317,467	2,880,990	1,759,709	1,654,138
State \times Decade FEs	Yes	Yes	Yes	Yes	Yes	Yes
County FEs	Yes	Yes	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
County Controls \times Decade	Yes	Yes	Yes	Yes	Yes	Yes
County Linear Trends	Yes	Yes	Yes	Yes	Yes	Yes
Ever Treated	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The table replicates column 4 of Table 1 and Table 2. Standard errors, in parentheses, are clustered at the diocese (Panel A), commuting zone (Panel B), and state (Panel C) level. See the notes to Tables 1 and 2 for the description of controls. Significance levels: *** p<0.01, ** p<0.05, * p<0.1.

Table B.10. First and Second Generation Italians

	(1)	(2)	(3)	(4)	(5)	(6)
Dep. Variable:	Married to Native	Residential Integration	Naturalized	Speak English	In Labor Force	Log Occ. Score
Years w/ Italian Church	-0.126*** (0.016)	-0.440*** (0.093)	-0.570*** (0.220)	-0.079 (0.141)	0.177*** (0.051)	-0.013*** (0.004)
Mean Treatment	6.999	7.470	7.527	6.768	6.511	6.493
Mean Dep. Variable (1900)	1.023	17.50	53.39	59.10	84.89	3.072
Observations	2,131,408	1,051,271	1,317,630	3,347,378	1,994,507	1,836,105
State \times Decade FEs	Yes	Yes	Yes	Yes	Yes	Yes
County FEs	Yes	Yes	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
County Controls \times Decade	Yes	Yes	Yes	Yes	Yes	Yes
County Linear Trends	Yes	Yes	Yes	Yes	Yes	Yes
Ever Treated	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The table replicates column 4 of Table 1 and Table 2 by including both first and second generation Italian immigrants, and controlling for a dummy equal to one for being a first generation immigrant. Second generation Italian immigrants are defined as individuals born in the US from Italian-born parents. In column 3, the sample is restricted to first generation immigrants (since US born men were automatically granted citizenship). See the notes to Tables 1 and 2 for the description of controls. Standard errors, clustered at the county level, in parentheses. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

C Appendix – Data

C.1 Variables from the US Census of Population

This section provides a detailed description of the variables collected from the US Census of Population.

Intermarriage and residential integration. The first assimilation measure used in the paper is intermarriage, often considered “the final stage of assimilation” in the sociology literature (Gordon, 1964). Formally, we define it as a dummy equal to one if an Italian immigrant is married to a native of native parentage. In our preferred specification, we restrict attention to married individuals who are 15 years or older. However, in Table A.2, we explore the robustness of our findings to alternative samples and specifications. First, we define the intermarriage dummy considering both married and unmarried individuals (again, 15 years or older). Second, we exploit a specific question, available only in the US Census of 1900 and 1910, which asks respondents the number of years since their first marriage. Combining this piece of information with year of arrival in the US, we are able to identify individuals who were already married when they left Italy, and estimate separate regressions for Italians who were, respectively, unmarried and married at the time of migration.

Our second main assimilation measure is the probability of having at least one native of native parentage as neighbor. This variable can also be conceived as a proxy for residential integration at the individual level. We construct it following Logan and Parman (2017). Specifically, we take advantage of a peculiar characteristic of historical full count US Census manuscript files. Since enumeration occurred door-to-door up until 1960, it is possible to infer the identity of a given household’s neighbors relying on the ordering of respondents in manuscript records. Using this logic, we construct a variable that takes on the value of one if a first-generation Italian immigrant has at least one neighbor who is native of native parentage. The variable is defined for all households with at least one (and not necessarily both) observed neighbor.⁶⁸

Naturalization rates and ability to speak English. As additional proxies for social assimilation, we consider: naturalization rates and ability to speak English. For naturalization, we restrict attention to immigrant men who were at least 21 years

⁶⁸In Tables D.1 and D.2, we construct a similar index, to measure the residential integration of Italians with other groups (e.g., non-native, non-Italian individuals; immigrants from different regions of origin; etc.).

old and had spent at least 5 years in the US, since only these individuals were eligible to apply for citizenship. In particular, immigrant men would file a Declaration of Intent, also known as “first papers” upon arrival or shortly thereafter. Then, within five years, they were eligible to file a Petition for Naturalization (or, “second papers”). This was the last step required for the court to finalize the naturalization process.⁶⁹ For ability to speak English, we consider individuals (of either gender) who were at least 15 years old.

Naming patterns. To measure the vertical transmission of (Italian and Catholic) culture across generations, we rely on the name chosen by Italian immigrant parents for their US born children. We define three different name index. The first one is an Italian sounding name index, which captures the Italian ethnic distinctiveness of the name given by parents to their children. This is similar in spirit to the index first used in Fryer and Levitt (2004) for African Americans and in Abramitzky et al. (2020a) and Fouka (2019), among others, for European immigrants. The Italian name index (INI) measures the frequency of a name within first-generation Italian immigrants relative to its frequency among both natives and first-generation immigrants of every nationality.⁷⁰ For each decade τ , we consider individuals born 20 years before as a reference group, and compute the index as:

$$INI_{Name,\tau} = \frac{Pr(Name|Italians_{\tau})}{Pr(Name|Italians_{\tau}) + Pr(Name|Not\ Italians_{\tau})} \times 100$$

where $Italians_{\tau}$ refers to Italians born between τ and $\tau - 2$, and $Not\ Italians_{\tau}$ refers to natives and first-generation immigrants of every nationality (other than Italian) born between τ and $\tau - 2$. The index ranges from 0 to 100, with names never encountered among, respectively, Italians and non-Italians having a value of zero and 100.

We construct the INI for US born children of (first generation) Italian parents using the full count US Census of Population (Ruggles et al., 2020) for the three decades between 1900 and 1920. To avoid double-counting, we further restrict attention to children who, in a given Census year, are between 0 and 10.

We complement the INI with two additional name index. The first one captures parents’ willingness to transmit Catholic values to the next generation. In particular, restricting attention to the same sample just described, we define a dummy equal to

⁶⁹See also Fouka et al. (2022) for more details.

⁷⁰Consistent with our definition of intermarriage, we define as natives those individuals who were born in the US from native parents. To avoid potentially confounding effects due to naming patterns among African Americans (Fryer and Levitt, 2004), we restrict attention to native whites.

one if a child is named after a Catholic saint.⁷¹ The second one is similar in spirit to the INI, except that it measures the American (rather than the Italian) distinctiveness of the name given by parents to their children. We define the American name index (ANI) as:

$$ANI_{Name,\tau} = \frac{Pr(Name|Native Whites_\tau)}{Pr(Name|Native Whites_\tau) + Pr(Name|Immigrants_\tau)} \times 100$$

where *Native Whites_τ* refers to native whites with native parents born between Census decades τ and $\tau - 2$, and *Immigrants_τ* refers to first-generation immigrants of any nationality born during the same time period. The index ranges from 0 to 100, with names never encountered among native whites and immigrants having a value of 0 and 100, respectively.

Economic assimilation. We measure economic assimilation with labor force participation and the log of occupational income scores.⁷² As in previous work (Fouka et al., 2022; Tabellini, 2020), when defining economic outcomes we restrict attention to men in working age (15-64).⁷³ As additional proxies for economic assimilation, we consider indicators for working, respectively, in the manufacturing and in the unskilled sector, where immigrants were over-represented relative to natives.⁷⁴ We also construct an index that captures the “Italianness” of the occupation held by the immigrant. Specifically, we define an occupation-specific index computed as the ratio of the probability that an Italian immigrant were employed in an occupation relative to the same probability for a non-Italian man. The occupation index ranges from 0 to 100, with higher values referring to more “Italian” occupations. By construction, the Italian occupation index does not include individuals in the labor force with a “non-classified” occupation.

⁷¹We retrieved the list of Catholic saints from the Roman Martyrology.

⁷²The US Census did not collect data on wages or income until 1940. We thus rely on income scores that assign to an individual the median income of his job category in 1950 (Abramitzky et al., 2014).

⁷³At the time, less than 15% of Italian women were in the labor force. Perhaps not surprisingly, in unreported analyses, we find that church exposure had a negative, but imprecisely estimated and quantitatively small, impact on female labor force participation. Also, results reported in the main text are unchanged if we include both men and women when defining economic assimilation.

⁷⁴To map occupations to skill groups, we follow Katz and Margo (2014).

C.2 Catholic Directories

As explained in Section 3 of the main text, an important contribution of our work is the historical data that we collected and digitized from the Catholic directories. The first *Catholic Directory or Catholic Laity's Directory*, as it was called, was published by Matthew Field in 1817 (Meier, 1915), when the presence of Catholic churches in the US had become more important, and covered all English-speaking countries (including Canada and the UK). Although the official denomination (*Ordo*, *Almanac*, *Clergy list*, etc.) and the editing company (Sadlier; Hoffmann; Wiltzius; Kenedy, etc.) changed more than once, the structure remained similar over time. All directories consistently reported: *i*) a list of Catholic institutions (chapels, churches, missions, education and health related institutions), including address and list of available clergy, divided by city and diocese, and the ethnic denomination whenever applicable (see the example in Figure C.1); and, *ii*) a complete list of clergymen, with related rank, order, and place of service (see the example in Figure C.2).

