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# FAITH AND ASSIMILATION: ITALIAN IMMIGRANTS IN THE US

Stefano Gagliarducci Marco Tabellini

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#### **ABSTRACT**

How do ethnic religious organizations influence immigrants' assimilation in host societies? This paper offers the first systematic answer to this question by focusing on Italian Catholic churches in the US between 1890 and 1920, when four million Italians moved to America, and anti-Catholic sentiments were widespread. Relying on newly collected data on the presence of Italian Catholic churches across counties over time, we implement a difference-in-differences design. We find that Italian churches reduced the social assimilation of Italian immigrants, lowering intermarriage, residential integration, and naturalization rates. We provide evidence that stronger coordination within the Italian community and natives' backlash and negative stereotyping can explain these effects. Despite the negative effects on Italians' social assimilation, Italian churches had ambiguous effects on immigrants' economic outcomes, and increased children's literacy and ability to speak English.

Stefano Gagliarducci University of Rome Tor Vergata Via Columbia 2 00133 Rome Italy stefano.gagliarducci@uniroma2.it

Marco Tabellini Harvard Business School 279 Morgan Hall Soldiers Field Boston, MA 02163 and CEPR and also NBER mtabellini@hbs.edu

## 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 immigrants' assimilation pose fundamental threats to social cohesion and may erode national identity (Collier, 2013). Such concerns are often linked to religion – a dimension along which immigrants and natives tend to differ, and an important determinant of culture, beliefs, and moral values (Bisin et al., 2004; Enke, 2019; Valencia Caicedo et al., 2021).

Irrespective of their specific characteristics and of the faith they are linked to, religious organizations are frequently blamed for perpetuating ethnic practices and for slowing the adoption of norms prevailing in the host society. In recent decades, Muslim immigrants have become the target of episodes of violence perpetrated by natives (Abdelgadir and Fouka, 2020; Bansak et al., 2016; Bisin et al., 2008; Müller and Schwarz, 2020). Although the religious groups that trigger natives' hostility may differ across time and space, the current animosity is not a new phenomenon. In fact, between 1850 and 1920, when more than 30 million Europeans moved to the United States during the Age of Mass Migration (Abramitzky and Boustan, 2017), Catholic immigrants led to similar, hostile reactions (Higham, 1955; Spiro, 2009).

Despite the salience of the topic, the effects of religious organizations on immigrants' assimilation have remained surprisingly under-studied, at least within economics. Moreover, such effects are *ex-ante* ambiguous. On the one hand, ethnic religious organizations may keep alive the legacy of national culture either directly (e.g., by encouraging immigrants to stick to their social norms) or indirectly (e.g., by favoring the expansion of ethnic networks or by triggering natives' backlash). On the other hand, they may alleviate the cost of immigration by providing spiritual and material support, thus favoring the permanence of immigrants in the destination country and making adaptation smoother. In addition, religious organizations might foster the economic and social integration of ethnic minorities through the provision of key public goods such as education.

In this paper, we study the effects of ethnic religious organizations on the social, cultural, and economic assimilation of immigrants. We examine the role of Italian Catholic churches in the United States between 1890 and 1920, at the peak of the Age of Mass Migration. This setting offers several advantages. First, between 1892 and 1925 more than 4 million Italians migrated to the United States, representing the single largest national group at the time (Ferenczi, 1929; Spitzer and Zimran, 2018). Moreover, 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).<sup>1</sup> Second, we collected and digitized detailed historical records on the arrival and the presence of Italian Catholic priests and churches that were specifically identified by the Catholic hierarchy to serve the Italian community. By combining this novel dataset with the full count US Census of Population, we can trace out the effects of religious organizations on immigrants' integration. Third, anecdotal and historical evidence highlights both the importance of the Catholic Church for Italian immigrants (Herberg, 1983; Vecoli, 1969) and the hostile reactions that it triggered among natives at the time (Higham, 1955).

We 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.<sup>2</sup> We then estimate linear, two-way (county 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 characteristics that might have jointly influenced the assimilation of Italian immigrants and the establishment of an Italian Catholic church. That is, the effects of Italian churches are estimated within the same county over time, as compared to other counties within the same state in a given Census year.

The main threat to identification is that counties where the assimilation of Italian immigrants was evolving differentially received an Italian church earlier – something that would violate the parallel trends assumption behind our difference-in-differences (DD) strategy. For instance, it could be that Italian Catholic churches were more likely to open in areas with pre-existing Italian communities, where immigrants may have been on differential assimilation trends. Furthermore, the presence of a church may, at least in part, reflect the process of assimilation of the ethnic community (Tomasi, 1975). To assuage these concerns and to allow for differential trends, we interact Census year dummies with several 1900 county characteristics. Our preferred specification restricts attention to counties that received at least one Italian church between 1890 and 1920, and includes county-specific linear trends. This guarantees that we only exploit variation in the *timing* of the arrival of an Italian church within a given decade, net of heterogeneous constant

<sup>&</sup>lt;sup>1</sup>Notable 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).

<sup>&</sup>lt;sup>2</sup>Throughout the paper, we define an Italian church if i) it was an Italian national church (as classified by the Catholic directories); or, ii) it was a church with at least one Italian priest. Below, we show that results are robust to using either measure, and to defining exposure to churches over longer time periods.

trends in county penetration, which, as we describe below, were largely dictated by idiosyncratic factors.

To corroborate the validity of the empirical design, we perform three key exercises. First, we check that the timing of church arrivals within a decade is largely uncorrelated with either the 1880-1900 change or the 1900 level of several county characteristics. Second, we verify that neither the 1880-1900 change in Italian immigrants' assimilation nor its 1900 level predicts church exposure in subsequent years. This holds also for a measure of religiosity (based on the frequency of children named after Catholic saints), the economic circumstances, and the cultural homogeneity of the Italian community – key variables that historical accounts associate with the presence of Italian Catholic churches (Francesconi, 1983; Tomasi, 1975). Finally, we document that church entries are not predicted by yearly changes in the Italian immigrant population, the ethnic and religious content of names chosen by Italian parents for their offspring, and mentions of ethnic stereotypes in the local press. These patterns are consistent with the historical evidence described in Section 2, according to which the timing of the arrival of Italian churches was erratic.<sup>3</sup>

We find that Italian Catholic churches lowered the probability that Italians were married with and lived close to a native of native parentage. According to our estimates, five additional years of exposure to an Italian Catholic church – slightly less than the sample average – reduce intermarriage rates and residential integration by .5 and 2 percentage points, respectively (or 61% and 13% relative to the 1900 mean). Exposure to churches also lowered immigrants' naturalization rates, suggesting that Italians became less interested in political participation, and raised parents' desire to transmit their culture and values to the next generation. Exploiting naming patterns within Italian families, we show that children born in the US after the arrival of an Italian church were more likely to be named after a Catholic saint, relative to their siblings born before the arrival of the church. Interestingly, however, Italian churches did not increase the probability that parents chose names that were particularly common among Italians. One explanation for this asymmetric effect is that Italian Catholic churches were effective in fostering parents' desire to promote specific (i.e., religious) values rather than a more generic notion of "Italianness."

Turning to economic outcomes, the picture is more mixed. The presence of Italian churches increased Italians' labor force participation, but reduced their occupational

<sup>&</sup>lt;sup>3</sup>For example, the timing of the entry (and exit) of Italian churches in a county 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.

standing and the quality of their jobs. Moreover, Italian immigrants living in counties more exposed to churches were more likely to specialize in more typically "Italian" occupations (such as bootblacks, barbers, or fruit graders). These patterns are consistent with anecdotal accounts, and indicate 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).

We verify that our results are not due to the spurious correlation between church arrival and other factors, such as the growth of the Italian or the immigrant community, or stronger labor demand, and that they are robust to accounting for heterogeneous effects across cohorts (de Chaisemartin and D'Haultfoeuille, 2020; Goodman-Bacon, 2021). We also provide evidence against the possibility that our findings may be driven by selective in-migration of Italian immigrants or by broader changes in county characteristics, potentially triggered by church arrivals. We describe these and additional robustness checks below, after presenting the main results.

In the second part of the paper, we investigate the mechanisms. Abundant historical evidence suggests 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 for the Italian community, churches and priests facilitated the interaction among immigrants in many other ways, such as celebrating weddings, promoting lay associations, and organizing recreational activities for both adults and children.

To test this mechanism, we interact church exposure with the size of the Italian community in 1900, both in absolute value and relative to county population. In the presence of coordination, one would expect Catholic churches to reduce social assimilation more in areas with a larger Italian enclave. Our estimates confirm this conjecture: intermarriage rates 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.

A second potential mechanism is natives' backlash, which may have arisen if Italian

Catholic churches increased the salience of the immigrant community in the eyes of natives, thereby reinforcing the (negative) stereotypical association between Italian immigrants and Catholicism (Higham, 1955). Using the local press to measure natives' attitudes, we show 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).

The findings described thus far suggest that Italian Catholic churches reduced the social and, to a lesser extent, economic assimilation of Italian immigrants. However, churches may have helped immigrants integrate in the host society along other dimensions. One specific channel highlighted by the historical literature is the provision of education, since Catholic churches often had annexed schools that immigrant children could attend (Vecoli, 1969). In line with this view, 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. Exploiting the granularity of our data, we find that this pattern was more pronounced for Italian churches that had an annexed school. Interestingly, the effects for ability to speak English – but not those for literacy – are stronger in counties belonging to states that had compulsory English laws in place, and are larger for girls than for boys.

Our paper speaks to different strands of the literature. First, we complement the papers on immigrants' assimilation. Existing works have considered a number of forces—from time spent in the host country (Abramitzky et al., 2014, 2020) to ethnic enclaves and group size (Edin et al., 2003; Eriksson, 2019) to the arrival of new groups (Fouka et al., 2022) to education and other government policies (Bandiera et al., 2019; Fouka, 2020; Lleras-Muney and Shertzer, 2015)—that shape the inclusion or exclusion of minorities into the majority group. To the best of our knowledge, we are the first to examine the impact of ethnic religious organizations, which are anecdotally viewed as an important factor in the process of integration of minorities. Since ethnic churches mediate the transmission of values and the persistence of national culture, our paper is also related to works on cultural transmission (Alesina et al., 2013; Bisin and Verdier, 2001; Fernandez and Fogli, 2009; Giuliano and Nunn, 2021).

Second, our paper complements the broader literature on the economics of religion

(Barro and McCleary, 2003; McCleary and Barro, 2006). Since the seminal contribution of Weber (2002), 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). Botticini and Eckstein (2012), 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, in turn, long run economic development. Montero and Yang (2021) have documented that religious festivals lower agricultural productivity and hinder economic development in Mexico.<sup>4</sup> In studying how religious organizations influence immigrants' integration, our work links this literature to that on assimilation.

Finally, we complement the recent and growing literature on the Age of Mass Migration, which has studied the economic and political effects of European immigrants in the short run (Abramitzky et al., 2019; Tabellini, 2020), and their long run impact on political ideology and economic growth (Giuliano and Tabellini, 2020; Sequeira et al., 2020).<sup>5</sup>

The rest of the paper proceeds as follows. Section 2 discusses the historical background and the role of Italian Catholic churches in the US during the Age of Mass Migration. Section 3 describes the data, and Section 4 lays out the empirical strategy. Section 5 presents the main results, while Section 6 explores the mechanisms. Section 7 examines the effects of churches on immigrant children. Section 8 concludes.

# 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).<sup>6</sup> 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

<sup>&</sup>lt;sup>4</sup>See also Becker et al. (2021), Iannaccone (1998), and Iyer (2016) for comprehensive reviews.

<sup>&</sup>lt;sup>5</sup>See also Abramitzky and Boustan (2017) for a review. Goldin (1994) is an early contribution on the political economy of immigration restrictions. Spitzer and Zimran (2018) and Pérez (2021) study, respectively, the patterns of selection and the assimilation in the US and Argentina of Italian immigrants during the Age of Mass Migration.

<sup>&</sup>lt;sup>6</sup>During 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).

(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, together, 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. 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, 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,

<sup>&</sup>lt;sup>7</sup>The 1921 Emergency Quota Act mandated that the number of 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).

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).

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. 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 (such as that of the Scalabrinians).<sup>10</sup>

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 for more details). Perhaps not surprisingly, the arrival of missions and churches often mirrored the distribution of Italian settlements. Yet, church arrivals did not always follow the footsteps of Italian migration. For example, Italian churches remained

<sup>&</sup>lt;sup>8</sup>Among 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).

<sup>&</sup>lt;sup>9</sup>In the Catholic Church, a diocese is an ecclesiastical district under the jurisdiction of a bishop.

<sup>&</sup>lt;sup>10</sup>Similar 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).

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. However, churches and priests reached many more locations, with no 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 tried to target poorer areas, where Italian immigrants were more in need of (spiritual and material) support. This was particularly true for the Scalabrinians, but held for other denominations as well (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.<sup>11</sup> The degree of religiosity of the Italian community represents a third factor that might have influenced the arrival of Italian churches. 12 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 Italian and 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 wrote that he was "not sure about the number of Italians. Some people say there are

<sup>&</sup>lt;sup>11</sup>For 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 are described for Syracuse (NY), Fredonia (MA), and many other places.

<sup>&</sup>lt;sup>12</sup>Compared 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).

six hundred, others eight hundred, and others over one thousand." <sup>13</sup> Such uncertainty interacted with the limited supply of priests. "There remained the problem of finding a priest [...] willing to daily carry out the delicate and responsible task at Ellis Island," lamented Father Gambera in his 1900 Memorie, who also noted how "The scarcity of priests was our most serious and damaging problem." <sup>14</sup>

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.<sup>15</sup> 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, including his brother (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, the various Italian religious orders had to be granted permission to open a church by the bishop of the diocese – again, a process whose outcome and duration were highly uncertain. <sup>16</sup>

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. Specifically, between 1890 and 1920 we observe 756, 192, and 36 single, double, and triple church entries, respectively. There

<sup>&</sup>lt;sup>13</sup>Letter from Father Gibelli to Father Vicentini, 1893. Reported in Francesconi (1983).

<sup>&</sup>lt;sup>14</sup>See *Memorie* by Father Gambera, reported in Francesconi (1983).

<sup>&</sup>lt;sup>15</sup>For 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]."

<sup>&</sup>lt;sup>16</sup>Father Gambera's *Memorie* provides several examples. For instance, when referring to the case of St. Louis (MO), Father Gambera writes: "Following long negotiations, I obtained permission from that Archbishop of St. Louis, Missouri to preach a mission to the Italian community [...] in the Irish church of St. Patrick."

## 2.3 Italian Churches and Immigrants' Assimilation

Pope Leo XIII hoped that Italian churches would have preserved the faith and reinforced the legacy of the Catholic culture among Italian immigrants. As the Pope wrote in the 1888 Encyclical Quam Aerumnosa (whose literal translation is "How Sad"), specifically addressing the Italian migration to the Americas, "Among 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, to administer the sacraments, or to uphold by the aids whereby the soul is raised to the desire of heavenly things, and the life of the spirit is strengthened and nourished."