We could retrieve a version of the almanacs for all years between 1880 and 1920, except for 1882, 1895, 1913, 1915, 1917, and 1918. From the sources that could be located, we collected: *i*) the number of Italian national churches; *ii*) the number of churches with Italian priests; and, *iii*) the number of other Catholic churches. The almanacs identify some churches as “national” (e.g., reporting “Italian”, “German”, or “Polish” after the name of the church, see Figure C.1) depending on whether a church was officially assigned by the diocese to serve a specific ethnic community, amid the availability of priests who could speak the homeland language. National churches were often connected to national seminaries and confraternities, where the clergymen were trained. The presence of a priest that could speak Italian represented a pre-requisite to hear Confession and to administer other sacraments among Italian immigrants (i.e., Eucharist, Confirmation, Matrimony, etc.), besides the Baptism of newborns. Appendix C.3 below describes in detail how Italian priests were identified in the data.

We complement the data from the directories with archival records from the Missionaries of St. Charles Borromeo (Francesconi, 1983, Volumes II and IV). These records were not systematically organized as directories, but we were able to recover the presence of parishes run by the Scalabrinians from 1888 to 1920. Of the 489 county-year observations we could identify in Francesconi (1983), only 95 were not present in the almanacs.

C.3 Identifying Italian Priests in the Catholic Directories

Italian priests were identified from the original Catholic directories *via* their last name. Almanacs reported for each year and parish the clergy list, i.e., the full names of all serving reverends preceded by the title “Rev.” (as an example, see Figure C.1). Last names were then classified as Italian according to a Jaro-Winkler 99% similarity match with all last names of Italian immigrants recorded on the Ellis Island archives for the period 1892-1924 (Florio, 2021).⁷⁵

The original Ellis Island list includes 421,826 distinct Italian last names, the three most frequent being Rossi, Russo, and Esposito. Since these records suffer from a high rate of misspellings, we only keep Italian last names that were still present in the Italian 2009 *Whitepages* directory. This is supposed to be mistake-free, although it may miss last names that disappeared during the 20th century. This step reduces the number of surnames on the list to 48,371. We also exclude last names terminating with a consonant, which was very unlikely for Italians who were migrating at that time (mostly from the South of Italy, Spitzer and Zimran, 2020). This further reduces the final list to 45,535 last names.

C.4 Predicting Italian Population Shares

As noted in the main text (Section 4.1), to account for the possibility that Italian churches arrived earlier in counties where the Italian community was growing faster (or slower), we derive a predicted measure of Italian population share in each county and decade. In this section, we explain in detail the construction of this variable.

Our approach follows previous work by Sequeira et al. (2020), and combines variation in *i*) the expansion of railroads across counties with *ii*) Italian immigration to the US at the national level over time. The intuition is that, since immigrants often relied on railroads to travel to their final destination after arriving at Ellis Island (Forster, 1969), counties that got connected to the railroad network at the beginning of decades when more Italian immigrants arrived to the US are expected to receive a larger inflow of Italians. The strategy exploits only the interaction between the *timing* of railroad expansion and the *timing* of immigration booms from Italy to the US as a whole. This reduces concerns that the arrival of railroads may have direct

⁷⁵The Jaro-Winkler similarity index is the inversion of the Jaro-Winkler edit distance between two strings (i.e., how dissimilar two strings are to one another by counting the minimum number of operations required to transform one string into the other), normalized between 0 and 1.

effects on county economic conditions, which might in turn influence the assimilation trajectories of the Italian enclave.

Similar to Sequeira et al. (2020), we estimate the following “zeroth stage” equation for the three decades from 1900 to 1920:⁷⁶

$$\begin{aligned} ItaShare_{c\tau} = & \gamma ItaShare_{c\tau-1} + \beta Immigflow_{\tau-1} \cdot Railroad_{c\tau-1} + \alpha_\tau + \alpha_c + \\ & \delta Railroad_{c\tau-1} + \theta Industrialization_{\tau-1} \cdot Railroad_{c\tau-1} + \\ & \phi GDPGrowth_{\tau-1} \cdot Railroad_{c\tau-1} + \mathbf{X}_{c\tau-1}\Gamma + \varepsilon_{c\tau}. \end{aligned} \quad (5)$$

where $ItaShare_{c\tau}$ is the Italian population share in county c and decade τ ; $Immigflow_{\tau-1}$ is the number of Italian immigrants arrived in the US (overall) between Census year $\tau - 1$ and Census year τ ; $Railroad_{c\tau-1}$ is a dummy equal to one if the county was connected to a railroad in $\tau - 1$; $Industrialization_{\tau-1}$ and $GDPGrowth_{\tau-1}$ are measures of, respectively, yearly average industrialization and GDP growth (for the US as a whole) between $\tau - 1$ and τ ; and, $\mathbf{X}_{c\tau-1}$ is a vector of county level controls.⁷⁷ Standard errors are clustered at the county level.

Then, we calculate the predicted number of Italians in county c and Census year τ as:

$$\widehat{ITA}_{c\tau} = \widehat{\beta}(Immigflow_{\tau-1} \cdot Railroad_{c\tau-1}) \cdot Pop_{c\tau}$$

where $\widehat{\beta}$ is the coefficient estimated in the zeroth stage equation (5), and $Pop_{c,\tau}$ is county population in Census year τ . Finally, we obtain the predicted Italian population share by dividing $\widehat{ITA}_{c,\tau}$ by 1900 county population.⁷⁸

In Table C.3, we verify that, consistent with Sequeira et al. (2020), the actual and the predicted Italian population shares are strongly correlated with each other. Specifically, stacking the data for the three decades from 1900 to 1920, we estimate county-level regressions of the form:

$$ShIta_{c\tau} = \alpha_c + \gamma_{s\tau} + \beta \widehat{ShIta}_{c\tau} + X_{c\tau} + \varepsilon_{c\tau},$$

⁷⁶This specification is identical to that estimated in Sequeira et al. (2020), except for the fact that: *i*) we focus on Italian, rather than all European, immigrants, and *ii*) we consider the period from 1900 to 1920, rather than from 1860 to 1920.

⁷⁷As in Sequeira et al. (2020), we construct $Industrialization_{\tau-1}$ by taking the logarithm of one plus the yearly industrialization index and computing the average over all the years between Census years $\tau - 2$ and $\tau - 1$. $GDPGrowth_{\tau-1}$ refers to the GDP growth rate between Census years $\tau - 2$ to $\tau - 1$. The vector of controls includes: lagged population density, lagged urban share, and its interaction with lagged European immigration normalized by total US population.

⁷⁸We use 1900, rather than contemporaneous, county population to reduce concerns of endogeneity. Results are very similar when using county population in each decade.

where α_c and $\gamma_{s\tau}$ are county fixed effects and state by decade fixed effects, $ShIta_{c\tau}$ and $\widehat{ShIta}_{c\tau}$ are actual and predicted Italian population share in county c and decade τ , and $X_{c\tau}$ is the vector of controls included in our preferred specification (see equation (1) in Section 4.1 of the paper). Regressions are weighed by 1900 county population, and standard errors are clustered at the county level.

In column 1, we only include county fixed effects and state by decade fixed effects. In column 2, we add 1900 county characteristics interacted with decade dummies. In column 3, we add interactions between decade dummies and the 1900 share of Irish and European (non-Irish and non-Italian) immigrants.⁷⁹ Finally, in column 4, we augment the previous specification by also controlling for county linear trends.

In all cases the actual and the predicted Italian population shares are highly correlated with each other, and coefficients are statistically significant at the 1% level. The point estimate ranges from 1.546 (column 1) to 1.201 (column 3), and is equal to 0.992 in the most stringent specification (column 4). That is, one percentage point increase in the predicted Italian population share is associated with about 1-1.15 percentage points increase in its actual counterpart.

C.5 Herfindahl–Hirschman Index of Regional Homogeneity

In order to measure the degree of regional homogeneity within the Italian community of each county, we exploit the geographical content embedded in the Italian family names of immigrants living there. One peculiar feature of Italy, due to its late unification and historical fragmentation, is the very high number of last names, and their high geographical clustering (Caffarelli and Marcato, 2008).

Ideally, one would measure the distribution of Italian surnames in Italy at the turn of the twentieth century to infer the region of origin of Italian immigrants in the US. However, to the best of our knowledge, no such dataset exists. Hence, we rely on the Italian 2009 *Whitepages* directory, which contains aggregate data on almost 4 million landline owners by last name and municipality of residence. We acknowledge that the contemporaneous distribution of surnames in Italy is an imperfect proxy for their historical one, especially given the internal mobility flows that occurred after WWI and WWII. However, while internal migration in Italy may reduce the accuracy

⁷⁹Note that in the main paper, the Irish and European population shares in 1900 are always included together with all other baseline county controls. However, in Table C.3, we introduce them separately, to verify that the coefficient remains stable when controlling for other immigrant groups at baseline (interacted with decade dummies).

of our index, we have no reason to expect that this would bias any of our estimates.

We then proceeded as follows. First, we computed the relative occurrence of each of the 20 Italian regions for every last name in the *Whitepages* dataset. Next, we merged these frequencies to the individual Census data of first-generation Italians via their last name, thereby assigning to each surname a probability of originating from a given Italian region. Then, we collapsed the data from the individual to the county level, in order to recover the relative frequency of each Italian region within the Italian community of each US county. Finally, we computed the Herfindahl–Hirschman index, which ranges from 0 (extreme heterogeneity) to 1 (extreme concentration).

We replicated this approach using last names from the universe of personal tax returns in 2005, covering over 11 million individual Italian taxpayers by city of residence.⁸⁰ With the caveat of internal migration discussed above, we find that the index computed using this source is similar to that obtained with the *Whitepages*.

C.6 Linked Sample

In Section 6.1, we use a linked sample of Italian men that could be observed for at least two consecutive decades, between 1900 and 1920. The data comes from Abramitzky et al. (2020b), who develop a standardized procedure to construct linked samples from the full count US Census of Population. In Table C.4, we present summary statistics for the baseline (columns 1 to 3) and the linked (columns 4 to 6) sample. Since the linking procedure can be applied only to men, to make the comparison more meaningful, we restrict attention to men also in the full, cross-sectional dataset. Moreover, to avoid double-counting in the linked sample, we present summary statistics only for 1900 and 1910 (i.e., the “beginning of decade” characteristics of linked individuals); we thus adopt the same convention for the cross-sectional dataset, omitting 1920 when presenting the summary statistics in columns 1 to 3 of Table C.4.

The structure of the table mirrors that of Table A.1: we report church exposure and the main individual level outcomes in Panel A, selected county variables in Panel B, and additional individual characteristics in Panel C. In 1900 and 1910, individuals in the linked sample were on average living in counties that had one more year of exposure to Italian churches (5.2), relative to Italian men in the cross-sectional sample (4.3). They had similar rates of residential integration and economic profiles. How-

⁸⁰Individual tax returns filled by all physical persons in Italy were briefly posted online by the Italian Revenue Agency (*Agenzia delle Entrate*) in 2008.

ever, individuals in the linked sample were somewhat more likely to be married with a native of native parentage, had higher naturalization rates, and were more likely to speak English.⁸¹ The county characteristics of the two samples are very similar, except for total and urban population: individuals in the linked sample lived in larger and more urban counties.

This discussion suggests that the linked sample may not be fully representative of the Italian population.⁸² For this reason, before presenting the analysis for selected in- and out-migration, in Section 6.1, we replicate our baseline specification for the linked sample only. Results, reported in Table A.5, remain qualitatively unchanged. The only notable difference emerges for labor force participation (column 5). In this case, the coefficient on church exposure drops to zero and is imprecisely estimated.⁸³ Overall, however, the patterns in Table A.5 are consistent with those documented in our main analysis.

C.7 Local Newspapers

As explained in the main text, we rely on local newspapers to proxy for natives' attitudes towards Italians. We compiled a list of articles from the website Newspapers.com, retrieving data from local newspapers for 1,071 of the 2,164 counties in our sample. Because the counties for which newspapers data are available are characterized by a higher Italian and total population, they include more than 70% of the individuals in our sample. Table C.5 compares the characteristics of the counties in the full sample (columns 1 to 3) with those for which newspapers were available (columns 4 to 6). Relative to the full sample, counties for which newspapers data could be located have a longer average exposure to Italian churches, are slightly more urban, and have a higher immigrant share. However, the proportion of Italians and natives' economic outcomes are almost identical in the two samples. Also, and reassuringly, along all individual characteristics, Italian immigrants in the two samples are very similar. Table A.9 shows that results are unchanged when restricting attention to counties that received at least one church between 1890 and 1920 (i.e., those

⁸¹Individuals in the linked sample are also more likely to be married and to be literate, and had spent two additional years in the US, relative to individuals in the full sample (see Panel C).

⁸²For more details on the potential limitations of linked samples, see Bailey et al. (2020) and Abramitzky et al. (2021).

⁸³The coefficient for occupational scores (column 6) is also not statistically significant. Yet, it is quantitatively in line with that from the baseline specification.

in our preferred specification) and that also had local newspapers’ data.

For each calendar year between 1900 and 1920, we computed the number of articles in which selected terms appeared together with the word “Italian”. First, we search for articles mentioning jointly the word “Italian” and the word “Catholic”. Next, we consider stereotypical and disparaging terms. Italians, as other immigrant groups, were often considered criminals, prone to violence, and lazy (Katz and Braly, 1933). Moreover, Italians were frequently associated with the mafia, even though the latter expanded its presence in the US only after the 1920s (i.e., after the period considered in our study).

We search for the joint occurrence of the word “Italian” and selected terms that are likely to capture natives’ negative stereotypes: crime, violent, lazy, and mafia.⁸⁴ As explained in the main text (Section 6.3), to account for changes in the frequency of different words over time, we scale the joint frequency of the word “Italian” and each selected term by the marginal frequency of the latter (in each county-year). This normalization allows us to test if, following the entry of an Italian church, selected disparaging, stereotypical terms became increasingly associated to the Italians.⁸⁵

⁸⁴Results are robust to including additional words, such as “alcohol” or “dirty”.

⁸⁵To ease the interpretation of results, we standardize all outcomes by subtracting their mean and dividing through their standard deviation.

Table C.1. Description of Outcome Variables

Variable	Description
Panel A. Individual Level Outcomes	
Married to Native	Dummy=1 if the individual is married to a native of native parentage; restricted to married individuals 15+
Residential Integration	Dummy=1 if the household head has at least one native neighbor of native parentage
Naturalized	Dummy=1 if citizen is naturalized; restricted to men 21+ who have been in the US for at least 5 years
Speak English	Dummy=1 if the individual speaks English. Defined separately for individuals 15+, and for children of age 10-14
American Name Index (ANI)	American sounding name index. Defined for US born children with Italian parents who are between 0 and 10 in a Census year. In Section 6.1, it is defined for any first generation Italian man in the linked sample (see also Appendix C.6)
Catholic Score	Dummy equal to 1 if the individual is named after a Catholic saint (either in Italian or in English). Defined for US born children with Italian parents who are between 0 and 10 in a Census year. In Section 6.1, it is defined for any first generation Italian man in the linked sample (see also Appendix C.6)
Log Occupational Score	Logarithm of (0.01+occupational score); restricted to men (15-64) in labor force
In Labor Force	Dummy=1 if a man (15-64) is in labor force. For 1900, due to data limitations, non-missing occupational scores is used
In Manufacturing	Dummy=1 if a man (15-64) works in manufacturing
Unskilled	Dummy=1 if a man (15-64) reports an unskilled occupation (defined using the matching of occupation to skill categories from Katz and Margo, 2014)
Italian Occupational Index	Ratio of the probability that an Italian immigrant man were employed in an occupation relative to the same probability for a non-Italian man. The occupation index ranges from 0 to 100, with higher values referring to more “Italian” occupations. Individuals in the labor force with a “non-classified” occupation are excluded when constructing the index
Literacy	Dummy=1 if the individual can read and write. Defined for men 15+ in Section 5.2, and for children of age 10-14 in Section 7
Panel B. Household Level Outcomes	
Number of Children	Number of children born in the US in the previous decade (from first-generation Italian immigrant parents)
Panel C. County Level Outcomes	
KKK Presence	Dummy=1 if at least one KKK klavern between 1915 and 1940
KKK Timing	Log of the difference between 1940 and the year of opening of the first KKK klavern in the county, in years. Set to 0 if no klavern ever opened
Mentions of “Italians” and “Catholic” in Local Newspapers	Frequency of joint appearance of the terms “Italians” and “Catholic” in the same page of local newspapers in each county year, scaled by the frequency of the term “Catholic”
Average Mentions of Stereotypes and “Italians” in Local Newspapers	Simple average of the frequency of joint appearance of the term “Italians” and a number of negative stereotypes (“Crime”, “Lazy”, “Mafia”, and “Violent”) in the same page of local newspapers, scaled by the frequency of each stereotype

Notes: The table reports the description of the main outcomes used in the paper. All dummies are multiplied by 100.