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, which were unknown or neglected, to administer to them the saving sacraments, to spread among the rising generation religion..." 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." Special attention was paid to young migrants, who were considered by the Church at risk of abandoning their Italian culture for the American one. 19

These and similar accounts suggest that Italian Catholic churches may have hindered the Americanization of Italian immigrants. Through the lens of standard models of cultural evolution (Bisin and Verdier, 2001), Italian churches may have favored 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, and inducing parents to give more Italian sounding names, or the name of a Catholic saint, to their children. As noted by Tomasi (1975), Italian parishes were the "first line of defense behind which the immigrants could organize themselves and preserve

 $<sup>^{17}</sup>$ We return to this point when discussing the empirical strategy in Section 4.

<sup>&</sup>lt;sup>18</sup>Letter by Bishop Scalabrini to Archbishop of Ireland, 1889, in Francesconi (1983).

<sup>&</sup>lt;sup>19</sup>For 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).

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).<sup>20</sup>

The arrival of Italian Catholic churches may have also increased the salience of the immigrant community, triggering natives' backlash and discrimination and raising the frequency of negative stereotyping. At the time, anti-Catholic sentiments were widespread, to the point that the KKK openly targeted Catholic immigrants (Higham, 1955) and the religious affiliation of Alfred Smith – the first Roman Catholic presidential candidate for the Democratic Party – is considered one of the causes of his defeat in the 1928 elections (Slayton, 2001). 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 abroad: "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." <sup>21</sup> 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. <sup>22</sup> In addition, missionaries often emphasized that more schools were needed to facilitate the adaptation of Italian immigrants. <sup>23</sup> Especially after 1910, many US states required public and private institutions, including ethnic schools, to teach also – if not exclusively – in English (Edwards, 1923).

<sup>&</sup>lt;sup>20</sup>Francesconi (1983) further noted that, linked to the church, was often a Catholic school, which "has a hall for the meetings of the numerous societies [...] in it Sunday classes are held, and night celebrations and entertainments for families and their children are offered."

<sup>&</sup>lt;sup>21</sup>Lecture by Bishop Scalabrini, 1898, in Francesconi (1983).

<sup>&</sup>lt;sup>22</sup>Return 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).

<sup>&</sup>lt;sup>23</sup> "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 1892 in a letter to Father Rolleri (Francesconi, 1983).

Since Italian immigrants often sent their children to ethnic and religious schools, Catholic churches may have promoted skill acquisition and favored successful assimilation, more so in states where schools were required to teach (also) in English. These effects, which were likely stronger for pupils born in Italy and arrived in the US while in schooling age, may have increased the assimilation of at least some segments of the Italian immigrant population, contrary to the intents of Pope Leo XIII.

This discussion suggests that the impact of Italian Catholic churches was *ex-ante* ambiguous also for Italian immigrants' economic assimilation. On the one hand, a more segregated community and limited social integration, possibly coupled with lower levels of English proficiency, may have prevented Italian immigrants from finding well-paying jobs with opportunities for skill and occupational upgrading (Eriksson, 2019). On the other hand, the existing evidence suggests that priests actively helped Italian immigrants find a job.<sup>24</sup> Moreover, if churches increased coordination within the Italian community, they may have facilitated the matching process in the ethnic labor market (Edin et al., 2003).

## 3 Data

#### 3.1 US Census Data

Data on socioeconomic and demographic characteristics of Italian immigrants, as well as on county historical variables, come from the full count US Census of Population (Ruggles et al., 2020). In our analysis, we restrict attention to the universe of Italian immigrants living in the US in each Census year 1900, 1910, and 1920.<sup>25</sup>

We measure immigrants' assimilation in different ways. First, we proxy for social assimilation using i) intermarriage between an Italian immigrant and a native spouse of native parentage, and ii) a measure of residential integration. The former is considered in the sociology literature "the final stage of assimilation" (Gordon, 1964). The latter is constructed adapting the procedure developed in Logan and Parman (2017), and can be interpreted as the probability that an Italian immigrant had at least one native neighbor (of native parentage). Both variables can be also interpreted as "equilibrium outcomes",

<sup>&</sup>lt;sup>24</sup>After 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).

<sup>&</sup>lt;sup>25</sup>Since county boundaries changed over time, we fix them to 1930 using the procedure developed in Perlman (2016).

<sup>&</sup>lt;sup>26</sup>For intermarriage, we restrict attention to married individuals who were at least 15 years old. Ideally,

which depend not only on immigrants' desire to fit in but also on natives' willingness to accept them.

As additional proxies for social assimilation, we use naturalization rates and ability to speak English – two variables that depend more on immigrants' actions than on those of natives. For 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.<sup>27</sup> When defining the ability to speak English, we instead consider individuals (of either gender) who were at least 15 years old.

We also consider the willingness of immigrant parents to transmit the (Italian) culture to their offspring. Following the literature (Abramitzky et al., 2020; Fouka, 2020; Fryer and Levitt, 2004), we construct an Italian index (INI) that captures the ethnic distinctiveness of the name given by parents to their children. The index, whose description is detailed in Appendix B.2, ranges from 0 to 100, with lower values for names that were relatively less common among Italians living in the US. We complement this measure with a Catholic score, i.e., the percentage of children named after a Catholic saint as a proxy for parents' religiosity (and their desire to transmit their values to the next generation).

Finally, we measure economic assimilation with labor force participation and the log of occupational income scores.<sup>28</sup> In addition, we consider indicators for working, respectively, in the unskilled and in the manufacturing sector, where immigrants were over-represented relative to natives. We also construct an index that captures the "Italianness" of the occupation held by the immigrant.<sup>29</sup> We describe in more details these variables as they become relevant below.

Table 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. Reflecting the propensity of Italians to settle in counties with a large foreign born population, the average immigrant share in our sample is

one would want to focus on individuals who got married in the US. However, this is not possible, since age at first marriage was not asked before 1930. Appendix B.1 describes in detail the construction of our proxy for residential integration, which, to avoid double-counting, is defined only for household heads.

<sup>&</sup>lt;sup>27</sup>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. See also Fouka et al. (2022) for more details.

<sup>&</sup>lt;sup>28</sup>The 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).

<sup>&</sup>lt;sup>29</sup>As in Tabellini (2020), when defining economic outcomes we restrict attention to men in working age (15-64). To map occupations to skill groups, we follow Katz and Margo (2014).

27%. Italians accounted for an important fraction of immigrants, as the Italian share of the county population was, on average, 4%. Consistent with historical accounts, immigrants in our sample were disproportionately located in urban areas (Abramitzky and Boustan, 2017).

Turning to the main outcomes of interest, only 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. Both variables indicate that social assimilation was not common 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.

#### 3.2 Catholic Directories

We combine the US Census with newly collected data on the presence of Catholic churches and priests in the US. These were obtained by digitizing *The Official Catholic Directory* of the United States for the period 1880-1920, which contain information on the presence of Italian Catholic organizations across counties and over time. 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 3); and, *ii*) a complete list of clergymen, with related rank, order, and place of service (see the example in Figure 4).

We were able to recover a PDF version of the almanacs for all years between 1880 and 1920, except for 1882, 1895, 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.<sup>30</sup> In all cases, we refer to

<sup>&</sup>lt;sup>30</sup>The almanacs identify some churches as "national" (e.g., reporting "Italian", "German", or "Polish" after the name of the church, see Figure 3) 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 prerequisite to hear Confession and to administer other sacraments among Italian immigrants (i.e., Eucharist,

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.<sup>31</sup>

Panel A of Table 1 reports summary statistics for our preferred treatment variable – the number of years between two Censuses with at least one Italian national church or a church with an Italian priest.<sup>32</sup> On average, the county-level exposure to an Italian church 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. For example, the outcomes of an Italian measured in the 1910 Census are matched to her exposure (if any) to an Italian church between 1901 and 1910.<sup>33</sup> Stacking repeated cross-sectional individual datasets for 1900, 1910, and 1920, we restrict attention to first-generation Italian immigrants (though, as shown in Appendix C, results are similar when including second generation immigrants). Following a two-way fixed effects approach to difference-in-differences (DD), we estimate:

$$y_{ihc\tau} = \alpha_c + \gamma_{s\tau} + \beta_1 T_{c\tau} + \beta_2 X_{i\tau} + \beta_3 X_{h\tau} + \beta_4 X_{c\tau} + \epsilon_{ihc\tau}$$
 (1)

where  $y_{ihc\tau}$  is the outcome of immigrant i in household h residing in county c in Census year  $\tau$ ; and  $T_{c\tau}$ , the key regressor of interest, is the number of years between Census year  $\tau$  and  $\tau - 1$  with at least an Italian church (as defined in Section 3.2 above) active in county

Confirmation, Matrimony, etc.). Appendix B.3 describes in detail how Italian priests were identified in the data.

<sup>&</sup>lt;sup>31</sup>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.

<sup>&</sup>lt;sup>32</sup>Since the two measures are not mutually exclusive, in our baseline specification we combine them together, but we present results considering each measure separately in Appendix C.

<sup>&</sup>lt;sup>33</sup>Appendix C shows that results are robust to using longer time periods to measure exposure.

 $c.^{34}$   $X_{i\tau}$  and  $X_{h\tau}$  are vectors of individual (gender and fixed effects for marital status, years in the US, and age) and household (number of adults) level controls.  $X_{c\tau}$  includes: i) the number of years between Census year  $\tau$  and  $\tau - 1$  with at least a non-Italian Catholic church, which proxies for the assistance that Italian immigrants might have received from other Catholic institutions; and, ii) a vast set of 1900 county characteristics interacted with Census year fixed effects. Table A.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. Finally,  $\alpha_c$  and  $\gamma_{s\tau}$  are county and state by decade fixed effects. Standard errors are clustered at the county level.

The inclusion of county and state by decade fixed effects implies that the coefficient of interest,  $\beta_1$ , captures the effects of exposure to Catholic churches and priests within the same county over time as compared to other counties within the same state in a given Census year. 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. Similarly, including the baseline share of European, Italian, and Irish immigrants, and 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.

Allowing for differential trends depending on the degree of regional homogeneity, captured by a Herfindahl–Hirschman index based on the distribution of Italian surnames (see Appendix B.4), further assuages the concern that more homogeneous communities were better able to request a priest, while simultaneously assimilating more (or less) slowly. We also allow for differential trends according to two proxies for religiosity. This deals with the concern that Italian churches may have arrived earlier in places with a more religious enclave, whose members may have been more resistant to cultural change and

<sup>&</sup>lt;sup>34</sup>Table A.1 presents all the outcomes considered in the paper. We denote a Census year (or decade) with  $\tau$  to distinguish it from the exact calendar year, t, which we introduce in Section 4.2 below. If an individual migrated after the arrival of the church,  $T_{c\tau}$  is replaced with the number of years spent in the US by the individual. Since the county of residence is only defined at Census year, we are implicitly assuming that there was no inter-county mobility prior to the Census.

<sup>&</sup>lt;sup>35</sup>When 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. This procedure expands the sample size by about 10%, thereby increasing the precision of the estimates. All results are unchanged when excluding observations with missing data.

thus to assimilation. The first proxy for Italians' religiosity is the average percentage at household level of Italian children with a Catholic saint's name (either in Italian or in English) in 1900.<sup>36</sup> The second one is the 1890 share of Catholics in the county (taken from the Census of Religious Bodies).<sup>37</sup>

Our preferred specification restricts attention to counties that received at least one Italian church during our sample period – weakening the parallel trends assumption – and includes county linear trends estimated using observations before and after treatment, similarly to Dobkin et al. (2018) – implying that we only exploit 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.

## 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 across and within counties. We combine this with yearly variation in birth dates of children born in the US from (first-generation) Italian parents. We reshape the data from census-year-individual to calendar-year-household level, taking into account the year of arrival of the household head when expanding the dataset at the yearly 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.

Restricting attention to first-generation Italian married couples over the period 1890-1920, we estimate the following regression:

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

where  $y_{hct}$  is the household h average Italian score (INI, see Appendix B.2) of US-born children (0-10) in calendar year t, and  $T_{c,t+k}$  are event dummy variables. Alternatively,  $y_{hct}$  could be the Catholic score, i.e., the percentage of children in a household named after a Catholic saint. As we can only identify ten coefficients out of eleven, we restrict the

<sup>&</sup>lt;sup>36</sup>We retrieved the list of Catholic saints from the Roman Martyrology.

<sup>&</sup>lt;sup>37</sup>In 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.

coefficient in the year before entry  $(\beta_{t-1})$  to zero.<sup>38</sup> Since counties could have experienced multiple entries per decade, 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 additionally includes: interactions between state and (calendar) year dummies,  $\gamma_{st}$ ; a vector of household level controls (household head fixed effects for gender, years in the US, and age, as well as household size and the number of children),  $X_{ht}$ ; the vector of time-invariant county controls interacted with decade dummies,  $X_{ct}$ , as defined in Section 4.1 (see also Table A.2); and, county-specific linear trends. Following Abramitzky et al. (2020), we also include household by decade fixed effects  $(\theta_h)$ . Since we only observe names in the presence of newborn children, this implies that we are de facto comparing the content of names of siblings born from the same parents before and after the arrival of an Italian Catholic church in a given county within a decade.<sup>39</sup>

This setting also allows us to test the validity of our identification assumption. Specifically, if the latter holds, the effects at each lead (k = -4, ..., -1) should be statistically indistinguishable from zero, ruling out anticipatory effects. One would also expect effects (if any) to manifest at the year of entry (k = 0), or later (k = +1, ..., +6), and possibly to change over time as the message of the church spreads across the immigrant community.

# 4.3 Testing the Identification Assumption

The identification assumption behind our strategy is that, within a decade and conditional on the controls and the fixed effects included in equation (1), the timing of the arrival of an Italian Catholic church was 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 identification assumption.

First, in Table 2a we regress the county-level measure of exposure to Italian churches,  $T_{c\tau}$ , against either the 1900 level of or the 1880-1900 change in several county characteristics. In Table 2b, we replicate this exercise considering different proxies for Italian immigrants' assimilation.<sup>40</sup> Since exposure is defined by decade, county characteristics

<sup>&</sup>lt;sup>38</sup>The model also includes a dummy, not reported, for any church arrival before t-4, and a dummy for any church arrival after t+6.

<sup>&</sup>lt;sup>39</sup>In principle, one could run a similar exercise for church exits. However, as shown in Appendix C, we do not find any effect of exits on assimilation in the DD framework. One possible explanation for this is that, even after a formal exit, the very same church remained open, even though it was no longer considered Italian by the Catholic directories.

<sup>&</sup>lt;sup>40</sup>The 1890 US Census of Population cannot be used because it was destroyed in a fire. Also, this exer-

and individual outcomes are interacted with decade dummies. We always control for county and state by decade fixed effects, and include county linear trends in columns 2 and 4.

Reassuringly, neither the pre-1900 trends nor the 1900 levels of several individual outcomes predict church exposure in subsequent years, independently of whether we control or not for county linear trends. This weighs against the possibility that the arrival of Italian churches depended on the pace of assimilation in a given county. As discussed in Section 2.2, one might expect churches to arrive earlier where the Italian community was larger, or where it was growing faster. Columns 1 and 3 of Table 2b confirm this conjecture: the share of Italians and other European immigrants (both in levels and in changes) are correlated with the timing of church arrival in the following decades. However, and crucially for our identification strategy, such correlations disappear when controlling for county linear trends (columns 2 and 4).