Table C.2. Description of Control Variables

Variable	Description
Panel A. Individual Level Controls	
Age	Age, in years
Male	Dummy=1 if the individual is male
Years in the US	Number of years spent in the US
Married	Dummy=1 if an individual is married
Birth Order	Dummy for birth order of US born children (0-10) from Italian parents during the previous decade. In the analysis, it is interacted with gender fixed effects
State of Birth	Dummies for US state of birth. Defined for US born children with Italian parents who are between 0 and 10 in a Census year
Year of Birth	Dummies for year of birth. Defined for US born children with Italian parents who are between 0 and 10 in a Census year
Panel B. Household Level Controls	
Number of Adults	Number of individuals 15+ in the household
Panel C. County Level Controls	
Black Population Share	African American share of the county population in 1900
County Population	County population in 1900
European Immigrant Share	Fraction of European immigrants over county population in 1900
Irish Immigrant Share	Fraction of Irish immigrants over county population in 1900
Predicted Italian Immigrant Share	Predicted fraction of Italian immigrants in a county-decade, constructed using the procedure described in Appendix C.4
Share Native Men 15-64 in Labor Force	Share of native men (15-64) in the labor force in 1900
Share Native Men 15-64 in Manufacturing	Share of native men (15-64) employed in manufacturing in 1900
Urban Share	Urban share of the county population in 1900
Years w/ non-Italian Church	Number of years with at least one non-Italian church in the previous decade
Years w/ Railroad	Number of years a county has been connected to the railroad up to 1900
Catholic Population Share	Share of Catholic population in 1890
Characteristics of Italian immigrants	Average of the following variables among Italian immigrants in 1900: number of years spent in the US; age; a dummy for being married; a dummy for being female.
Characteristics of Italian households	Average of the following variables among Italian immigrant households in 1900: percentage of children named after a Catholic saint (Italians' Religiosity); and, Herfindahl-Hirschman Index of Italian region of origin concentration constructed in Appendix C.5 (Italians' Regional Homogeneity)

Notes: The table reports the description of the main control variables used in the paper. All dummies are multiplied by 100. All county-level controls refer to 1900, except for the number of years with a non-Italian Catholic church and the predicted Italian immigrant share (measured in each decade) as well as the share of the Catholic population in the county (measured in 1890).

Table C.3. Actual and Predicted Italian Population Share (1900-1920)

	(1)	(2)	(3)	(4)
Dep. Variable:	Actual Italian Population Share			
Predicted Italian Population Share	1.546*** (0.340)	1.173*** (0.366)	1.201*** (0.283)	0.992*** (0.257)
Mean Treatment	0.002	0.002	0.002	0.002
Mean Dep. Variable	0.004	0.004	0.004	0.004
Observations	8,069	7,585	7,585	7,585
State x Decade FEs	Yes	Yes	Yes	Yes
County FEs	Yes	Yes	Yes	Yes
County Controls x Decade		Yes	Yes	Yes
Immigrants x Decade			Yes	Yes
County Linear Trends				Yes

Notes: The sample is restricted to counties with at least one Italian immigrant in 1900. The dependent variable is the Italian population share in a county-decade, between 1900 and 1920. The main regressor of interest, *Predicted Italian Population Share*, is the predicted Italian population share in a county-decade constructed in Appendix C.4. *County controls* include: *i*) interactions between decade dummies and 1900: logarithm of county population, the urban and the Black population share, labor force participation, the manufacturing share, the Catholic share of the population, the number of years a county had been connected to the railroad; the average among the Italian immigrants of the number of years spent in the US, age, the share of married individuals, the average share of women, the average number of children with the first name of a Catholic saint, the Herfindahl–Hirschman index of regional homogeneity; and, *ii*) number of years with at least one non-Italian Catholic church. *Immigrants* includes the 1900 share of Irish and (non-Italian and non-Irish) European immigrants. Regressions are weighed by 1900 population. Standard errors, clustered at the county level, in parentheses. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table C.4. Summary Statistics: Linked vs. Cross-Sectional Samples

	Baseline			Linked		
	Mean	Std. Dev.	Obs.	Mean	Std. Dev.	Obs.
Panel A. Main Variables						
Years w/ Italian Church	4.26	3.802	1,103,506	5.198	3.849	147,891
<i>Main Individual Level Outcomes</i>						
Married to Native	1.333	11.469	622,997	1.863	13.521	95,182
Residential Integration	19.065	39.282	467,334	19.065	39.282	83,635
Naturalized	34.819	47.64	627,032	42.438	49.425	98,803
Speak English	52.451	49.94	1,103,506	65.980	47.378	147,891
Log Occupational Score	2.173	2.466	1,016,065	2.176	2.524	136,411
In Labor Force	93.525	24.608	1,086,407	92.928	25.636	146,792
Italian Name Index	73.528	30.036	983,175	75.224	27.086	144,988
Catholic Score	54.025	49.838	983,175	60.968	48.782	144,988
American Name Index	25.268	24.449	983,175	24.818	22.498	144,988
<i>Main Household Level Outcomes</i>						
Number of Children	1.089	1.825	1,103,506	1.598	2.089	147,891
Panel B. Main County Level Characteristics						
Black Share	0.034	0.078	1,103,506	0.033	0.073	147,891
Catholic Population Share (1890)	0.007	0.014	1,103,506	0.008	0.015	147,891
County Population	594,700	658,607	1,103,506	668,015	659,984	147,891
Immigrant Share	0.276	0.115	1,103,506	0.29	0.111	147,891
Irish Immigrant Share	0.039	0.028	1,103,506	0.043	0.028	147,891
Italian Immigrant Share	0.038	0.025	1,103,506	0.040	0.025	147,891
Italians' Regional Homogeneity	0.093	0.025	983,651	0.094	0.026	129,633
Italians' Religiosity	43.325	7.773	1,103,506	44.183	6.183	147,891
Other Europeans Immigrant Share	0.199	0.085	1,103,506	0.206	0.082	147,891
Share Native Men 15-64 in Labor Force	0.864	0.054	1,103,506	0.858	0.057	147,891
Share Native Men 15-64 in Manufacturing	0.149	0.072	1,103,506	0.155	0.072	147,891
Urban Share	0.715	0.317	1,103,506	0.768	0.296	147,891
Years w/ Railroad	45.194	21.561	1,103,506	45.284	22.117	147,891
Years w/ non-Italian Church	5.687	3.633	1,103,506	6.664	3.440	147,891
Panel C. Additional Individual Characteristics						
Age	32.994	11.735	1,103,506	32.287	10.999	147,891
In Manufacturing	15.04	35.747	1,086,407	15.633	36.317	146,792
Literacy	65.344	47.588	1,103,506	71.762	45.016	147,891
Male	100	0	1,103,506	100	0	147,891
Married	56.456	49.581	1,103,506	64.36	47.894	147,891
Married to Italian	89.728	30.359	454,139	87.423	33.159	84,648
Years in the US	8.964	8.254	1,103,506	10.707	8.225	147,891

Notes: The table reports summary statistics for Italian men in the linked and the cross-sectional samples for Census years 1900 and 1910. See Appendix C.6 for more details about the linked sample. For a description of variables, see Tables C.1 and C.2. In this table, *Italian Immigrant Share* refers to the actual Italian immigrant population share.

Table C.5. Summary Statistics: Newspapers Sample

	Mean	Std. Dev.	Min	Median	Max	Obs.
Panel A. Main Variables						
Years w/ Italian Church	6.051	3.816	0	7	10	3,002,765
<i>Main Individual Level Outcomes</i>						
Married to Native	1.098	10.422	0	0	100	2,057,262
Residential Integration	20.631	40.466	0	0	100	1,045,289
Naturalized	31.909	46.612	0	0	100	1,391,200
Speak English	61.211	48.727	0	100	100	3,002,765
Log Occupational Score	1.925	2.766	-5	2.996	4.382	1,750,863
In Labor Force	94.426	22.942	0	100	100	1,854,248
Italian Name Index	66.479	29.897	0	74.661	100	326,844
Catholic Score	45.204	49.769	0	0	100	326,844
American Name Index	31.768	25.347	0	28.048	100	326,844
<i>Main Household Level Outcomes</i>						
Number of Children	1.815	2.179	0	1	9	3,002,765
Panel B. Main County Level Characteristics						
Black Share	0.034	0.067	0	0.017	0.945	3,002,765
Catholic Population Share (1890)	0.008	0.014	0	0	0.041	3,002,765
County Population	797,771	810,588	143	455,036	3,022,912	3,002,765
Immigrant Share	0.275	0.107	0	0.285	0.540	3,002,765
Irish Immigrant Share	0.033	0.024	0	0.027	0.098	3,002,765
Italian Immigrant Share	0.044	0.024	0	0.042	0.129	3,002,765
Italians' Regional Homogeneity	0.093	0.021	0.069	0.089	1	2,797,681
Italians' Religiosity	45.402	6.352	0	46.153	100	3,002,765
Other Europeans Immigrant Share	0.198	0.078	0	0.201	0.537	3,002,765
Share Native Men 15-64 in Labor Force	0.881	0.042	0	0.893	0.964	3,002,765
Share Native Men 15-64 in Manufacturing	0.158	0.070	0	0.155	0.473	3,002,765
Urban Share	0.789	0.272	0	0.930	1	3,002,765
Years w/ Railroad	53.566	21.662	0	60	70	3,002,765
Years w/ non-Italian Church	7.085	3.316	0	8.500	10	3,002,765
Panel C. Additional Individual Characteristics						
Age	34.961	12.720	15	33	133	3,002,765
In Manufacturing	19.410	39.551	0	0	100	1,854,248
Literacy	64.636	47.810	0	100	100	3,002,765
Male	63.221	48.220	0	100	100	3,002,765
Married	68.515	46.446	0	100	100	3,002,765
Married to Italian	91.958	27.194	0	100	100	1,811,015
Years in the US	12.379	9.063	0	10	90	3,002,765

Notes: The table reports summary statistics for the counties for which data on local newspapers are available through the website Newspapers.com. *Years w/ Italian Church* is the number of years with at least one Italian Catholic church in the county over the ten years before a Census. *Italians' Religiosity* is the average among the Italian households of the percentage of children named after a Catholic saint. In this table, *Italian Immigrant Share* refers to the actual Italian immigrant population share. For a description of the rest of the variables, see Tables C.1 and C.2.