Table 2c considers three factors that, as described above, may have played an important role for both the arrival of Catholic churches and the assimilation of Italian immigrants: economic circumstances, religiosity, and cultural homogeneity of Italians. Since data on wages or wealth do not exist for this historical period, we rely on occupational income scores to proxy for the economic affluence of the Italian community. We measure religiosity as the share of Italian children named after a Catholic saint. Finally, in Appendix B.4, we derive a measure of cultural homogeneity by constructing an Herfindahl–Hirschman index over the distribution of Italian immigrants' surname data, where each family name is associated to the probability of originating from a specific region in Italy according to the Italian 2009 Whitepages directory.<sup>44</sup> In all cases, no systematic pattern emerges, and church entry seems to be uncorrelated with either the level or the change of Italians' income, religiosity, and cultural homogeneity. Reassuringly, this

cise cannot be performed for residential integration, naturalization status, and ability to speak English, since the 1880 Census did not report data needed to construct these variables.

 $<sup>^{41}</sup>$ Because of multi-collinearity,  $T_{c\tau}$  can be interacted only with one decade dummy (i.e., 1910-1920, but not 1900-1910) in columns 1 and 3. For the 1880-1900 change in immigrants' assimilation, data limitation prevents us from considering residential integration, naturalization, and ability to speak English.

<sup>&</sup>lt;sup>42</sup>Results are unchanged when replacing the number of years of exposure to Italian churches with the timing of first arrival of a church within the decade.

<sup>&</sup>lt;sup>43</sup>Since data on the Catholic population share is not available for 1880, we do not include it in Table 2b. However, results (not reported for brevity) are very similar to those obtained for the name-based index of religiosity when performing the placebo check using the 1890 value of the Catholic share.

<sup>&</sup>lt;sup>44</sup>The *Whitepages* is the official telephone directory, which provides a complete list of all names associated to a landline telephone number. See also Gagliarducci and Manacorda (2020). Ideally, one would exploit the regional distribution of Italians using historical data. However, to the best of our knowledge, no such data exists. For this reason, we rely on the *Whitepages*, acknowledging that it is an imperfect proxy and that it might introduce noise to our estimates.

pattern holds for all other variables included in Tables 2a-2c.

In the exercise just described, we could only consider changes in county or individual characteristics over a 20-year period. Figure 5 performs a more granular test, presenting a county-level event study graph that plots the evolution of *yearly* changes in Italian immigrant population in a close window around church entries. The model includes all the state- and county-level controls as in equation (2). We report results both without (Panel A) and with (Panel B) county linear trends. Formally, we estimate:

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

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 (or out-of-US) migration or mortality. To account for this, we fit a model with a quadratic rate in the inflow of Italians, which we assume being the same across counties and years of arrival (i.e., we control for county by year of arrival fixed effects). Predicted values from this model are then used to compute yearly inflow rates. Reassuringly, there is no sign of anticipation along this dimension, and patterns look very similar with and without county linear trends.

Taken together, the evidence presented here supports the idea that, within a decade, there were no county-level trends that explain the timing of church arrivals. Section 5.2 provides additional evidence consistent with the lack of "pre-trends" in church entries, using the ethnic and religious content of names chosen by immigrant parents for their children. 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. In contrast with this possibility, however, Figure 5 documents that there is no increase in Italian immigration after the arrival of an Italian church. Moreover, in Appendix C, we use a linked sample of Italians between 1900 and 1920 to verify that church exposure did not lead to selective in-migration of Italian immigrants.<sup>45</sup>

<sup>&</sup>lt;sup>45</sup>We return to this point after presenting our main results, in Section 5.4. Appendix C also verifies that church arrivals do not cause compositional changes at the county level, and that results are robust to controlling for measures of predicted immigration (of both Italians and other groups).

Finally, one may be worried that not only church entries, but also exits, might be endogenous to trends in assimilation of Italians 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. In addition, bishops' decisions to "denationalize" a 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 C shows that all 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 discuss additional robustness checks in Section 5.4, after presenting the main results.

# 5 Results

#### 5.1 Social Assimilation

We begin the analysis by focusing on the social assimilation of Italian immigrants. Table 3 reports results from equation (1) for intermarriage and residential integration in Panels A and B respectively. Column 1 estimates a parsimonious regression that only includes individual controls (family size, gender and fixed effects for age, marital status, and years in the US) as well as county and state by decade fixed effects. In both cases, 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 the battery of interactions between 1900 county controls and decade fixed effects (column 2).

In column 3, we add county-specific linear trends, and in column 4 we restrict attention to counties that received at least one church during our sample period. Again, the point estimate remains highly statistically significant and strongly negative. According to our preferred specification (column 4), 5 additional years of exposure to an Italian Catholic

<sup>&</sup>lt;sup>46</sup>For example, as Father A. Demo wrote in a letter to Father D. Vicentini 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, 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.

Since residential integration and intermarriage are equilibrium outcomes, these patterns likely reflect both the direct effect of churches on the actions of Italian immigrants and the indirect impact on natives' attitudes and behavior. The presence of Italian ethnic churches and Italian priests may have increased the propensity of Italians to intermarry and live closer to each other. For instance, Mass celebrations might have raised the frequency of contact between fellow Italians, either because immigrants jointly attended the service or because they chose to live nearby the church (or both). Moreover, the direct influence of churches and priests may have increased the value of retaining the Catholic and Italian culture, thereby reducing effort exerted by immigrants to Americanize. The presence of Catholic churches may have also increased the salience of the immigrant community among natives, triggering backlash. These forces, together, might have led to lower inter-group contact and higher (residential and social) segregation.

Table 4 considers two additional proxies for immigrants' assimilation: an indicator for being naturalized (Panel A), and a dummy for being able to speak English (Panel B). We focus on the most stringent specification (column 4) for brevity. Exposure to Italian churches had no statistically significant effect on ability to speak English, but substantially reduced the probability of being a naturalized citizen. According to our estimates, 5 additional years of exposure to an Italian church lowered naturalization rates by approximately 3 percentage points, or 6% relative to the 1900 mean. Both outcomes are less likely to depend on natives' behavior relative to intermarriage and residential integration, and may thus capture immigrants' effort to assimilate (Fouka et al., 2022). However, we prefer to interpret them more broadly, as reflecting different dimensions of assimilation.

The negative effects of Italian churches on naturalization are consistent with immigrants becoming 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 key public goods (such as education or different forms of insurance) as well as opportunities to find a job within their ethnic network, Italian churches might have reduced the benefits of naturalization. The muted effects for ability to speak English may be the

product of countervailing forces. On the one hand, Italian churches lowered immigrants' incentives to be integrated. 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 Vertical Transmission: Evidence from Naming Patterns

In this section, we examine another proxy for immigrants' social assimilation, focusing on the ethnic content of names chosen by immigrant parents for their offspring. As this outcome depends solely on the actions of the immigrants, it has often been interpreted as the desire of parents to vertically transmit the culture of the home-country (Abramitzky et al., 2020; 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.

As a preliminary step, 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 13,105 households and 57,878 yearly observations. Figure A.3 plots the estimated coefficients (together with 95% confidence intervals) for the effects of church arrivals on the number of children. The vertical line refers to the year of church arrival. Reassuringly, there is no apparent 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 (if any) in naming patterns are not driven by changes in family size.

In Figure 6, we turn to our main outcome of interest: the names chosen by Italian parents for their (US born) children. We focus on married couples who had at least one child born in the US in the decade, for a final sample size of 12,745 households, and a total of 46,864 yearly observations. In Panel A, the dependent variable is the average Italian score of children's names. As before, there is no evidence of anticipatory effects. Coefficients on the right of the vertical line also reveal that immigrant parents did not change the ethnic content of names chosen for children born after the entry of an Italian church, although a slightly increasing trend can be detected in later years.

In Panel B, we focus on the Catholic score, which we define as parents' propensity to name their children after a Catholic saint (spelled either in Italian or in English). Given the tight relationship between Italian culture and Catholicism and the high religiosity prevailing among Italians, we interpret a higher propensity to name a child after a Catholic saint as stronger attachment to national (Italian) culture. Once again, there is no sign of any anticipatory effect. However, this time, coefficients gradually but steadily increase after the arrival of a church: after 6 years of exposure, the percentage of children named after a Catholic saint increases by 4.7 percentage points, or about 18% compared to the sample mean (26.25).

All in all, the evidence on the effect of Italian churches on the desire to transmit the Italian culture across generations, as captured by naming patterns, is mixed. The trends in Panel A of Figure 6 suggest that Italian Catholic churches did not foster vertical transmission of a generic notion of Italianness among immigrant parents. However, results in Panel B are consistent with Italian churches raising Italian parents' desire to promote specific (religious) values to their offspring. It is also possible that church exposure somewhat changed the notion of Italian culture, increasing its association with Catholic values, among Italian immigrants.

#### 5.3 Economic Assimilation

We now turn to the effects of Italian churches on immigrants' economic assimilation. Restricting attention to Italian men in working age (15-64), Table 5 reports results for labor force participation and the log of occupational income scores in Panels A and B respectively. The structure of the table mirrors that of Tables 3 and 4. For brevity, we only comment on the most stringent specification (column 4). The picture that emerges is mixed. While exposure to Italian Catholic churches increased immigrants' labor force participation, it reduced their occupational income scores.

In both cases, the magnitude of coefficients is non-trivial. The point estimate in Panel A indicates that 5 additional years of exposure to an Italian church increased labor force participation of Italian men by .85 percentage points (or, 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% 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 in the US by roughly 10%.

Since occupational 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 also 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.

In Table A.3, we corroborate this view by examining the effects of Italian churches on additional labor market outcomes. Church exposure had a positive, but quantitatively small, effect on the probability that Italian immigrants were employed in the manufacturing (column 1) and in the unskilled (column 2) sectors – two of the most "immigrant intensive" sectors at the time (Fouka et al., 2022; Tabellini, 2020). Perhaps not surprisingly, church exposure did not have any significant effect on literacy (column 3). Nonetheless, it increased the probability of working in occupations that were "Italian dominated" (column 4).<sup>47</sup>

Taken together, Tables 3 to 5 indicate that church exposure reduced the assimilation of Italian immigrants. We cannot rule out the possibility that the reduction in occupational income scores was responsible for the drop in social integration. However, our findings suggest that this cannot be the only mechanism at play. Indeed, church exposure increased immigrants' labor force participation, thereby facilitating their entry in the (possibly ethnic) labor market. Our interpretation is instead that church exposure jointly lowered social and, to some extent, economic assimilation of Italians. Social and economic effects might have reinforced each other, further amplifying the initial impact of Italian churches.

# 5.4 Summary of Robustness Checks

We already showed above that church exposure is uncorrelated with the 1900 level and the 1880-1900 change in county characteristics and in Italian immigrants' assimilation (Tables 2a-2c), and that yearly changes in immigration, naming patterns, and fertility decisions among Italians do not predict the timing of church entry across counties (Figures 5, 6, and A.3). We now summarize additional robustness checks, which are described in detail in Appendix C. First, as anticipated in Section 4.3, we document that results are robust to focusing on counties that did not experience any church exit (Table C.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,

<sup>&</sup>lt;sup>47</sup>We define this index 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.

Goodman-Bacon, 2021), following Cengiz et al. (2019) and Deshpande and Yue (2019) in implementing a stacked-by-event strategy (Table C.1, Panel B). Third, we verify that results are robust to defining church exposure in different ways (Tables C.2 and C.3) and over time horizons longer than a decade (Table C.4). Fourth, we use a linked sample from 1900 to 1920 to show that, consistent with the analysis already presented in Figures 5 to 6, selective in-migration among Italians is unlikely to explain our findings (Table C.6). Fifth and related, we check that church exposure was not systematically associated with changes in county demographic characteristics (Tables C.7 and C.8). Finally, we verify that results are robust to: i) including a measure of predicted industrialization and to accounting for predicted changes in Italian or (other) European immigrants (Table C.9); ii) extending the analysis to second generation immigrants (Table C.10); and, iii) clustering standard errors at the commuting zone and at the state level (Table C.11).

## 6 Mechanisms

In this section, we provide evidence that the reduction in social and, to a certain extent, economic assimilation documented above can be explained by at least two, non-mutually exclusive, forces. First, churches increased coordination within the Italian community, acting as an attraction point and raising the frequency of contact among fellow Italians. Second, Italian churches raised the salience of the Italian community, triggering natives' backlash.

#### 6.1 Italian Churches and the Role of Coordination

As discussed in Section 2.3, the presence of an Italian church raised Mass attendance and increased the chances to join ethnic societies. 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.

Size of ethnic enclave. In the presence of coordination, one would expect Italian churches to have a more negative effect on immigrants' assimilation in communities with

a larger number of Italians. Moreover, 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 6, 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 a mechanism of coordination, Italian churches reduced intermarriage and residential integration more in counties with a larger Italian community (columns 1 and 2). Instead, the presence of churches did not have a differential effect for naturalization and ability to speak English (columns 3 and 4), even though the coefficient on the interaction term is negative for naturalization. One explanation for this pattern is that coordination may be less relevant for becoming a naturalized citizen or for learning to speak English, relative to intermarriage or residential choice. In the latter case, it is indeed crucial to coordinate with another party (the spouse or neighbors).

Finally, when considering labor market outcomes (columns 5 and 6), the interaction effect is positive, although statistically significant only for occupational income scores. The positive or null coefficient on the interaction term for economic outcomes is consistent with the church making ethnic labor markets more efficient, smoothing potential frictions in the matching process.

Interaction with other groups. 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 7, 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 7 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 intermar-

riage between Italian immigrants and two of the most prominent non-Italian Catholic communities (i.e., the Irish and the Germans).<sup>48</sup>

Results in Table 7 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). **Priests, Italian churches, and non-Italian churches.** As explained in Section 3.2, 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 A.5, 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 (Table 5), 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 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

<sup>&</sup>lt;sup>48</sup>The coefficient on residential integration is, instead, not statistically significant for the Irish and barely statistically significant (and positive) for the Germans. 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 A.4 presents additional results for other European regions.

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).

## 6.2 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 as well as negative stereotyping. In turn, natives' hostility may have reduced immigrants' ability to assimilate, 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. 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.<sup>49</sup> 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, to check whether the entry of an Italian church increased the association between Italians and Catholicism, we search for articles mentioning jointly the word "Italian" and the word "Catholic". Next, we more directly consider stereotypical and disparaging terms. Italians, as other immigrant groups, were often considered criminals, prone to violence,

<sup>&</sup>lt;sup>49</sup>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 A.6 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.7 shows that results are unchanged when restricting attention to counties that received at least one church between 1890 and 1920 (i.e., those in our preferred specification) and that also had local newspapers' data.

and lazy (Katz and Braly, 1933). They were also portrayed as dirty and as threats to public hygiene (Ager et al., 2020). Finally, though to a lesser extent than the Irish or the Germans, as most Europeans, also the Italians were stereotypically associated with alcohol (Fouka et al., 2022). We thus search for the joint occurrence of the word "Italian" and selected terms that are likely to capture natives' negative stereotypes: crime, violent, alcohol, dirty, and lazy. We also include a common disparaging term associated with Italians: Dago.<sup>50</sup> 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.<sup>51</sup>

Focusing on the counties that received at least one church during the sample period, we apply an event study design similar to the one described in Section 4.3 above for yearly Italian immigration. In Panel A of Figure 7, 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 7 confirms this idea, by reporting the effects of church entry on the average frequency of the disparaging terms listed above. Also in this case, there are no "pre-trends"; the coefficient jumps in the calendar year of church entry, becoming statistically significant for the following three years. Interestingly, even though coefficients are no longer statistically significant from year 4, they remain positive. In Figure A.4, we decompose the various terms included in the average index reported in Figure 7. Results appear to be driven by the words "crime" (Panel C) and "violent" (Panel D).