Figure C.1. Sample of the 1902 Catholic Almanac: List of Churches

BOSTON	
ARCHDIOCESE OF BOSTON	
23	
ST. CECILIA'S, St. Cecilia st., Rev. John J. McNulty, Rev. Jno. J. Downey, Rev. Jno. J. O'Keefe.	
HOLY TRINITY (German), Shawmut ave., Rev. John Jutz, S.J., rector; Rev. John P. M. Schleuter, S.J., Rev. Joseph Busan, S.J. Res., 14 Cobb st. (in rear of the church).	
Schools — 5 Sisters of Notre Dame (Berkeley st.) and 1 lay teacher. Boys 106; girls, 132.	
2 Sisters of St. Francis (German), F. St., So. Boston. 2 Sisters. Boys, 57; girls, 38.	
Station — St. Elisabeth's (German), Ellis st., Roxbury District, Boston.	
School — 5 Sisters of St. Francis. Boys, 106; girls, 112.	
IMMACULATE CONCEPTION, Harrison ave. and Concord st. Rev. W. G. Read Mullan, S.J., (rector), Rev. Patrick A. McQuillan, S.J., (minister), Rev. William B. Brownrigg, S.J., (prefect of the church), Rev. Alphonse Charlier, S.J. (spiritual director of St. Vincent de Paul's conference), Rev. Joseph H. Rockwell, S.J., (chaplain of the deaf mutes), Rev. Francis J. O'Neill, S.J., (chaplain at city hospital), Rev. Denis T. O'Sullivan, S.J. (director of League of Sacred Heart), Rev. John D. Whitney, S.J., (treasurer), Rev. John M. Colgan, S.J., Rev. George A. Fargis, S.J., Rev. Thomas L. Gasson, S.J., Rev. John A. Moore, S.J., Rev. Joseph V. Schmidt, S.J., Rev. William M. McDonough, S.J., Rev. Edmund J. Burke, S.J., Rev. William S. Singleton, S.J., Rev. John McQuaid, S.J. Res., 761 Harrison ave.	
Station — City Hospital.	
ST. JAMES', Harrison ave., near Kneeland st., Revs. Wm. P. McQuaid, Denis F. Lee, Jas. J. Baxter, D.D., James A. Barrett, Rev. Pascal Di Milla (Italian mission). Res., 9 Whitmore st.	
School — 5 Sisters of Notre Dame (6 Whitmore st.). Pupils, 232 (girls).	
ST. JOHN THE BAPTIST (Portuguese), North Bennett st., Rev. Antonio Joaquim Pimentel, Rev. John J. Perry. Res., 1 N. Bennett st.	
ST. JOSEPH'S, Chamber st., Very Rev. Wm. Byrne, D.D., V.G.; Revs. Jno. F. Keleher, Joseph G. Anderson, Peter J. Walsh, Jos. F. Coppinger, Res., 6 Allen st.	
Chapel — State Prison.	
Stations — Massachusetts Hospital.	
Suffolk Co. Jail.	
ST. LEONARD OF PORT MAURICE (Italian), Prince st., Rev. Ubaldus da Rieti, O.F.M. rector; Rev. Wenceslaus, O.F.M., Rev. Valerianus, O.F.M. Res., 31 Prince st.	
ST. MARY'S, Endicott st., Rev. James J. Bric, S.J., rector; Revs. William R. Cowardin, S.J., Allan McDonnell, Patrick J. O'Connell, S.J., Ignatius Renaud, S.J., Frederick J. Holland, S.J., M. J. Byrnes, S.J.—Rev. Patrick H. Brennan, S.J., attends city institutions on the islands. Res., 45 Cooper st.	
School — 2 lay teachers and 12 Sisters of Notre Dame (Berkeley st.). Boys, 263; girls, 298.	
Chapels — City Institutions on Deer Island, Rainsford Island, Long Island.	
NOTRE DAME DES VICTOIRES (French), 25 Isabella st., Very Rev. Onesime Renaudier, S.M., rector; Rev. Joseph T. Remy, S.M., vice-rector; Revs. Felix Barbier, S.M., Henri de la Chapelle, S.M., Ernest Pfleger, S.M. — The Marist Fathers give missions to French Congregations.	
ST. PHILIP'S, Harrison ave., Revs. Philip J. O'Donnell, Owen Doherty, Austin E. Doherty, Patrick J. Buckley. Res., 887 Harrison ave.	
Mission — St. Patrick's, Northampton st.	
ST. STEPHEN'S, Hanover and Clarke sts., Revs. Denis J. O'Farrell, B. F. Killilea, Leo J. Knappe, D.C.L. Res., 24 Clarke st.	
School — 2 lay teachers and 13 Sisters of Notre Dame (Berkeley st.). Boys, 256; girls, 344.	
SACRED HEART (Italian), North sq. Conducted by Fathers of the Congregation of St. Charles Borromeo for Italian emigrants. Revs. Roberto Biasotti, Domenico G. Belliotti, Gaetano Cerruti, Stefano Duda. Res., 2 North sq.	
Mission — Orient Heights, East Boston, St. Lazarus (Italian).	
OUR LADY OF THE CEDARS OF MT. LEBANON, Maronite chapel, Tyler st. Rt. Rev. Joseph Yazbek, Chor. Bishop, rector; Superior of Syro-Maronite Missions in U. S. Rev. Joseph K. Yazbek. Res., 66 Tyler st.	
ROXBURY DISTRICT, ST. PATRICK'S (new), Dudley and Magazine st., Revs. Joseph H. Gallagher, N. J. Merritt, Thos. A. Walsh, Jas. Anthony Walsh, James F. Regan. Res., Magazine st. (rear of church).	
School — 18 Sisters of Charity (Halifax). Girls, 683.	
ST. JOSEPH'S, Circuit st., Rev. Thomas Moylan, P.R., Rev. Timothy J. Fahey, Rev. Patrick J. Scannell. Res., 85 Regent st.	
School — 12 Sisters of Charity (Madison). Boys, 264; girls, 349.	
ST. JOHN'S, Blue Hill ave., Revs. Hugh P. Smyth, Garrett J. Barry, Daniel F. Whalen.	
School — 8 Sisters of Charity (Madison). Boys, 190; girls, 233.	
Mission — St. Hugh's, Blue Hill ave., cor. Schuyler.	
ST. FRANCIS DE SALES', Vernon st., Revs. Patrick J. Daly, Jno. H. Harrigan, James J. McCarthy, Cornelius J. Herlihy. Res., 116 Vernon st.	
OUR LADY OF PERPETUAL HELP, 1545 Tremont st., Rev. John J. Frawley, C.S.S.R., rector; Rev. Henry Gareis, C.S.S.R., Andrew Wynn, C.S.S.R., Rev. Eugene Walsh, C.S.S.R., Rev. Michael J. Sheehan, C.S.S.R., Rev. William White, C.S.S.R., Rev. Thomas A. Donohoe, C.S.S.R., Rev. Bernard Cullen, C.S.S.R., Rev. Henry W. Mohan, C.S.S.R., Rev. Peter Corr, C.S.S.R., Rev. Simon Grogan, C.S.S.R., Rev. Augustine Duke, C.S.S.R., Rev. James Hayes, C.S.S.R., Rev. Francis L. Kenzel, C.S.S.R. 3 Lay Brothers.	

Figure C.2. Sample of the 1902 Catholic Almanac: List of Clergymen

UNITED STATES CLERGY LIST	
SECULAR AND REGULAR PRIESTS.	
ABBREVIATIONS.	
<i>c.a.</i> , Assumptionist Fathers.	<i>o.c.r.</i> , Order of Reformed Clstericians, Trap- pist Fathers.
<i>c.m.</i> , Congregation of the Mission, Lazarist Fathers, Vincentian Fathers.	<i>o.m.c.</i> , Order of Minor Conventuals, Francis- can Friars.
<i>c.p.</i> , Congregation of the Passion, Passionist Fathers.	<i>o.m.cap.</i> , Order of Minor Capuchins, Francis- can Friars, Capuchin Fathers.
<i>c.p.p.s.</i> , Congregation of the Most Precious Blood, Sanguinist Fathers.	<i>o.m.i.</i> , Oblate Fathers of Mary Immaculate.
<i>c.r.</i> , Congregation of the Resurrection, Resur- rectionist Fathers.	<i>o.p.</i> , Order of Preachers, Dominican Fathers.
<i>c.s.b.</i> , Congregation of St. Basil, Basilian Fathers.	<i>o.praem.</i> , Order of Premonstratensians.
<i>c.s.c.</i> , Congregation of the Holy Cross.	<i>o.s.m.</i> , Order of Servite Fathers.
<i>c.s.p.</i> , Congregation of St. Paul, Paulist Fa- thers.	<i>o.s.a.</i> , Order of St. Augustine.
<i>c.ss.r.</i> , Congregation of the Most Holy Re- deemer, Redemptorist Fathers.	<i>o.s.b.</i> , Order of St. Benedict.
<i>c.s.sp.</i> , Congregation of the Holy Ghost.	<i>o.f.m.</i> , Order of Friars Minor, Franciscan Friars, Franciscan Fathers.
<i>c.s.v.</i> , Congregation of St. Viator.	<i>o.s.h.</i> , Oblate Fathers of the Sacred Hearts.
<i>m.s.</i> , Missionary Fathers of La Salette.	<i>p.s.m.</i> , Fathers of the Pious Society of Missions, Piarist Fathers.
<i>m.s.c.</i> , Missionary Fathers of the S. Heart.	<i>s.d.s.</i> , Society of the Divine Savior.
<i>o.c.</i> , Order of Charity.	<i>s.f.s.</i> , Salesian Fathers.
<i>o.c.c.</i> , Order of Calced Carmelites, Brothers of the Blessed Virgin of Mt. Carmel.	<i>s.j.</i> , Society of Jesus, Jesuit Fathers.
	<i>s.m.</i> , Society of Mary, Marist Fathers.
	<i>s.p.m.</i> , Society of Fathers of Mercy.
	<i>s.s.</i> , Sulpician Fathers.
	<i>s.v.d.</i> , Society of the Divine Word.
The letters in parenthesis designate the diocese.	
Aaron, Francis P. (E), McKean, Pa. — Leo, <i>o.s.b.</i> (Leav), Atchison, Kans.	Adelmann, Augustine C. (Cin), Russia, Ohio.
Abb. J. A. (G B), Green Bay, Wis., St. Vin- cent's Hospital.	Adelsperger, J. (Cov), Covington, Ky., Cathedral.
Abbelen, Very Rev. P. M. (Mil), Milwaukee, Wis., 699 Jefferson st.	Ader, H. (Alt), Carlinville, Ill.
Abbink, Bernardine, <i>o.f.m.</i> , (Ft W), Avilla, Ind. Home for the Aged.	Adolph, Anthony (Buf), Williamsville, N. Y.
Abbott, Michael (Spr), Farmer City, Ill.	Adrain, W. H. (Spr), Blackstone, Mass.
— T. C. (Nash), South Nashville, Tenn., St. Patrick's Church.	Adrian, H. G. (St L), St. Louis, Mo., 3519 N. 14th st.
Abel, A. J. (Wich), Wichita, Kans.	Aertker, Victor, <i>o.f.m.</i> (Mon), Los Angeles, Cal., 1223 Santee st.
— John (G R), Hannah, Mich.	Agresti, Raphael (E), Erie, Pa., 17th and Walnut sts.
— Jos. (Ft W), Hammond, Ind., 244 So. Hohman st.	Aguilera, V. (Mon), San Luis Obispo, Cal.
Abell, J. J. (L), St. John's P. O., Ky.	Ahern, J. F. (Spr), Springfield, Mass. House of Good Shepherd.
Abeln, Paul T. (Cov), Central Covington, Ky., St. Augustine's Church.	— Jos. J. (Port), Eastport, Me.
Aboud, E. (Om), Omaha, Nebr., 1102 S. 13th st.	— Michael (Cin), St. Louis, Mo., 3933 S. Broadway.
Abrometis, P. (Ph), Shenandoah, Pa., St. George's Church.	— M. J. (Rich), Alexandria, Va.
Abt, Chas. A. (Ph), Philadelphia, Pa., Tacomy.	— M. J. (Spr), Worcester, Mass., Sacred Heart Church.
— Romanus (New), Englewood, N. J., 50 Waldo Place.	— Philip E. (NY), New York City, 506 E. 90th street.
Accueda, P., San <i>o.f.m.</i> , (Mont), Luis Rey, Cal.	— Peter (Nat), in Canada.
Achim, Levi J. (Spr), Northboro, Mass.	— Terence (St J), Milan, Mo.
Achtergael, G. (Nes), Ballard, Wash.	— Wm. (Br), Brooklyn, N. Y., Essex st. and New Lots road.
Acker, A. H. (St L), Josephville, Mo.	Aherne, Jas. (Om), Omaha, Nebr., 531 S. 27th street.
Ackerman, Oscar P. (L), Louisville, Ky., 220 Woodbine st.	Ahlert, Augustine, <i>c.ss.r.</i> (Chle), Chicago, Ill., 234 Cleveland ave.
Adam, Joachim, Very Rev. (Mon), in Spain.	Ahmann, Ignatius M. (Cov), Carrollton, Ky.
— N. (Dav), Houghton, Ia.	Ahne, B. (New), Fort Lee, N. J., Main st.
Adamer, Geo. (G B), Rhinelander, Wis., Hospital.	— B. W. (New), Mt. Hope, N. J.
Adams, Antonius, <i>o.m.cap.</i> (NY), New York City, 227 E 112th st.	Alchinger, Benno, <i>o.m.cap.</i> (Mil), Mt. Cal- vary, Wis.
— Thos. (Br) Brooklyn, N. Y., 41 Butler st.	Aid, Richard (Dav), absent on leave.
Adanowski, J. (G B).	Aigner, Francis, <i>s.j.</i> (New), Jersey City, N. J., 144 Grand st.

D Appendix – Additional Results

D.1 Church Entry and Fertility of Italian Immigrants

In this section, we test whether the arrival of a church altered parents’ decision to have children in the first place. We restrict the sample to married couples, since at the time out of wedlock births were extremely rare (Greenwood et al., 2021), for a total of 25,594 households and 226,422 yearly observations. Figure D.1 plots the estimated coefficients (together with 95% confidence intervals) for the effects of church arrivals on the number of children born in the US in a given year. The vertical line refers to the year of church arrival. Consistent with the patterns reported in Figure 4 for naming patterns, there is no differential trend in fertility before the entry of a church. This evidence rules out anticipation effects or spurious correlation between the decision to have children and the arrival of an Italian church. The graph also shows that Italian churches did not have any effect on the number of children, suggesting that changes in naming patterns are not driven by changes in family size.

D.2 Italian Churches and Interactions with Other Groups

In Section 6.2 of the main text, we provide evidence consistent with churches increasing coordination within the Italian community. If churches lowered Italians’ assimilation by increasing the frequency of interactions with members of their own group, one might expect integration to fall not only with natives but also with other immigrants as well. In Table D.1, we estimate our preferred specification considering intermarriage (Panel A) and residential integration (Panel B) between Italians and members of different ethnic groups. Columns 1 and 2 document that church exposure increased the probability of endogamous marriage and of living in residentially segregated enclaves.

Alongside the increase in endogamous marriage, we observe a steep decline in the probability of intermarriage with non-Italian first and second generation immigrants (column 3). Interestingly, and possibly reflecting the stickiness of residential patterns, we do not observe a corresponding reduction in the probability of having non-native (non-Italian) neighbors. The remaining columns of Table D.1 show that the reduction in intermarriage reported in column 3 was likely driven by (lower) marriage rates with other non-Catholic Europeans. Indeed, Italian churches had no, or a negative

but small, effect on intermarriage between Italian immigrants and two of the most prominent non-Italian Catholic communities (i.e., the Irish and the Germans).⁸⁶

Results in Table D.1 can be reconciled with different mechanisms. However, they are consistent with churches reducing Italian immigrants’ willingness to integrate with other groups. An alternative interpretation, not in contrast with the previous one, is that other immigrant groups became more reluctant to socialize with and more likely to discriminate against Italians, in order to signal to natives that they were “different” (Fouka et al., 2022).

D.3 Priests, Italian Churches, and Non-Italian Churches

In this section, we provide additional evidence in support of the role of coordination. As explained in Section 3 and in Appendix C.2, we define a church as Italian when at least one of the following conditions is met: if it is *i*) an Italian national church; *ii*) a church with at least one Italian priest. Historical accounts emphasize that Italians were reluctant to attend the Mass in non-Italian Catholic churches. Moreover, only Italian priests were able to establish a tight relationship with their community – something that was instead unlikely to happen when Catholic priests were not Italian, due to cultural or linguistic barriers (Francesconi, 1983).

One would thus expect no (or weaker) effects on assimilation in the presence of non-Italian churches or priests, especially if coordination, favored by the church and promoted by the priest, were a central mechanism driving our results. We test this conjecture in Table D.3, where we run a horse-race between different measures of exposure. In particular, we consider the number of years with: at least one Italian national church; no Italian national church but at least one Italian priest; and, at least one Catholic church but neither an Italian church nor an Italian priest.

Exposure to Italian national churches had a strong, negative effect on intermarriage, residential integration, and naturalization (columns 1 to 3), while the effects are imprecisely estimated, but negative, for ability to speak English (column 4). As for the main analysis, exposure to an Italian national church increased labor force participation (column 5), but reduced the income score (column 6) of Italian immigrant men. Similar, albeit weaker, results appear when considering Italian priests in

⁸⁶The coefficient on residential integration is, instead, not statistically significant. When interpreting results in column 5, it should be kept in mind that German immigrants were split between Catholic and Protestant at the time (Goldbeck and Grossboelting, 2015). Table D.2 presents additional results for other European regions.

non-Italian churches. Interestingly, Italian priests (in non-Italian churches) have a stronger effect than Italian national churches on Italians' labor force participation. This is consistent with the evidence described in Section 2.3, according to which Italian priests exerted substantial effort to help their worshippers find a job (Capra, 1916).