KKK presence. The increase in the negative and stereotypical association between Italians and Catholicism likely reflects natives' backlash. In Table A.8, we test this

<sup>&</sup>lt;sup>50</sup> "Dago" comes from the Spanish name "Diego". Even though it was initially used to indicate Spanish or Portuguese sailors during the seventeenth century, it became a derogatory term when referring to Italians at the end of the nineteenth century.

<sup>&</sup>lt;sup>51</sup>To 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.

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.<sup>52</sup>

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 a leave-out version of a shift-share methodology (Card, 2001), which is detailed in Appendix C.<sup>53</sup>

Since we cannot include county fixed effects and exploit timing in the arrival of churches, results should be interpreted with caution. With this caveat in mind, Table A.8 documents that church exposure increased the likelihood that a KKK klavern was ever present in a county (columns 1 and 2), although estimates when controlling for the predicted fraction of Italian/European immigrants are are not precisely estimated. 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 columns 1 and 2, five additional years of church exposure increased the probability of having at least one KKK klavern between 1915 and 1940 by 1.7 percentage points (or, 5% relative to the sample mean), and anticipated the opening of the first klavern by about 20% (or, 1.2 years).

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

<sup>&</sup>lt;sup>52</sup>The 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.

<sup>&</sup>lt;sup>53</sup>As before, regressions are weighed by the number of individuals in our sample.

economically. We cannot pin down which force operated first, and whether one was more important than the other. However, our analysis reveals that both coordination within the immigrant community and natives' backlash contributed to the negative effects of Italian churches on immigrants' social assimilation.

# 7 Italian Churches and the Provision of Education

Our results thus far indicate that the presence of Italian Catholic churches – directly or indirectly – reduced the assimilation of Italian immigrants, at least in the short run. Yet, religious organizations tend to provide their community with important public goods, such as (formal or informal) insurance and, more often, education (Bazzi et al., 2020; Cantoni et al., 2018; Meyersson, 2014; Valencia Caicedo, 2019). Italian Catholic churches in the early twentieth century US 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. Even though the average Italian immigrant was typically too old to be in schooling age, Catholic schools, often annexed to churches, might have nonetheless been important for those immigrants arriving as children. Not only Catholic schools may have raised children's literacy; but also, they may have increased their ability to speak English, since many Italian priests were aware of the benefits that learning English would have offered to immigrants. In Table 8, we focus on first-generation immigrants who, in a Census decade, were between 10 and 14 years old. Estimating our most stringent 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 baseline mean. Interestingly, the effects are driven by females (column 4); church exposure has, instead, no effect on males (column 7). One possible explanation, consistent with our previous findings, is that boys were more likely to interact with other members of the Italian community. For instance, they may have occasionally helped adults with manual jobs, or simply been allowed to spend more time outside the house. A second possibility is that Italian girls attended schools more often than boys. Since average school attendance was very similar across genders (75% and 72% for girls and boys, respectively), this interpretation seems unlikely. It is nonetheless possible that the type of education received by girls differed from that received by boys, and that classes were taught in English more often for the former than for the latter.<sup>54</sup>

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. In particular, 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 (Edwards, 1923). 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 precisely estimated, suggesting that, even in states without compulsory English laws in place, church exposure raised immigrant children's ability to speak English. The interaction term is statistically significant for both boys and girls, suggesting that, absent mandatory state laws, girls were more often taught in English than boys.

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.<sup>55</sup> We exploit this additional piece of information to examine whether the effects described before were driven by the presence of a Catholic school, or were instead the by-product of churches more generally. In column 3, we augment our preferred specification, by including the number of years of exposure to an Italian Catholic school. The coefficient on exposure to a church remains positive, but becomes smaller in magnitude and statistically insignificant. The coefficient on the years of exposure to schools is also positive and marginally statistically significant. The noisy estimates hide interesting heterogeneity, however. In column 6, when focusing on girls, both the effect of the church without a school and the effect of the school are positive and statistically significant. This indicates that, as expected, at least some of the improvement in English proficiency was the direct effect of Italian Catholic schools. Instead, and in line with results in column 7, the effects disappear for boys (column 9).

In Table A.9, we replicate the analysis of Table 8 using as dependent variable an indicator for being able to read and write. Consistent with our previous results, church exposure had a positive effect on first-generation Italian immigrants' literacy (column 1).

<sup>&</sup>lt;sup>54</sup>Another possibility is that the (positive) effect of Catholic churches on ability to speak English was partly counteracted by the vertical transmission of cultural norms from parents to children – something that might have been stronger for boys than for girls. However, running counter to this interpretation, when replicating the analysis for naming patterns (Figure 6) separately for boys and girls, we obtained similar results (not reported for brevity).

<sup>&</sup>lt;sup>55</sup>There 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. In the latter case, either the school was never opened or it appeared later.

As before, the effect is entirely driven by females (column 4). Differently than for ability to speak English, the impact of churches on literacy did not vary with the presence of English language requirements (columns 2, 5, and 8). This is to be expected if the effectiveness of churches in instructing children were independent of a state's English laws. In contrast with results for ability to speak English, instead, the presence of a school was essential for the improvement in children's literacy. While the presence of a church alone had no impact on ability to read and write, exposure to a church with an annexed school increased literacy (column 3). The effect is both quantitatively relevant and statistically significant, but holds only for females.

Overall, these results paint a nuanced picture of the role of Catholic Italian churches. On the one hand, churches increased both the probability of endogamous marriage and the likelihood of living in ethnically segregated enclaves, slowing down the assimilation of Italian immigrants. On the other hand, however, Italian Catholic churches provided important skills to first-generation immigrant children. Not only Italian immigrant children exposed to Catholic churches were more likely to be literate. But also, and perhaps surprisingly, they were more likely to speak English – something that might have favored their economic and social integration in the American society later in life.

Results in this section also suggest that Italian churches were not mere "attraction points", which simply increased the frequency of contact among fellow Italians. Rather, churches likely transmitted values to their community. Moreover, and contrary to the rhetoric prevailing at the time (Higham, 1955), Italian churches seem to have provided immigrant children with tools and skills that may have eventually promoted their assimilation. This finding is consistent with existing historical accounts on the effects of Italian Catholic churches in the US (Tomasi, 1975).

## 8 Conclusions

The anti-immigrant rhetoric often blames religious organizations for perpetuating ethnic norms and for slowing down immigrants' integration in host societies. In this paper, we provide one of the first pieces of empirical evidence on this issue. Exploiting plausibly exogenous variation in the timing of church arrivals, we find that Italian Catholic churches reduced the social, and to a lesser extent economic, assimilation of Italian immigrants. We provide evidence that increased coordination within the Italian community, as well as the enhanced salience of the Italian enclave among natives might have been important mechanisms behind our findings. To be clear, our paper has no normative implications.

That is, our results do not imply that immigrants should (or should not) assimilate. We instead view our work as a first step to inform the current debate on immigration, assimilation, and the role of ethnic religious organizations.

We acknowledge that drawing policy prescriptions based on historical evidence might be hard. For example, the approach of the Roman Catholic Church towards the Italian migration of the early twentieth century might differ from that of religion organizations in other contexts. Yet, the lessons from the Italian experience in the US may apply to other settings, including the contemporary period. For one, the rampant anti-Catholicism prevailing during the Age of Mass Migration is comparable to the recent backlash against Muslim minorities in several European countries as well as in the United States. Furthermore, the extent to which religious organizations coordinated immigrants' networks was probably important in the past as much as it is today.

We 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 immigrants' assimilation and, more broadly, on social cohesion, especially in multicultural societies like the United States. 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. We leave these, and more, questions for future research.

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## **Tables**

Table 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	3,161,147
		Main	Individu	ial Level C	Outcomes	
Married to Native	1.122	10.533	0	0	100	2,157,540
Residential Integration	20.983	40.719	0	0	100	1,093,241
Naturalized	32.726	46.921	0	0	100	1,455,111
Speak English	61.049	48.764	0	100	100	3,161,147
Log Occupational Score	1.976	2.712	-4.61	2.996	4.382	1,846,855
In Labor Force	94.052	23.652	0	100	100	1,963,683
		Main	Househo	old Level C	Outcomes	
Number of Children	1.792	2.170	0	1	9	3,161,147
Italian Score	53.620	29.590	0	56.722	100	581,128
Catholic Score	39.857	36.220	0	33.333	100	581,128
Panel B. Main County Level Characteristic	s					
County Population	767,113	802,677	97	422,100	3,022,912	3,161,147
Urban Share	0.776	0.282	0	0.912	1	3,161,147
Black Share	0.035	0.072	0	0.017	0.945	3,161,147
Immigrant Share	0.272	0.108	0	0.282	0.540	3,161,147
Italian Immigrant Share	0.043	0.025	0	0.041	0.129	3,161,147
Irish Immigrant Share	0.033	0.025	0	0.027	0.121	3,161,147
Other Europeans Immigrant Share	0.196	0.079	0	0.199	0.537	3,161,147
Share Native Men 15-64 in Labor Force	0.876	0.047	0	0.893	0.964	3,161,147
Share Native Men 15-64 in Manufacturing	0.158	0.072	0	0.155	0.473	3,161,147
Years w/ Railroad	53.219	21.667	0	60	70	3,161,147
Years w/ non-Italian Church	6.985	3.371	0	8	10	3,161,147
Italians' Regional Homogeneity	0.093	0.022	0	0.089	1	2,952,643
Italians' Religiosity	45.232	6.607	0	46.153	100	3,161,147
Catholic Population Share (1890)	0.007	0.133	0	0	0.041	3,161,147
Panel C. Additional Individual Characteris	tics					
Age	34.928	12.694	15	33	133	3,161,147
Male	63.581	48.120	0	100	100	3,161,147
Married	68.255	46.548	0	100	100	3,161,147
Years in the US	12.206	9.060	0	10	90	3,161,147
Literacy	64.180	47.947	0	100	100	3,161,147
In Manufacturing	18.959	39.198	0	0	100	1,963,683
Married to Italian	91.950	27.206	0	100	100	1,890,333

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 A.1 and A.2. The number of observation is different for Married to Native and Married, because the former can be defined only when the spouse is present (for otherwise their nativity is not available), while the latter is defined also when the spouse is not present. Married to Italian is defined for fewer individuals, because exact country of birth of the spouse must be reported, and this variable is sometimes missing.

Table 2a. Predicting the Timing of Exposure

		(1)	(2)	(3)	(4)	
Dep. Variable:	Years w/ Italian Church					
Indep. Variables:		1900	Levels	1900-188	0 Difference	
1900-1910 Decade $\times$						
Individual Outcomes:	Residential Integration	-3.290** (1.577)				
	Naturalized	0.844				
		(2.381)				
	Speak English	2.643				
		(2.380)				
	Married to Native	-3.516		-0.121		
		(2.377)		(1.504)		
	In Labor Force	-1.143		-1.677		
		(2.609)		(2.065)		
	Log Occupational Score	2.498		-1.325		
		(2.153)		(1.597)		
1910-1920 Decade $\times$						
Individual Outcomes:	Residential Integration	-1.176	6.453**			
		(1.831)	(2.551)			
	Naturalized	0.849	-0.705			
		(2.472)	(4.152)			
	Speak English	-0.190	-4.047			
		(2.752)	(3.986)			
	Married to Native	-2.323	6.179	-2.326	-2.236	
		(2.760)	(4.553)	(1.769)	(2.799)	
	In Labor Force	2.291	4.661	0.252	2.917	
		(2.606)	(5.012)	(2.056)	(3.630)	
	Log Occupational Score	4.088*	-1.068	0.643	3.697	
		(2.310)	(3.504)	(1.804)	(2.486)	

Notes: The 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. 1900-1910 Decade (resp. 1910-1920 Decade) is a dummy for the 1900-1910 (resp. 1910-1920) decade. see Tables A.1 and A.2 for the definition of all other variables. All regressions are weighed by number of individuals included in the analysis reported in column 3 of Tables 3, 4, and 5. Standard errors, clustered at the county level, in parentheses. Significance levels: \*\*\* p<0.01, \*\* p<0.05, \* p<0.01.

Table 2b. Predicting the Timing of Exposure (cont'd)

		(1)	(2)	(3)	(4)
Dep. Variable:	Years w/ Italian Church				
Indep. Variables:		1900 I	Levels	1900-1880	Difference
1900-1910 Decade $\times$					
County Characteristics:	Total Population	0.000		0.000	
		(0.000)		(0.000)	
	Urban Share	-0.601		2.696	
		(1.640)		(3.424)	
	Share in Labor Force	-6.865		-6.598	
		(7.070)		(8.041)	
	Manufacturing Share	4.269		5.208	
		(3.793)		(8.018)	
	Years w/ Railroad	0.014		0.152**	
		(0.028)		(0.060)	
	Share of Italians	42.669**		24.015	
		(20.445)		(27.961)	
	Share of Irish	-40.666**		19.049	
		(20.457)		(19.716)	
	Share of Other EU Immigrants	-7.517		18.543	
1010 1000 D		(5.787)		(13.237)	
1910-1920 Decade ×	Total Danulation	0.000	-0.000	0.000	-0.000
County Characteristics:	Total Population	(0.000)	(0.000)	(0.000)	(0.000)
	Urban Share	-4.409**	-2.599	-0.145	-4.353
	Orban Share	(1.783)	(2.789)	(2.983)	(5.752)
	Share in Labor Force	-19.299**	-5.268	-11.675	(3.732) $1.834$
	Share in Labor Force	(7.973)	(12.797)	(8.853)	(17.579)
	Manufacturing Share	4.780	-4.986	6.171	-5.821
	Wandiacouring Share	(4.549)	(5.972)	(8.349)	(14.310)
	Years w/ Railroad	0.033	0.016	0.180***	-0.110
	rears w/ rearroad	(0.029)	(0.046)	(0.051)	(0.152)
	Share of Italians	5.133	-62.070*	-38.929	-71.363
		(19.951)	(37.194)	(32.503)	(44.957)
	Share of Irish	-28.422	56.672*	38.414	-5.603
		(19.722)	(32.977)	(23.642)	(34.590)
	Share of Other EU Immigrants	-2.993	11.781	30.183**	-7.282
			(9.555)		
	Share of Other EU Immigrants	-2.993 (6.071)		30.183** (12.135)	-7.282 (23.821)

Notes: The 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. 1900-1910 Decade (resp. 1910-1920 Decade) is a dummy for the 1900-1910 (resp. 1910-1920) decade. see Tables A.1 and A.2 for the definition of all other variables. All regressions are weighed by number of individuals included in the analysis reported in column 3 of Tables 3, 4, and 5. Standard errors, clustered at the county level, in parentheses. Significance levels: \*\*\* p<0.01, \*\*\* p<0.05, \* p<0.01.