A very different picture emerges when considering non-Italian Catholic churches. In this case, except for naturalization (column 3), coefficients are imprecisely estimated and without an obvious pattern. The positive effect of non-Italian churches on the probability of being a naturalized citizen may be due to the political influence exerted by the Irish Church, and the Irish community more generally. The latter often tried to mobilize immigrants of other nationalities, trading their support for local political machines in exchange for patronage jobs and similar benefits (Shertzer, 2016).

D.4 Alternative Definitions of Exposure

One may wonder if the *number* of churches and priests had an independent effect, above and beyond that of the length of exposure, on immigrant assimilation. In Table D.4, we experiment with two alternative measures of exposure to Italian Catholic churches. First, we consider the average number of Italian churches per year in each decade (Panel A). Second, we focus on the average number of Italian priests per year in each decade (Panel B). Differently from our baseline measure, which captures only the length of exposure, these alternative measures combine both the length and the intensity of exposure. Relative to the baseline specification, the coefficients for naturalization (column 3) become larger in magnitude, while those for occupational scores (column 6) are now smaller (in absolute value) and no longer statistically significant. However, all results remain in line with those from the preferred specification, suggesting that length of exposure – especially to churches (more than to priests) – was likely more important than the number of churches or priests.

In Table D.5, we explore one additional margin of heterogeneity, asking whether churches had a differential effect depending on the size of the county population or its area. In particular, we normalize the average number of Italian churches per year over the decade by: *i*) the 1900 county total (1,000) population (Panel A); and, *ii*) county area measured in square miles (Panel B). In both cases, results remain qualitatively

in line with our baseline specification. The only notable difference is that coefficient for occupational scores become positive and, when defining church exposure relative to area, statistically significant.

D.5 Italian Churches and KKK Presence

The increase in the negative and stereotypical association between Italians and Catholicism depicted in Figure 5 (Section 6.3) likely reflects natives’ backlash. In Table D.6, we test this possibility by focusing on a variable that proxies for anti-Catholic sentiments, i.e., the presence of a KKK klavern, taken from Kneebone and Torres (2015). Especially outside the US South, the second Klan, which was originally founded in Georgia in 1915 and then spread throughout the US in the 1920s, held an openly anti-Catholic rhetoric, accusing Catholics (and other minorities) of being “anti-American” (Higham, 1955; Lewis, 2013). We construct two measures. First, we use a dummy equal to one if the county had at least one KKK klavern between 1915 and 1940. Second, since the dataset reports the year in which a new KKK klavern opened in a county, we define the number of years between 1940 and the opening of the first klavern in the county, which is replaced to 0 in the case of no opening.⁸⁷

We estimate county-level cross-sectional regressions that correlate the number of years of church exposure up to 1915, with the two measures of KKK presence described above. We control for state fixed effects and for the full battery of 1900 county controls included in previous regressions. In columns 2 and 4, we also control for the predicted number of Italian and European immigrants, scaled by county population, constructed using the procedure detailed in Appendix C.4.⁸⁸

Since we cannot include county fixed effects and exploit the timing of the arrival of churches, results should be interpreted with caution. With this caveat in mind, Table D.6 documents that church exposure increased the likelihood that a KKK klavern was ever present in a county (columns 1 and 2). Moreover, counties with longer church exposure received a KKK klavern earlier (columns 3 and 4). In both cases, the magnitude of coefficients is non-trivial, even though they are only marginally significant. According to the coefficients in column 2, five additional years of church exposure increased the probability of having at least one KKK klavern between 1915 and 1940

⁸⁷The data does not report the number of active klaverns (or the exit year). This prevents us from considering the number of klaverns (in a given year or overall) as an additional outcome.

⁸⁸As before, regressions are weighed by the number of individuals in our sample.

by 1.3 percentage points (or, 3.7% relative to the sample mean), and anticipated the opening of the first klavern by about 15% (or, about 1 year).

Table D.1. Integration with Other Immigrant Groups I

	(1)	(2)	(3)	(4)	(5)
Ethnicity:	1 st gen. Italian	1 st and 2 nd gen. Italian	Not native	Irish	German
Panel A.	Dep. Variable: Married to Native				
Years w/ Italian Church	0.187*** (0.040)	0.253*** (0.034)	-0.116*** (0.025)	-0.004 (0.006)	-0.026*** (0.005)
Mean Treatment	7.190	7.190	7.190	7.190	7.190
Mean Dep. Variable (1900)	94.18	95.90	2.690	0.288	0.416
Observations	1,759,962	1,759,962	1,759,962	1,759,962	1,759,962
Panel B.	Dep. Variable: Residential Integration				
Years w/ Italian Church	0.453*** (0.114)	0.454*** (0.113)	-0.003 (0.113)	0.006 (0.033)	0.052 (0.033)
Mean Treatment	7.422	7.422	7.422	7.422	7.422
Mean Dep. Variable (1900)	67.36	67.78	41.30	9.861	9.528
Observations	1,005,364	1,005,364	1,005,364	1,005,364	1,005,364
State \times Decade FEs	Yes	Yes	Yes	Yes	Yes
County FEs	Yes	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes
County Controls \times Decade	Yes	Yes	Yes	Yes	Yes
County Linear Trends	Yes	Yes	Yes	Yes	Yes
Ever Treated	Yes	Yes	Yes	Yes	Yes

Notes: The table replicates the specification in column 4 of Table 1 for intermarriage and residential integration between an Italian immigrant and individuals belonging to the group reported at the top of each column. *Not native* includes any ethnicity and 1st and 2nd generation Italians. s, Massachusetts, New Jersey, New York, Pennsylvania). See the notes to Tables 2 and 2 for the description of controls. Standard errors, clustered at the county level, in parentheses. Significance levels: *** p<0.01, ** p<0.05, * p<0.1.

Table D.2. Integration with Other Immigrant Groups II

	(1)	(2)	(3)	(4)	(5)
Ethnicity:	UK	Western Europe	Northern Europe	Central/East Europe	Russian Empire
Panel A.	Dep. Variable: Married to Native				
Years w/ Italian Church	-0.013*** (0.004)	-0.033*** (0.008)	-0.004* (0.002)	-0.016*** (0.005)	0.001 (0.001)
Mean Treatment	7.190	7.190	7.190	7.190	7.190
Mean Dep. Variable (1900)	0.217	0.437	0.0571	0.199	0.0138
Observations	1,759,962	1,759,962	1,759,962	1,759,962	1,759,962
Panel B.	Dep. Variable: Residential Integration				
Years w/ Italian Church	-0.016 (0.028)	0.015 (0.020)	-0.014 (0.021)	0.072* (0.037)	0.032 (0.037)
Mean Treatment	7.422	7.422	7.422	7.422	7.422
Mean Dep. Variable (1900)	4.010	2.170	2.057	4.190	2.964
Observations	1,005,364	1,005,364	1,005,364	1,005,364	1,005,364
State \times Decade FEs	Yes	Yes	Yes	Yes	Yes
County FEs	Yes	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes
County Controls \times Decade	Yes	Yes	Yes	Yes	Yes
County Linear Trends	Yes	Yes	Yes	Yes	Yes
Ever Treated	Yes	Yes	Yes	Yes	Yes

Notes: The table replicates the specification in column 4 of Table 1, for intermarriage and residential integration between an Italian immigrant and individuals belonging to the group reported at the top of each column. s, Massachusetts, New Jersey, New York, Pennsylvania). See the notes to Tables 2 and 2 for the description of controls. Standard errors, clustered at the county level, in parentheses. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table D.3. Italian Churches, Italian Priests, and Non-Italian Churches

Dep. Variable:	(1)	(2)	(3)	(4)	(5)	(6)
	Married to Native	Residential Integration	Naturalized	Speak English	In Labor Force	Log Occ. Score
Years w/ Italian National Church	-0.110*** (0.013)	-0.506*** (0.090)	-0.640** (0.265)	-0.140 (0.140)	0.141** (0.056)	-0.014*** (0.004)
Years w/ Italian Priests	-0.040* (0.021)	-0.164 (0.125)	-0.380* (0.212)	0.010 (0.258)	0.252*** (0.066)	-0.007 (0.008)
Years w/ non-Italian Church	0.003 (0.038)	-0.222 (0.171)	1.153*** (0.429)	0.332 (0.309)	-0.048 (0.093)	0.001 (0.009)
Mean Italian National Church	6.148	6.613	6.654	5.753	5.504	5.531
S.d. Italian National Church	3.824	3.744	3.675	3.882	3.933	3.923
Mean Italian Priests	0.741	0.808	0.873	0.717	0.732	0.731
S.d. Italian Priests	1.784	1.883	1.949	1.748	1.760	1.752
Mean non-Italian Church	7.576	8.160	8.456	7.175	7.041	7.058
S.d. non-Italian Church	3.086	2.709	2.201	3.267	3.323	3.308
Mean Dep. Variable (1900)	0.807	17.15	53.39	57.07	85.75	3.070
Observations	1,988,957	1,005,364	1,317,467	2,880,990	1,759,709	1,654,138
State \times Decade FEs	Yes	Yes	Yes	Yes	Yes	Yes
County FEs	Yes	Yes	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
County Controls \times Decade	Yes	Yes	Yes	Yes	Yes	Yes
County Linear Trends	Yes	Yes	Yes	Yes	Yes	Yes
Ever Treated	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The table replicates column 4 of Table 1 and Table 2 replacing the main regressor (*Years w/ Italian Church*) with: *i*) the number of years with at least one Italian national church (*Years w/ Italian national church*); *ii*) the number of years with at least one Italian priest (*Years w/ Italian priests*), but no Italian national church; *iii*) the number of years with at least one Catholic church (*Years w/ non-Italian church*), but neither Italian national churches nor Italian priests. See the notes to Tables 1 and 2 for the description of controls. Standard errors, clustered at the county level, in parentheses. Significance levels: *** p<0.01, ** p<0.05, * p<0.1.