Table 2c. Predicting the Timing of Exposure (cont'd)

		(1)	(2)	(3)	(4)
Dep. Variable:			Years w/	Italian Ch	urch
Indep. Variables:		1900	Levels	1900-188	0 Difference
1900-1910 Decade ×					
Italians' Characteristics:	Regional Homogeneity	1.599		-3.964	
		(4.172)		(2.498)	
	Years in the US	-0.117		-0.053	
		(0.187)		(0.159)	
	Age	-0.047		-0.039	
		(0.165)		(0.078)	
	Female	-4.537		-3.528	
		(3.846)		(2.934)	
	Married	4.373		-3.078	
		(3.613)		(2.263)	
	Catholic Score	-0.028		-0.001	
		(0.018)		(0.014)	
1910-1920 Decade $\times$					
Italians' Characteristics:	Regional Homogeneity	-6.033	-8.890	-2.864	5.285
		(4.988)	(6.858)	(3.776)	(3.410)
	Years in the US	0.066	0.245	-0.228	-0.063
		(0.203)	(0.317)	(0.190)	(0.279)
	Age	-0.265	-0.176	-0.005	0.080
		(0.184)	(0.271)	(0.092)	(0.136)
	Female	-3.477	5.721	-1.362	6.245
		(4.478)	(6.499)	(2.758)	(4.934)
	Married	4.659	-2.635	-1.796	3.880
		(3.598)	(6.569)	(2.263)	(3.817)
	Catholic Score	-0.001	0.064**	0.016	0.015
		(0.022)	(0.032)	(0.017)	(0.020)
Mean Dep. Variable (1900)		0.853	0.853	1.533	1.533
Observations (1999)		2,899	2,899	1,294	1,294
$\overline{\text{State} \times \text{Decade FEs}}$		Yes	Yes	Yes	Yes
County FEs		Yes	Yes	Yes	Yes
County Linear Trends			Yes		Yes

Notes: Italians' Characteristics averaged by county. The 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. 1900-1910 Decade (resp. 1910-1920 Decade) is a dummy for the 1900-1910 (resp. 1910-1920) decade. See Tables A.1 and A.2 for the definition of all other variables. All regressions are weighed by number of individuals included in the analysis reported in column 3 of Tables 3, 4, and 5. Standard errors, clustered at the county level, in parentheses. Significance levels: \*\*\* p<0.01, \*\* p<0.05, \* p<0.01.

Table 3. Intermarriage and Residential Integration

	(1)	(2)	(3)	(4)		
Panel A.	Dep. Variable: Married to Native					
Years w/ Italian Church	-0.122***	-0.120***	-0.145***	-0.099***		
·	(0.011)	(0.011)	(0.013)	(0.013)		
Mean (s.d.) Treatment	6.352 (3.785)	6.352 (3.785)	6.352 (3.785)	6.889 (3.440)		
Mean Dep. Variable (1900)	1.087	1.087	1.087	0.808		
Observations	2,157,540	2,157,540	2,157,540	1,989,311		
Panel B.	Der	o. Variable: Res	sidential Integra	ation		
	-0.413***	-0.407***	-0.483***	-0.457***		
Years w/ Italian Church						
	(0.078)	(0.073)	(0.080)	(0.088)		
Mean (s.d.) Treatment	6.830 (3.680)	6.830 (3.680)	6.830 (3.680)	7.421 (3.213)		
Mean Dep. Variable (1900)	20.04	20.04	20.04	17.17		
Observations	1,093,241	1,093,241	1,093,241	1,006,112		
State × 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 1900: logarithm of county population, the urban, the Black, the Italian, the Irish, and other Europeans share of the population, 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. Standard errors, clustered at the county level, in parentheses. Significance levels: \*\*\* p<0.01, \*\* p<0.05, \* p<0.01.

Table 4. Naturalization and Ability to Speak English

	(1)	(2)	(3)	(4)
Panel A.		Dep. Variable	e: Naturalized	
Years w/ Italian Church	-0.298**	-0.206	-0.507**	-0.618***
	(0.118)	(0.139)	(0.214)	(0.226)
Mean (s.d.) Treatment	6.821 (3.624)	6.821 (3.624)	6.821 (3.624)	7.528 (3.029)
Mean Dep. Variable (1900)	53.72	53.72	53.72	53.40
Observations	1,455,111	1,455,111	1,455,111	1,318,535
_				
Panel B.		Dep. Variable:	Speak English	
Years w/ Italian Church	0.008	0.033	0.065	-0.140
	(0.100)	(0.105)	(0.119)	(0.137)
Mean (s.d.) Treatment	5.900 (3.872)	5.900 (3.872)	5.900 (3.872)	6.470(3.571)
Mean Dep. Variable (1900)	57.21	57.21	57.21	57.09
Observations	3,161,147	3,161,147	3,161,147	2,882,460
$\frac{\text{State} \times \text{Decade FEs}}{\text{State} \times \text{Decade FEs}}$	Yes	Yes	Yes	Yes
County FEs	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes
County Controls × Decade		Yes	Yes	Yes
County Linear Trends			Yes	Yes
Ever Treated				Yes

Notes: The sample includes first-generation Italian immigrants who were: i) men 21+ and in the US for at least 5 years (Panel A); ii) 15+ for both genders (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. Naturalized (resp. Speak English) is a dummy, multiplied by 100, for being naturalized (resp. able to speak English). Individual controls include gender and fixed effects of years in the US, marital status, and age. Household controls include the number of adults in the household. County controls include: i) interactions between decade dummies and 1900: logarithm of county population, the urban, the Black, the Italian, the Irish, and other Europeans share of the population, 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. Standard errors, clustered at the county level, in parentheses. Significance levels: \*\*\* p<0.01, \*\* p<0.05, \* p<0.01.

Table 5. Economic Assimilation

	(1)	(2)	(3)	(4)
Panel A.		Dep. Variable:	In Labor Force	),
Yers w/ Italian church	0.008	0.004	0.126***	0.170***
	(0.060)	(0.062)	(0.043)	(0.051)
Mean (s.d.) Treatment	5.593 (3.938)	5.593 (3.938)	5.593 (3.938)	6.236 (3.644)
Mean Dep. Variable (1900)	85.78	85.78	85.78	85.77
Observations	1,963,683	1,963,683	1,963,683	1,760,957
Panel B.	Dep	. Variable: Log	Occupational S	Score
Years w/ Italian Church	-0.007*	-0.010***	-0.012***	-0.011***
,	(0.004)	(0.004)	(0.003)	(0.004)
Mean (s.d.) Treatment	5.613 (3.930)	5.613 (3.930)	5.613 (3.930)	6.263 (3.629)
Mean Dep. Variable (1900)	3.061	3.061	3.061	3.070
Observations	1,846,855	1,846,855	1,846,855	1,655,382
State × 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 men of age 15-64. Panel B restricts attention to those men who were in the labor force or with non-missing occupational scores. Column 4 further restricts the sample 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. In Labor Force (resp. Log Occupational Score) is a dummy, multiplied by 100, for being in the labor force (resp. the log of the income occupational score). Individual controls include gender and fixed effects of years in the US, marital status, and age. Household controls include the number of adults in the household. County controls include: i) interactions between decade dummies and 1900: logarithm of county population, the urban, the Black, the Italian, the Irish, and other Europeans share of the population, 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. Standard errors, clustered at the county level, in parentheses. Significance levels: \*\*\* p<0.01, \*\* p<0.05, \* p<0.01.

Table 6. Heterogeneity by 1900 Group Size

	(1)	(2)	(3)	(4)	(5)	(6)
Dep. Variable:	Married	Residential	Naturalized	Speak	In Labor	Log Occ.
	to Native	Integration		English	Force	Score
Panel A.		In	teraction with	No. Italian	S	
Years w/ Italian Church	-0.094***	-0.415***	-0.638***	-0.147	0.165***	-0.012***
,	(0.013)	(0.079)	(0.215)	(0.137)	(0.052)	(0.004)
Years w/ Italian Church $\times$	-0.011*	-0.127***	-0.395	0.016	0.013	0.003**
No. Italians (1900)	(0.006)	(0.038)	(0.246)	(0.054)	(0.018)	(0.001)
Panel B.		In	teraction with	Fr. Italians	S	
Years w/ Italian Church	-0.091***	-0.403***	-0.604***	-0.159	0.163***	-0.013***
	(0.013)	(0.079)	(0.202)	(0.133)	(0.051)	(0.004)
Years w/ Italian Church $\times$	-0.019***	-0.157***	-0.327	0.047	0.022	0.006***
Fr. Italians (1900)	(0.006)	(0.047)	(0.278)	(0.102)	(0.021)	(0.002)
Mean Treatment	6.889	7.421	7.528	6.470	6.236	6.263
Mean Dep. Variable (1900)	0.808	17.17	53.40	57.09	85.77	3.070
Observations	1,989,311	1,006,261	1,318,535	2,882,460	1,760,957	1,655,382
0.5561 (4010115	1,000,011	1,000,201	1,010,000	2,002,100	1,100,001	1,000,002
State × 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 specification in column 4 of Tables 3, 4, and 5, 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 Tables 3, 4, and 5 for the sample considered in each column, the definition of the dependent variable, and the description of controls. Standard errors, clustered at the county level, in parentheses. Significance levels: \*\*\*\* p<0.01, \*\*\*\* p<0.05, \*\*\* p<0.01.

Table 7. Integration with Other Groups

	(1)	(2)	(3)	(4)	(5)
Ethnicity:	$1^{st}$ gen.	$1^{st}$ and $2^{nd}$	Not	Irish	German
v	Italian	gen. Italian	native		
Panel A.		Dep. Va	riable: Mar	ried to	
Years w/ Italian Church	0.192***	0.259***	-0.124***	-0.005	-0.027***
,	(0.040)	(0.034)	(0.025)	(0.006)	(0.006)
Mean Treatment	7.190	7.190	7.190	7.190	7.190
Mean Dep. Variable (1900)	94.17	95.90	2.693	0.288	0.416
Observations	1,760,274	1,760,274	1,760,274	1,760,274	1,760,274
Panel B.	1	Dep. Variable:	· Residentia	l Integration	า
Years w/ Italian Church	0.491***	0.495***	-0.028	0.002	0.051
	(0.112)	(0.111)	(0.114)	(0.033)	(0.033)
Mean Treatment	7.421	7.421	7.421	7.421	7.421
Mean Dep. Variable (1900)	67.33	67.74	41.32	9.867	9.529
Observations	1,006,112	1,006,112	1,006,112	1,006,112	1,006,112
$\frac{\text{State} \times \text{Decade FEs}}{\text{State} \times \text{Decade FEs}}$	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 Tables 3, 4, and 5, 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  $1^{st}$  and  $2^{nd}$  generation Italians. See Table 3 for the sample considered in each Panel, the definition of the dependent variable, and the description of controls. Standard errors, clustered at the county level, in parentheses. Significance levels: \*\*\* p<0.01, \*\* p<0.05, \* p<0.01.

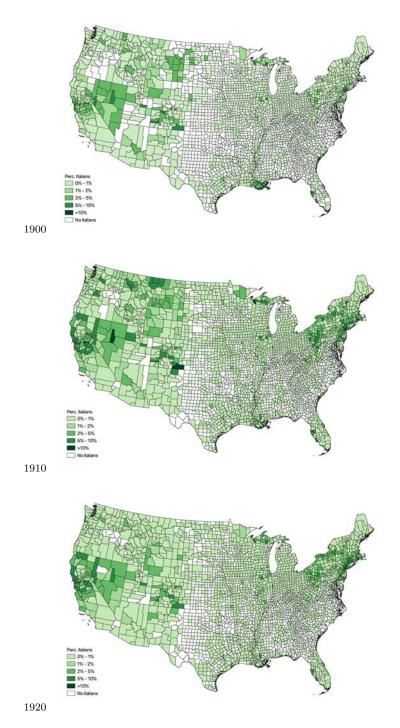
Table 8. Ability to Speak English: Italian Immigrant Children

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Dep. Variable:				Sp	eak English	1			
Sample:	Fema	ales and M	Iales		Females			Males	
Years w/ Italian church	0.460*** (0.170)	0.297* (0.158)	0.251 $(0.222)$	0.776*** (0.198)	0.618*** (0.186)	$0.457^*$ $(0.242)$	0.180 $(0.210)$	0.007 $(0.213)$	0.076 $(0.274)$
Years w/ Italian Church $\times$ English Laws		0.511** (0.204)			0.485** (0.211)			0.546** (0.226)	
Years w/ Italian Church $\times$ Presence of School			0.354* (0.206)			0.538*** (0.203)			0.177 $(0.248)$
Age	10-14	10-14	10-14	10-14	10-14	10-14	10-14	10-14	10-14
Mean Treatment	5.270	5.270	5.270	5.270	5.270	5.270	5.270	5.270	5.270
Mean Dep. Variable (1900) Observations	73.89 141,200	73.89 141,200	73.89 141,200	75.52 67,609	75.52 67,609	75.52 67,609	72.08 $73,541$	72.08 73,541	72.08 73,541
State × Decade FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
County FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
County Controls $\times$ Decade	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
County Linear Trends	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ever Treated	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The sample includes first-generation Italian immigrants of age 10 to 14. The dependent variable is a dummy (multiplied by 100) equal to one if the individual is able to speak English.  $1[English\ laws]$  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).  $1[Presence\ of\ School]$  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 4 of Table 4 (Panel B). See Table 4 for the description of controls. Standard errors, clustered at the county level, in parentheses. Significance levels: \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.01.

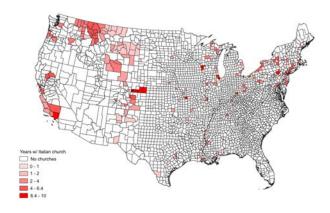
# Figures

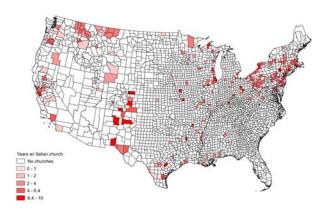
Figure 1. Italian Immigrants over County Population, by Decade

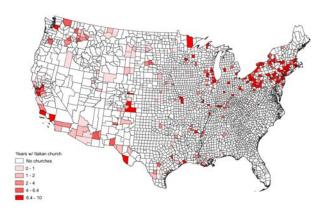


Notes: The figure plots the share of (first-generation) Italian immigrants relative to total county population in each Census year. County boundaries are fixed to 1930 using the procedure in Perlman (2016). Source: Authors' calculation from Ruggles et al. (2020).

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 3.2. Source: Authors' calculation from the The Official Catholic Directory.