Table D.4. Heterogeneity by Treatment Type I

	(1)	(2)	(3)	(4)	(5)	(6)
Dep. Variable:	Married to Native	Residential Integration	Naturalized	Speak English	In Labor Force	Log Occ. Score
Panel A	Number of Italian Churches					
Average Italian Churches p.a.	-0.076*** (0.015)	-0.498*** (0.095)	-1.519*** (0.511)	-0.195 (0.242)	0.137** (0.060)	-0.002 (0.007)
Mean Treatment	4.395	4.781	4.661	4.124	3.831	3.860
S.d. Treatment	4.673	4.819	4.759	4.607	4.500	4.513
Mean Dep. Variable (1900)	0.807	17.15	53.39	57.07	85.75	3.070
Observations	1,988,957	1,005,364	1,317,467	2,880,990	1,759,709	1,654,138
Panel B.	Number of Italian Priests					
Average Italian Priests p.a.	-0.035*** (0.011)	-0.265*** (0.065)	-0.892*** (0.317)	-0.109 (0.131)	0.081** (0.034)	-0.002 (0.002)
Mean Treatment	7.867	8.555	8.284	7.374	6.792	6.841
S.d. Treatment	8.815	9.066	8.946	8.653	8.416	8.440
Mean Dep. Variable (1900)	0.807	17.15	53.39	57.07	85.75	3.070
Observations	1,988,957	1,005,364	1,317,467	2,880,990	1,759,709	1,654,138
State \times Decade FEs	Yes	Yes	Yes	Yes	Yes	Yes
County FEs	Yes	Yes	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
County Controls \times Decade	Yes	Yes	Yes	Yes	Yes	Yes
County Linear Trends	Yes	Yes	Yes	Yes	Yes	Yes
Ever Treated	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The table replicates column 4 of Table 1 and Table 2 replacing the number of years with at least one Italian church (*Years w/ Italian Church*) with the average number of churches (resp., priests) per year during a decade in Panel A (resp., Panel B). See the notes to Tables 1 and 2 for the description of controls. Standard errors, clustered at the county level, in parentheses. Significance levels: *** p<0.01, ** p<0.05, * p<0.1.

Table D.5. Heterogeneity by Treatment Type II

	(1)	(2)	(3)	(4)	(5)	(6)
Dep. Variable:	Married to Native	Residential Integration	Naturalized	Speak English	In Labor Force	Log Occ. Score
Panel A.	Number of Italian Churches per Population					
Average Italian Churches	-0.001*** (0.000)	-0.007*** (0.001)	-0.021*** (0.007)	-0.003 (0.003)	0.002** (0.001)	-0.000 (0.000)
Mean Treatment	327.8	356.5	348	307.5	286	288.2
S.d. Treatment	335.9	345.7	340.8	331.6	323.8	324.7
Mean Dep. Variable (1900)	0.807	17.15	53.39	57.07	85.75	3.070
Observations	1,988,957	1,005,364	1,317,467	2,880,990	1,759,709	1,654,138
Panel B.	Number of Italian Churches per Square Mile					
Average Italian Churches	-1.551*** (0.284)	-16.078*** (1.314)	-75.966*** (10.111)	-11.411 (7.621)	4.631*** (1.428)	0.402** (0.171)
Mean Treatment	0.0809	0.0895	0.0840	0.0769	0.0687	0.0690
S.d. Treatment	0.167	0.176	0.171	0.163	0.154	0.155
Mean Dep. Variable (1900)	0.807	17.15	53.39	57.07	85.75	3.070
Observations	1,988,957	1,005,364	1,317,467	2,880,990	1,759,709	1,654,138
State \times Decade FEs	Yes	Yes	Yes	Yes	Yes	Yes
County FEs	Yes	Yes	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
County Controls \times Decade	Yes	Yes	Yes	Yes	Yes	Yes
County Linear Trends	Yes	Yes	Yes	Yes	Yes	Yes
Ever Treated	Yes	Yes	Yes	Yes	Yes	Yes

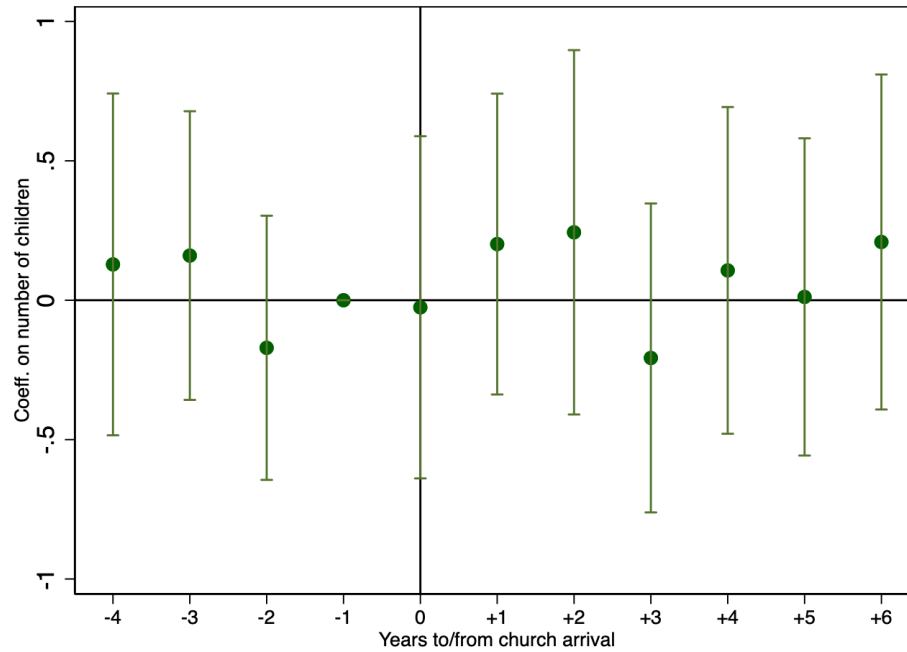
Notes: The table replicates column 4 of Table 1 and Table 2 by scaling the average number of Italian churches per year during the previous decade by the the total (1,000) county population (resp., county area in square miles) in 1900 in Panel A (resp., Panel B). See the notes to Tables 1 and 2 for the description of controls. Standard errors, clustered at the county level, in parentheses. Significance levels: *** p<0.01, ** p<0.05, * p<0.1.

Table D.6. KKK Presence, 1915-1940

	(1)	(2)	(3)	(4)
Dep. Variable:	KKK Presence × 100		KKK Timing in (log) Years	
Years w/ Italian Church	0.335* (0.199)	0.255 (0.152)	0.041* (0.024)	0.031* (0.018)
Mean Treatment	1.849	1.849	1.849	1.849
Mean Dep. Variable	33.79	33.80	-5.128	-5.127
Observations	3,010	3,009	3,010	3,009
State FEs	Yes	Yes	Yes	Yes
County Controls (1900)	Yes	Yes	Yes	Yes
Predicted Italian/European Immigration		Yes		Yes

Notes: *KKK Presence* is a dummy for the presence of at least one KKK klavern between 1915 and 1940, multiplied by 100. *KKK timing* is the log of (one plus) the number of years between 1940 and the opening of the first KKK klavern in the county. If a klavern never opened, the variable takes value of zero. Regressions include state fixed effects and the battery of county-level controls listed in Table C.2. Columns 2 and 4 also include the predicted Irish and European immigrant share constructed using a shift-share strategy (Card, 2001), and the Italian immigrant share constructed using the procedure described in detail in Appendix C.4. All regressions are weighed by number of observations included in the individual-level analysis (Tables 1 and 2). Robust standard errors in parentheses. Significance levels: *** p<0.01, ** p<0.05, * p<0.1.

Figure D.1. Number of Children



Notes: The figure plots the coefficient, with 95% confidence intervals, on leads and lags of a dummy equal to one for the entry of an Italian Catholic church in each county-(calendar) year. The dependent variable is the number of children born in the US in the household. The sample is restricted to: households with both parents born in Italy and with at least one child born in the US; first church arrival in the county over the 1890-1920 period, conditional on having no churches between 1880 and 1890. The regression includes all controls listed in column 4 of Table 1, and household fixed effects. The vertical black line refers to the arrival of the church in the county. Standard errors clustered at the county level.