Figure 3. Sample of the 1902 Catholic Almanac: List of Churches

# ---BOSTON ARCHDIOCESE OF BOSTON ST. CECHLIA'S, St. Cecilia st., Rev. John J. McNulty, Rev. Jno. J. Downey, Rev. Jno. J. O'Keeffe. O'Keeffc. HOLY TRINITY (German), Shawmut ave., Rev. John Jutz, S.J., rector; Rev. John P. M. Schleuter, S.J., Rev. Joseph Busam, 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. 2 Sisters of St. Francis (German), F. St., So. Boston. 2 Sisters. Boys, 567; 578; 38. Station – St. Elisabeth's (German), Elis st., Roxbury District, Boston. School – 5 Sisters of St. Francis. Boys, 106; girls, 112. 1MMACULATE CONCEPTION. Harrison ave, and Concord st. Rev. W. G. Read Mullan, S.J., Greefor), Rev. Patrick A. McQuillan, S.J., dinister), Rev. William B. Brownrigg, S.J., greefor), Rev. Patrick A. McQuillan, S.J., dinister), Rev. William B. Brownrigg, S.J., greefor), Rev. Patrick A. McQuillan, S.J., dinister), Rev. William B. Brownrigg, S.J., greefort of the church, Rev. Alphonse Charlier, S.S. (spiritual director of St. Vincent, Charles, S.J., Rev. Polin A. Moore, S.J., Rev. Boseph V. Schmidt, S.J., Rev. Denis T. O'Sullivan, S.J., delirector of League of Sacred Heart), Rev. John D. Whitney, S.J., (treasurer), Rev. John A. Moore, S.J., Rev. Joseph V. Schmidt, S.J., Rev. Folmand J. Burke, S.J., Rev. William M. McDonough, S.J., Rev. John A. Moore, S.J., Rev., Lev. William S. Singleton, S.J., Rev. John McQuald, S.J., Rev. Harrison ave., near Kneeland st., Rev. Swm. P. McQuald, Denis F. Lee, Jas. J. Baxter, D.D., James A. Barrett, Rev. Pascal Di Milla (Italian mission), Res., 9 Whitmore st. School – Set Schriffs (Portuguese), North Bennett st., Rev. Antonio Joaquime Pimentel, Rev. John J. Perry. Res., 11 N. Bennetts S., Rev. Antonio Joaquime Pimentel, Rev. John J. Perry. Res., 11 N. Bennetts S., School – State Prison. Stations – Massachusetts Hospital. Stations – Massachusetts Hospital. Stations – Massachusetts Hospital. St. J.EON Millon M. McGreen, Peter J. Waish, Jos. F. Coppinger, Res., 6 Allen st. Chaple – State Prison. Stations – Massachusetts Hospital. St. J.EON Millon M. McGreen, Peter J. Waish, Jos. F. Coppinger, Res., 6 Allen st. Chaple – State Prison. Stations – Massachusetts Hospital. St. J.EON Millon M. McGreen, Peter J. Waish, Jos. F. Coppinger, Res., 6 Allen st. Chaple – State Prison. Stations – Massachusetts Hospital. St. J.EON Millon M. McGreen, Peter J. Waish, Jos. F. Coppin

Figure 4. Sample of the 1902 Catholic Almanac: List of Clergymen

#### UNITED STATES CLERGY LIST

#### SECULAR AND REGULAR PRIESTS.

#### ABBREVIATIONS.

c.a., Assumptionist Fathers.
c.m., Congregation of the Mission, Lazarist Fathers, Vincentian Fathers.
c.p., Congregation of the Passion, Passionist Fathers.
c.p., Congregation of the Most Precious Blood, Sanguinist Fathers.
c.r., Congregation of the Resurrection, Resurrectionist Fathers.
c.s.b., Congregation of St. Basil, Basilian

c.s.b., Congregation of St. Basil, Basilian Fathers. c.s.c., Congregation of the Holy Cross. c.s.p., Congregation of St. Paul, Paulist Fa-

c.s.c., Congregation of the Holy Cross.
c.s.p., Congregation of St. Paul, Paulist Fathers.
c.ss.r., Congregation of the Most Holy Redeemer, Redemptorist Fathers.
c.s.s.p., Congregation of the Holy Ghost.
c.s.v., Congregation of St. Viateur.
m.s.c., Missionary Fathers of La Salette.
m.s.c., Order of Charity.
o.c.c., Order of Calced Carmelites, Brothers of the Blessed Virgin of Mt. Carmel.

o.c.r., Order of Reformed Cistercians, Trappist Fathers.

o.c.r., Order of Reformed Cistercians, Trappist Fathers.
o.m.c., Order of Minor Conventuals, Franciscan Friars.
o.m.cop., Order of Minor Capuchins, Franciscan Friars, Capuchin Fathers.
o.m.i., Oblate Fathers of Mary Immaculate.
o.p., Order of Preachers, Dominican Fathers.
o.p., Order of Premonstratensians.
o.s.m., Order of Servite Fathers.
o.s.a., Order of St. Augustine.
o.s.b., Order of St. Benedict.
o.f.m., Order of Friars Minor, Franciscan Friars, Franciscan Fathers.
o.s.h., Oblate Fathers of the Sacred Hearts.
p.s.m., Fathers of the Pious Society of Missions, Piarist Fathers.
s.d.s., Society of the Divine Savior.
s.s.f.s., Salesian Fathers.
s.m., Society of Mary, Marist Fathers.
s.p.m., Society of Fathers of Mercy.
s.s., Sulpician Fathers.
s.v.d., Society of the Divine Word.

#### The letters in parenthesis designate the diocese.

The letters in parenthes

Aaron, Francis P. (E), McKean, Pa.

— Leo, o.s.b. (Leav), Atchison, Kans.

Abb, J. A. (G B), Green Bay, Wis., St. Vincent's Hospital.

Abbelen, Very Rev. P. M. (Mil), Milwaukee, Wis., 699 Jefferson st.

Abbink, Bernardine, o.f.m., (Ft W), Avilla, Ind. Home for the Aged.

Abbott, Michael (Spr), Farmer City, Ill.

— T. C. (Nash), South Nashville, Tenn., St. Patrick's Church.

Abel. A. J. (Wich), Wichita, Kans.

— John (G R), Hannah, Mich.

— Jos. (Ft W), Hammond, Ind., 244 So. Hohman st.

Abell. J. J. (L), St. John's P. O., Ky.

Abeln, Paul T. (Cov), Central Covington, Ky., St. Augustine's Church.

Aboud, E. (Om), Omalia, Nebr., 1102 S. 13th st. Abrometis, P. (Ph), Shenandoah, Pa., St. George's Church.

Abt., Chas. A. (Ph), Philadelphia, Pa., Tacomy.

— Romanus (New), Englewood, N. J., 50

Waldo Place.

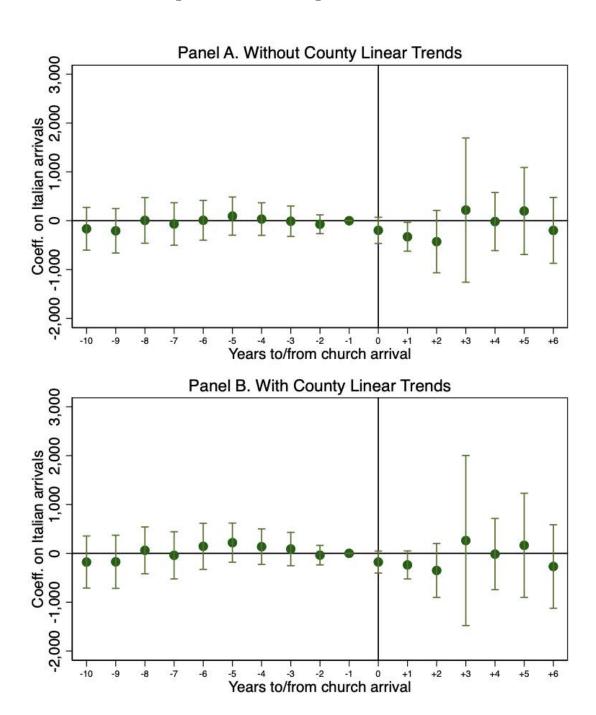
Accine, Levi J. (Spr), Northboro, Mass.

Achim, Levi J. (Spr), Northboro, Mass.

Achim,

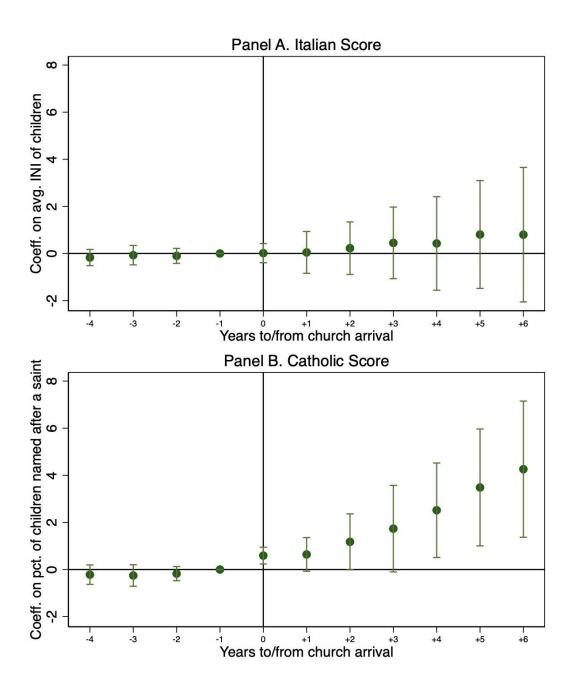
Adelmann, Augustine C. (Cin), Russia, Ohio. Adelsperger, J. (Cov), Covington, Ky., Cathedral.
Ader, H. (Alt), Carlinville, Ill.
Adolph, Anthony (Buf), Williamsville, N. Y. Adrain, W. H. (Spr), Blackstone, Mass.
Adrian, H. G. (St L), St. Louis, Mo., 3519
N. 14th st.
Aertker, Victor, o.f.m. (Mon), Los Angeles, Cal., 1223 Santee st.
Agresti. Raphael (E), Erie, Pa., 17th and Walnut sts.
Aguilera, V. (Mon), San Luis Obispo, Cal.
Alern, J. F. (Spr), Springfield, Mass. House of Good Shepherd.
— Jos. J. (Port), Eastport, Me.
— Michael (Cin), St. Louis, Mo., 3933 S.
Broadway.
— M. J. (Rich), Alexandria, Va.
— M. J. (Spr), Worcester, Mass., Sacred Heart Church.
— Philip E. (NY), New York City, 506 E. 90th street.
— Peter (Nat), In Canada.
— Terence (St J), Milan, Mo.
— Wm. (Br). Brooklyn, N. Y., Essex st. and New Lots road.
Aherne, Jas. (Om), Omaha, Nebr., 531 S. 27th street.
— Almann, Ignatius M. (Cov), Carrollton, Ky.
Ahne, B. (New), Fort Lee, N. J., Main st.
— B. W. (New), Mr, Hope, N. J.
Alchinger, Benno, o.m.cap. (Mil), Mt. Calvary, Wis.
Ald, Richard (Dav), absent on leave.
Aigner, Francis, \*j. (New), Jersey City, N. J., 144 Grand st.

Figure 5. Italian Immigrants Over Time



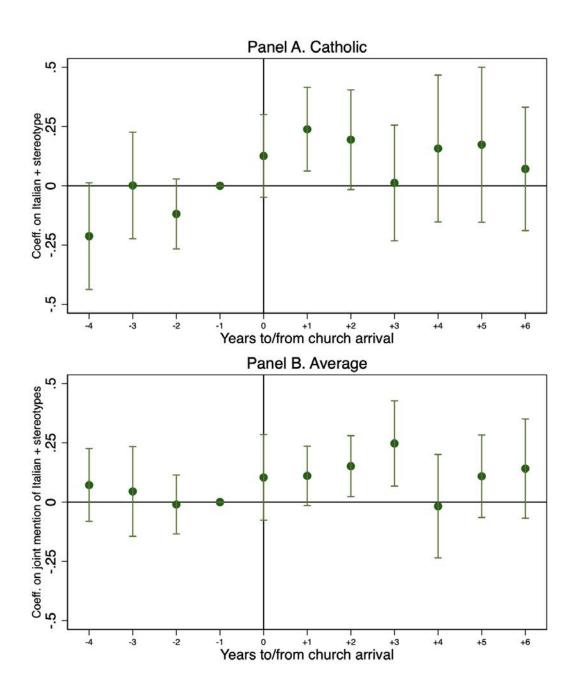
Notes: The figure plots the coefficient, with 95% confidence intervals, on leads and lags of a dummy equal to one for the entry of an Italian Catholic church in each county-(calendar) year. The dependent variable is the predicted number of Italian arrivals in each county-(calendar) year (see Section 4.3 for more details). The regression includes all controls listed in column 4 of Table 3, except for individual characteristics. County linear trends are omitted from Panel A, and included in Panel B. The vertical black line refers to the arrival of the church in the county.

Figure 6. 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 dependent variable is i) the average Italian score of the US-born children (0-10) in the household in Panel A; ii) the Catholic score, i.e., the percentage of US-born children (0-10) being named after a Catholic saint in the household in Panel B. 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 3, and the following additional variables: household fixed effects; the number of children in the household in the previous year; fixed effects for gender, age, and years in the US for the household head (rather than for each household member). The vertical black line refers to the arrival of the church in the county.

Figure 7. 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 keyword "Catholic" in Panel A; ii) the average mention of the keywords "Alcohol", "Dirty", "Crime", "Violent", "Lazy", "Dago" 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: i) interactions between decade dummies and 1900: county population, the urban, the Black, the Italian, the Irish, and other Europeans share of the population, labor force participation, the manufacturing share, and the number of years a county had been connected to the railroad; and, ii) number of years with at least one non-Italian Catholic church. The vertical black line refers to the arrival of the church in the county.

# A Appendix – Additional Tables and Figures

Table A.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
Literacy	Dummy=1 if the individual can read and write. Defined separately for individuals 15+, and for children of age 10-14
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
Panel B. Household Level Outcomes	
Number of Children	Number of children in the household
Italian Score	Average Italian score (INI) of US-born children (0-10) names
Catholic Score	Percentage of US-born children (0-10) named after a Catholic saint (either in Italian or in English)
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 Lo-	Frequency of joint appearance of the terms "Italians" and "Catholic" in the
cal Newspapers	same page of local newspapers in each county year, scaled by the frequency of
A	the term 'Catholic'.
Average Mentions of Stereotypes and "Ital-	Simple average of the frequency of joint appearance of the term "Italians" and
ians' in Local Newspapers	a number of negative stereotypes ("Alcohol", "Dirty", "Crime", "Violent", "Lazy", and "Dago") in the same page of local newspapers, scaled by the
	"Lazy", and "Dago") in the same page of local newspapers, scaled by the frequency of each stereotype.
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Notes: The table reports the description of the main outcomes used in the paper. All dummies are multiplied by 100

Table A.2. Description of Control Variables

Variable	Description
Panel A. Individual Level Controls	
Age Male Years in the US Married	Age, in years Dummy=1 if the individual is male Number of years spent in the US Dummy=1 if an individual is married
Panel B. Household Level Controls	
Number of Adults	Number of individuals 15+ in the household
Panel C. County Level Controls	
County Population Urban Share Black share Fraction of European Immigrants Fraction of Italians Fraction of Irish Share Native Men 15-64 in Labor Force Share Native Men 15-64 in Manufacturing Years w/ non-Italian Church Years w/ Railroad Catholic Population Share Characteristics of Italian immigrants	County population in 1900 Urban share of the county population in 1900 African American share of the county population in 1900 Fraction of European immigrants over county population in 1900 Fraction of Italian immigrants over county population in 1900 Fraction of Irish immigrants over county population in 1900 Share of native men (15-64) in the labor force in 1900 Share of native men (15-64) employed in manufacturing in 1900 Number of years with at least one non-Italian church in the previous decade Number of years a county has been connected to the railroad up to 1900 Share of Catholic population in 1890 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 (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 except the number of years with a non-Italian Catholic church (measured in each decade) and the share of the Catholic population in the county (measured in 1890) refer to 1900. Except for the number of years with a non-Italian Catholic church, all county-level controls are interacted with decade (or year) dummies.

Table A.3. Additional Assimilation Outcomes

	(1)	(2)	(3)	(4)
Dep. Variable:	In Manufacturing	Unskilled	Literacy	Italian
				Occupational
				Index
Years w/ Italian Church	0.248**	0.275*	-0.158	0.058***
	(0.104)	(0.143)	(0.116)	(0.019)
Mean Treatment	6.236	6.236	6.236	6.119
Mean Dep. Variable (1900)	11.67	60.35	54.59	4.132
Observations	1,760,957	1,760,957	1,760,957	1,419,196
$\frac{}{\text{State} \times \text{Decade FEs}}$	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 4 of Table 5, focusing on first-generation Italian immigrant men of age 15 to 64. The dependent variable is a dummy equal to 1 (multiplied by 100) for being: i) in manufacturing (column 1); ii) unskilled (column 2); iii) literate (column 3). Italian Occupational Index is the fraction of Italian men in labor force holding a specific occupation over the fraction of the rest of the male population in the labor force, holding that occupation. 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 Table 5 for the definition of regressors and controls. Standard errors, clustered at the county level, in parentheses. Significance levels: \*\*\* p<0.01, \*\* p<0.05, \* p<0.01.

Table A.4. Integration with Other Immigrant Groups

	_		_	_	
	(1)	(2)	(3)	(4)	(5)
Ethnicity:	UK	Western	Northern	Central/East	Russian
·		Europe	Europe	Europe	Empire
Panel A.		Dep.	Variable: N	farried to	
Years w/ Italian Church	-0.015***	-0.034***	-0.004**	-0.016***	0.001
,	(0.004)	(0.008)	(0.002)	(0.005)	(0.001)
	<b>7</b> 100	<b>7</b> 100	<b>7</b> 100	<b>=</b> 100	<b>=</b> 100
Mean Treatment	7.190	7.190	7.190	7.190	7.190
Mean Dep. Variable (1900)	0.217	0.437	0.0580	0.200	0.014
Observations	1,760,274	1,760,274	1,760,274	1,760,274	1,760,274
Panel B.		Dep. Varia	ble: Residen	tial Integration	
Years w/ Italian Church	-0.023	0.016	-0.011	0.051	0.042
	(0.027)	(0.020)	(0.022)	(0.036)	(0.036)
Mean Treatment	7.421	7.421	7.421	7.421	7.421
Mean Dep. Variable (1900)	4.011	2.173	2.056	4.192	2.963
Observations (1900)	1,006,112	1,006,112		1,006,112	1,006,112
Observations	1,000,112	1,000,112	1,006,112	1,000,112	1,000,112
$\overline{\text{State} \times \text{Decade FEs}}$	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 3, for intermarriage and residential integration between an Italian immigrant and individuals belonging to the group reported at the top of each column. See Table 3 for the sample considered in each Panel, the definition of the dependent variable, and the description of controls. Standard errors, clustered at the county level, in parentheses. Significance levels: \*\*\* p<0.01, \*\* p<0.05, \* p<0.01.

Table A.5. Heterogeneity by Treatment Type

	(1)	(2)	(3)	(4)	(5)	(6)
Dep. Variable:	Married	Residential	Naturalized	Speak	Labor	Log Occ.
•	to Native	Integration		English	Force	Score
Years w/ Italian National Church	-0.109***	-0.524***	-0.672**	-0.157	0.148***	-0.013***
	(0.013)	(0.087)	(0.266)	(0.141)	(0.056)	(0.004)
Years w/ Italian Priests p.a.	-0.043**	-0.189*	-0.480**	-0.037	0.298***	-0.002
	(0.021)	(0.105)	(0.209)	(0.247)	(0.063)	(0.009)
Years w/ non-Italian Church	0.004	-0.237	1.139***	0.315	-0.044	0.002
	(0.038)	(0.170)	(0.424)	(0.309)	(0.094)	(0.009)
Mean Italian National Church	6.148	6.613	6.654	5.753	5.504	5.531
Mean Italian Priests	0.741	0.808	0.873	0.717	0.732	0.731
Mean non-Italian Church	7.576	8.159	8.456	7.175	7.041	7.059
Mean Dep. Variable (1900)	0.808	17.17	53.40	57.09	85.77	3.070
Observations	1,989,311	1,006,112	1,318,535	2,882,460	1,760,957	1,655,382
State × 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 specification in column 4 of Tables 3, 4, and 5, replacing the main regressor Years w/ Italian Church with the following three regressors: i) the number of years with at least one Italian national church (Years w/ Italian national church); i) 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 no Italian national churches nor Italian priests. See the notes to Tables 3, 4, and 5 for the description of controls. Standard errors, clustered at the county level, in parentheses. Significance levels: \*\*\* p<0.01, \*\*\* p<0.05, \*\* p<0.01.

Table A.6. Summary Statistics: Newspapers Sample

	Mean	Std. Dev.	Min	Median	Max	Obs.
Panel A. Main Variables						
Years w/ Italian Church	6.347	3.705	0	8	10	2,249,290
Main E	ndividual 1	Level Outcor	mes			
Married to Native	1.028	10.089	0	0	100	1,538,992
Residential Integration	19.240	39.419	0	0	100	786,537
Naturalized	32.661	46.897	0	0	100	1,034,125
Speak English	61.300	48.706	0	100	100	2,249,290
Log Occupational Score	1.932	2.763	-5	2.996	4.382	1,294,572
In Labor Force	93.983	23.779	0	100	100	1,377,451
Main H	Iousehold I	Level Outcor	nes			
Number of Children	1.801	2.162	0	1	9	2,249,290
Italian Score	53.491	29.726	0	56.768	100	408,710
Catholic Score	44.899	36.799	0	50	100	408,710
Panel B. Main County Level Characteristic	es					
County Population	952,316	867,699	338	529,106	3,022,912	2,249,290
Urban Share	0.815	0.252	0	0.954	1	2,249,290
Black Share	0.034	0.064	0	0.018	0.937	2,249,290
Immigrant Share	0.290	0.107	0	0.291	0.540	2,249,290
Italian Immigrant Share	0.043	0.025	0	0.041	0.129	3,161,147
Irish Immigrant Share	0.034	0.023	0	0.029	0.092	2,249,290
Other Europeans Immigrant Share	0.211	0.077	0	0.216	0.537	2,249,290
Share Native Men 15-64 in Labor Force	0.877	0.046	0	0.893	0.964	2,249,290
Share Native Men 15-64 in Manufacturing	0.154	0.066	0	0.147	0.464	2,249,290
Years w/ Railroad	51.552	23.264	0	60	70	2,249,290
Years w/ non-Italian Church	7.097	3.353	0	8.500	10	2,249,290
Italians' Regional Homogeneity	0.093	0.020	0	0.090	1	2,056,077
Italians' Religiosity	45.674	5.658	0	46.153	100	2,249,290
Catholic Population Share (1890)	0.010	0.015	0	0	0.041	2,249,290
Panel C. Additional Individual Characteris	stics					
Age	35.037	12.773	15	33	133	2,249,290
Male	62.734	48.351	0	100	100	2,249,290
Married	68.423	46.482	0	100	100	2,249,290
Years in the US	12.331	9.050	0	10	90	2,249,290
Literacy	64.481	47.857	0	100	100	2,249,290
In Manufacturing	18.273	38.645	0	0	100	1,377,451
Married to Italian	92.015	27.107	0	100	100	1,360,545

Notes: The table reports summary statistics for the full sample (columns 1 to 3) and for the counties for which data on local newspapers are available through the website Newspapers.com (columns 4 to 6). 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 in 1900 of the percentage of children named after a Catholic saint. For a description of the rest of the variables, see Tables A.1 and A.2. The number of observation is different for Married to Native and Married, because the former can be defined only when the spouse is present (for otherwise their nativity is not available), while the latter is defined also when the spouse is not present. Married to Italian is defined for fewer individuals, because exact country of birth of the spouse must be reported, and this variable is sometimes missing.

Table A.7. Baseline Results: Newspapers Sample

	(1)	(2)	(3)	(4)	(5)	(6)
Dep. Variable:	Married to Native	Residential Integration	Naturalized	Speak English	Labor Force	Log Occ. Score
Years w/ Italian Church	-0.093*** (0.018)	-0.412*** (0.109)	-0.808*** (0.294)	-0.214 (0.180)	0.160** (0.066)	-0.012** (0.006)
Mean Treatment Mean Dep. Variable (1900) Observations	7.102 0.798 1,468,906	7.621 15.70 749,664	7.765 53.43 976,579	6.691 57.85 2,133,465	6.485 85.35 1,293,260	6.509 3.083 1,215,176
State × Decade FEs	Yes	Yes	Yes	Yes	Yes	Yes
County FEs Individual Controls	Yes Yes	Yes Yes	Yes Yes	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 specification in column 4 of Tables 3, 4, and 5, restricting attention to individuals living in counties for which newspapers data are available. See notes to Tables 3, 4, and 5 for the description of regressors and controls. Standard errors, clustered at the county level, in parentheses. Significance levels: \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.01.

Table A.8. KKK Presence, 1915-1940

	(1)	(2)	(3)	(4)	
Dep. Variable:		Presence 100	KKK timing in (log) years		
Years w/ Italian Church	0.336* (0.199)	0.257 $(0.156)$	0.041* (0.024)	0.031* (0.019)	
Mean (s.d.) Treatment Mean Dep. Variable Observations	1.849 (5.589) 33.79 3,010	1.849 (5.589) 33.80 3.010	1.849 (5.589) -5.128 3,010	1.849 (5.589) -5.127 3,010	
State FEs	Yes	Yes	Yes	Yes	
County Controls (1900) Predicted Italian/European Immigration	Yes	Yes Yes	Yes	Yes Yes	

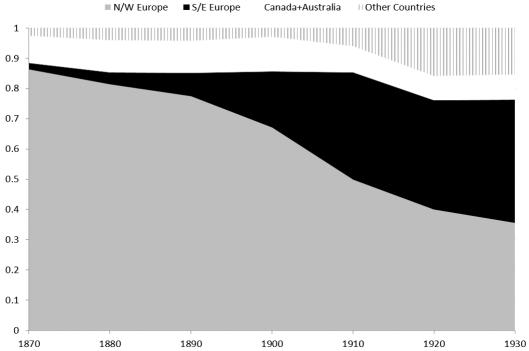
Notes: KKK Presence is a dummy for the presence of at least one KKK klavern between 1915 and 1940, multiplied by 100. KKK timing is the log of (one plus) the number of years between 1940 and the opening of the first KKK klavern in the county. If a klavern never opened, the variable takes value of zero. Regressions include state fixed effects and the battery of county-level controls listed in Table A.2 (Panel C). Columns 2 and 4 also include the predicted Italian and European immigrant share constructed using a shift-share (Card, 2001) procedure described in detail in Appendix C. All regressions are weighed by number of individuals included in the analysis reported in column 3 of Tables 3, 4, and 5. Robust standard errors in parentheses. Significance levels: \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.01.

Table A.9. Literacy: Italian Immigrant Children

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Dep. Variable:					Literacy				
Sample:	Fem	ales and N	Males		Females			Males	
Years w/ Italian church	$   \begin{array}{c}     \hline     0.185 \\     (0.117)   \end{array} $	0.203 $(0.135)$	0.059 $(0.135)$	0.346** (0.142)	0.360** (0.152)	0.187 (0.160)	0.056 $(0.151)$	0.072 $(0.171)$	-0.042 (0.181)
Years w/ Italian church $\times$ English Laws		-0.058 $(0.120)$			-0.045 $(0.125)$			-0.050 (0.143)	
Years w/ Italian church $\times$ Presence of School			0.214** (0.085)			0.267** (0.112)			0.168 $(0.111)$
Age Mean Treatment Mean Dep. Variable (1900)	10-14 5.270 76.19	10-14 5.270 76.19	10-14 5.270 76.19	10-14 5.270 75.54	10-14 5.270 75.54	10-14 5.270 75.54	10-14 5.270 76.75	10-14 5.270 76.75	10-14 5.270 76.75
Observations (1900)	141,200	141,200	141,200	67,609	67,609	67,609	73,541	73,541	73,541
$State \times Decade FEs$	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
County FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
County Controls $\times$ Decade	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
County Linear Trends	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ever Treated	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

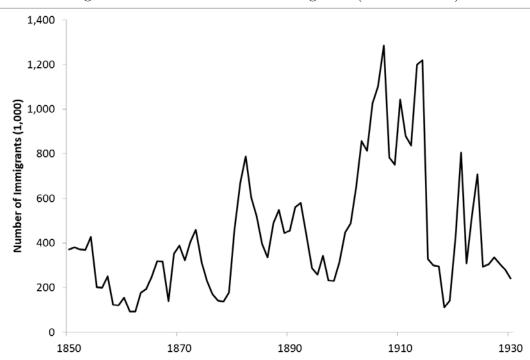
Notes: The sample includes first-generation Italian immigrants of age 10 to 14. The dependent variable is a dummy (multiplied by 100) equal to one if the individual is able to read and write. English laws is a dummy equal to one if the individual lives in a county belonging to a state with the requirement 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 4 of Table 4 (Panel B). See Table 4 for the description of controls. Standard errors, clustered at the county level, in parentheses. Significance levels: \*\*\* p<0.01, \*\* p<0.05, \* p<0.01.

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



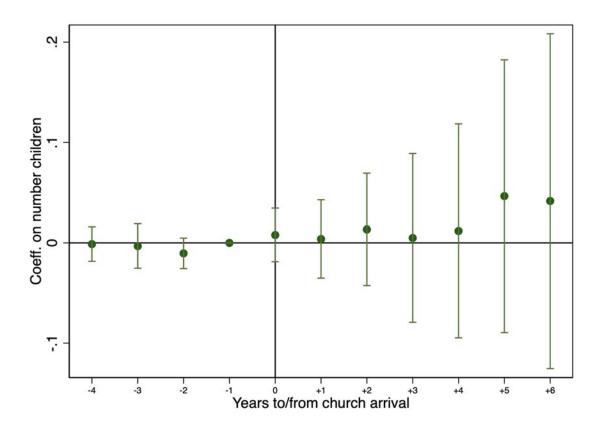
Notes: Share of immigrants (relative to the total foreign born population) living in the United States, by sending region and by decade. Source: Authors' calculations from Ruggles et al. (2020).

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



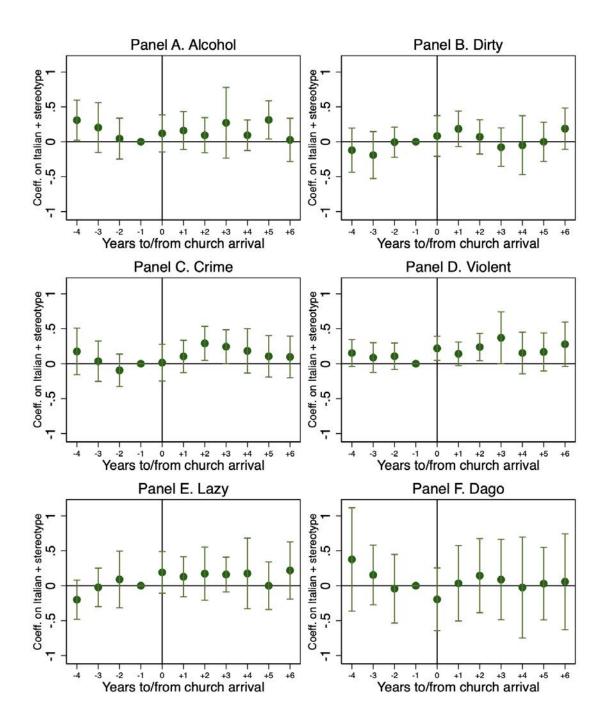
Notes: Annual inflow of immigrants to the United States (1850-1930). Source: Adapted from Tabellini (2020).

Figure A.3. 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 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 3, and the following additional variables: household fixed effects; fixed effects for gender, age, and years in the US for the household head (rather than for each household member). The vertical black line refers to the arrival of the church in the county.

Figure A.4. Relative Frequency of (Single) 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 the keywords "Alcohol" (Panel A), "Dirty" (Panel B), "Crime" (Panel C), "Violent" (Panel D), "Lazy" (Panel E), and "Dago" (Panel F), scaled by the number of occurrences of the stereotypical keyword, in local newspapers of a county in a calendar year. The regression includes all controls listed in Figure 7. The vertical black line refers to the arrival of the church in the county.

# B Appendix – Data

### B.1 Residential Integration at the Individual Level

To estimate the effects of Italian Catholic churches on the social assimilation of Italian immigrants (Table 3), we construct a measure of residential integration at the individual level. To construct this variable, we follow Logan and Parman (2017), taking 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. In Tables 7 and A.4, 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; other Italians; etc.).

### **B.2** Italian Sounding Names

As discussed in the main text, we consider the "Italian content" of the name chosen by Italian immigrant parents for their offspring (born in the US). Since this choice involves their children and not immigrants themselves, naming might capture an indirect effect of Italian churches on assimilation, and may well follow from other assimilation outcomes, such as intermarriage with native-born spouses. Moreover, rather than reflecting assimilation "effort", naming patterns should better capture the desire to transmit vertically the national culture. Nonetheless, as long as parents are attached to their culture, choosing a non-ethnic name for their offspring is a costly assimilation decision. Moreover, there might be a penalty in the labor market, and more broadly in the social life, associated with a foreign-sounding name (Biavaschi et al., 2017). If parents were aware of this, such a penalty may proxy for the monetary value they assign to their children having a name indicative of their ethnic origin.

To capture the ethnic content of names, we compute an index of name distinctiveness that builds on what was first used in Fryer and Levitt (2004) for African Americans and, more recently, in Abramitzky et al. (2020), Fouka (2019), and Fouka et al. (2022) among others for European immigrants. Since we are specifically interested in Italian immigrants, we construct an Italian Name Index (INI). This index 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.<sup>57</sup> For each decade  $\tau$ , we consider individuals

<sup>&</sup>lt;sup>56</sup>This approach is widely used in the literature (Abramitzky et al., 2020; Fouka, 2019).

<sup>&</sup>lt;sup>57</sup>Consistent 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.

born 20 years before as a reference group.

Formally, the index is computed as follows:

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

where  $Italians_{\tau}$  refers to Italians born between  $\tau$  and  $\tau-2$ , and  $Not\ Italians_{\tau}$  refers to natives and first-generation immigrants of every nationality (other than Italian) born between  $\tau$  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 an Italian-born father using the full count US Census (Ruggles et al., 2020) for the three decades between 1900 and 1920. Note, also, that we consider only first-generation immigrants as reference groups in order to capture what parents perceived as a "distinctive Italian" name when making the naming decision, without contamination from changes in naming patterns among US-born Italians. In practice, we construct a household-level average INI for each calendar year t. As explained in Section 4.2, we control for household fixed effects as well as for the number of children in each year. Thus, the change in the household-level INI before and after the arrival of the church captures precisely the impact of the church on the name given by parents to the kid(s) born after the arrival of the church.

## B.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 3). 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).<sup>58</sup>

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 20<sup>th</sup> 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.

<sup>&</sup>lt;sup>58</sup>The 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.

## B.4 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 (Caffarellix 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 of our index, we have no reason to expect that this would bias any of our estimates.

With the aforementioned caveat in mind, we 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.<sup>59</sup> Perhaps not surprisingly, the index computed using these data is very similar too that obtained with the *Whitepages*.

<sup>&</sup>lt;sup>59</sup>Individual tax returns filled by all physical persons in Italy were briefly posted online by the Italian Revenue Agency (*Agenzia delle Entrate*) in 2008.

## C Appendix – Robustness

This section describes the checks we performed to assess the robustness of our results.

Testing the identifying assumption. In addition to the evidence provided in Section 4.3, here we tackle 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, we can nonetheless test whether results are robust to focusing on a sample of counties with at least one church entry but no exits within the decade. Panel A of Table C.1 shows that this is indeed the case. That considering only entries – but not exits – leaves our results unchanged 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).

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 weighed 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.<sup>61</sup> 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 C.1, verify that all coefficients are robust to this approach.

 $<sup>^{60}</sup>$ Here, we estimate our preferred specification (column 4) reported in Tables 3 to 5, restricting attention to the sample just described.

<sup>&</sup>lt;sup>61</sup>Estimates are not sensitive to the inclusion of never-treated counties.

Definition of "exposure". In addition to the exercise reported in Table A.5 (where we considered separately the effects of Italian National churches and the effects of churches with at least one Italian priest), in Table C.2, 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 less precisely estimated. However, and reassuringly, all results remain qualitatively in line with those from the preferred specification.

As an additional robustness check, in Table C.3, we normalize the average number of Italian churches over the decade by: i) 1900 county total 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, when using the number of churches per square mile, the effect over the occupational score becomes positive and statistically significant.

Next, we explore the robustness of our results to defining exposure over different time horizons. 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 C.4, we define exposure as the number of years a church was present in the county over the previous 20 (Panel A) and 30 years (Panel B).<sup>62</sup> 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.<sup>63</sup>

With these caveats in mind, Table C.4 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 conven-

 $<sup>^{62}</sup>$ Since we are unable to measure exposure to Italian Catholic churches after 1920, we are forced to cap exposure to three decades at a maximum.

<sup>&</sup>lt;sup>63</sup>The longer the period of exposure, the less likely this assumption is to hold, possibly introducing noise in the measurement of exposure over multiple decades. However, unless internal migration were selective (and correlated with the presence of churches), this should not introduce bias in our estimates. We return to this point in the next paragraph (see also Table C.6).

tional 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 – 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 very similar to those in the baseline specification.

Selective migration and compositional changes. In this paragraph, we address the potential concern that our findings may be at least partly driven by the selective in-migration of Italians, which may have been drawn to the county following the arrival of a church. Figure 5 presented in the main text already assuages this concern by showing that church arrivals are neither anticipated nor followed by changes in yearly Italian immigration. We now examine the possibility that church arrivals triggered selective in-migration among Italians.

Using the linked sample made available by Abramitzky et al. (2020), we select all Italian immigrants who lived in one of the counties in our sample in 1920 that can be linked to our baseline Census year of 1900.<sup>64</sup> Before describing the analysis, we provide an overview of the geographic distribution and the characteristics of the Italians in the baseline and in the linked samples. Restricting attention to counties that received at least one Italian Catholic church between 1890 and 1920, in Figure C.1, we plot the counties that include Italian immigrants in the baseline and in the linked samples. Colored (both dark and light) counties refer to the former. Counties in darker colors refer to the latter. Perhaps not surprisingly, the linked and the baseline samples largely overlap for the most populous counties in the Northeast and the West, and for some other areas in the Mid-West (such as Cook County, Illinois). Instead, counties in the North-West and in other parts of the country are less likely to be included in the linked sample.

In Table C.5, we compare the characteristics of the individuals in the baseline (columns 1 to 3) and in the linked sample (columns 4 to 6). To make the comparison more meaningful, we present the characteristics for 1900. Since only male individuals can be linked, we further restrict attention to men also in the baseline sample. As of 1900, individuals in the baseline and in the linked sample lived in counties with very similar church exposure. For most county-level characteristics (Panel B), the two samples are rather similar, with the exception of a few variables, such as exposure to the railroads (longer in the linked sample) and the 1890 Catholic population share (higher in the baseline sample). Consistent with the pattern depicted Figure C.1, Italians in the linked sample are also somewhat more likely to live in urban counties, compared to those in the baseline sample. Focusing on individual-level

 $<sup>^{64}</sup>$ To keep the analysis consistent, we restrict attention to the set of counties that received at least one church during the sample period, i.e., those included in our preferred specification. Results are unchanged when relaxing this restriction.

characteristics, Table C.5 shows that Italians in the linked sample are more likely to be married with and live close to a native of native parentage, and that they have higher English proficiency, literacy, and naturalization rates.

This discussion suggests that, as expected, the linked sample is not fully representative of the Italian population.<sup>65</sup> With this caveat in mind, we now turn to the analysis. We consider the six main outcomes of interest of the paper (intermarriage, residential integration, ability to speak English, citizenship, labor force participation, and the log of occupational income scores), and estimate individual-level regressions to test if the characteristics of Italian immigrants that moved into one of our counties between 1900 and 1920 varied systematically with the years of church exposure in the county. Specifically, we regress each individual characteristic measured in 1900 against: county fixed effects, all the individual level controls included in our baseline specification, a "mover" dummy equal to one if the county of residence of the individual in 1900 was different from that in 1920, and the interaction between the mover dummy and the number of years for which the county of residence in 1920 had at least one Italian church between 1900 and 1920.<sup>66</sup>

We present results in Table C.6, reporting the coefficients on both the mover dummy and its interaction with church exposure. Movers are more likely to be married with a native of native parentage (although the coefficient is not statistically significant at conventional levels), less likely to speak English, and more likely to be in the labor force. Crucially for our purposes, however, none of the coefficients on the interaction term between the mover dummy and church exposure is statistically significant at conventional levels. Moreover, the implied magnitudes are small, and we do not detect any systematic pattern. This indicates that our main results are unlikely to be driven by selective in-migration of Italians following the arrival of a church.

One potential concern with results reported in Table C.6 is that, as noted above, the linked sample is not fully representative. Moreover, the previous analysis did not allow us to consider other county-level characteristics, which may have changed following the entry of an Italian Catholic church. For these reasons, we turn again to the repeated cross-sectional datasets used in the main analysis and perform two additional exercises.

First, in columns 1 to 3 of Table C.7, we estimate county-decade panel regressions for our most preferred specification, where the dependent variable is the log of county, immigrant, and Italian population respectively. The main regressor of interest is the baseline measure of exposure to Italian churches in a county-decade.<sup>67</sup> Reassuringly, exposure to Italian churches

<sup>&</sup>lt;sup>65</sup>For more details on the potential limitations of linked samples, see Bailey et al. (2020) and Abramitzky et al. (2021).

<sup>&</sup>lt;sup>66</sup>We also include the interaction between the mover dummy and the years of exposure to non-Italian churches. Results are unchanged when omitting this interaction.

<sup>&</sup>lt;sup>67</sup>Since regressions are at the county-decade level, we cannot include individual and household level controls. To keep the weighting scheme as close as possible to the individual level analysis, regressions are weighed by the number of observations included in the tables in the main paper (e.g., Tables 3, 4, and 5).

is not associated with any change in the total, immigrant, or Italian population. In columns 4 to 6, we also verify that exposure to Italian churches did not alter the immigrant (column 4) or Italian (column 5) share of the county population, or the share of Italian immigrants, relative to the foreign born population (column 6).

Next, we explore the possibility that Italian churches changed sex ratios, i.e., the number of women relative to the number of men, in the county. This may be problematic in light of our results for intermarriage (Table 3). In Table C.8, we again estimate county-decade panel regressions for our preferred specification considering as dependent variable different measures of sex ratios. Reassuringly, exposure to Catholic churches has no impact on sex ratios defined for: the whole county (column 1), natives of native parentage (column 2), first and second generation Italians (column 3), first-generation Italians (column 4), all first and second generation immigrants (column 5), and all individuals in the age range 18-35 (column 6).

Additional robustness checks. 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 Panel A of Table C.9. Reassuringly, all our estimates remain very close to those from our preferred specification.

Then, and along similar lines, we verify that results are unchanged when including a measure of predicted Italian, Irish, and European (omitting the previous two groups) immigration – all constructed using a leave-out Bartik approach (Card, 2001). In particular, we predict the number of Italian and Irish immigrants in each county-decade by interacting i) the share of immigrants of each group in that county in 1900 (relative to all immigrants from that group living in the US) with ii) the national inflow of immigrants from each group in the previous 10 years omitting those that eventually settled in that specific county. We predict the number of immigrants from each other European nationality by following the same steps, and then summing across all national groups to obtain the total number of European (non-Italian and non-Irish) immigrants in each county-decade (see also Tabellini, 2020, for more details). We then scale all measures (Italian, Irish, European) of immigration by the 1900 county population to recover the predicted immigrant share in a county-decade. We then replicate our preferred specification by augmenting it with these additional controls. Also in this case, all results are unchanged.

As an additional robustness check, Table C.10 verifies 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.<sup>68</sup> Finally, Table C.11 documents that the statistical significance of our estimates is unchanged when clustering standard errors at the state (Panel A) and at the commuting zone (Panel B) level.

<sup>&</sup>lt;sup>68</sup>Since individuals born in the United States were automatically granted citizenship, the sample in column 3 is identical to that in the baseline specification.

Table C.1. Robustness of DD Strategy

	(1)	(2)	(3)	(4)	(5)	(6)
Dep. Variable:	Married	Residential	Naturalized	Speak	Labor	Log Occ.
•	to Native	Integration		English	Force	Score
Panel A. Excluding Exits						
Years w/ Italian Church	-0.125***	-0.567***	-1.175***	-0.087	0.122*	-0.017***
,	(0.018)	(0.119)	(0.407)	(0.179)	(0.067)	(0.004)
Mean Treatment	7.357	7.899	8.062	6.916	6.686	6.720
Mean Dep. Variable (1900)	0.793	16.58	53.57	57.23	85.60	3.065
Observations	1,397,703	709,987	903,419	2,013,180	1,205,761	1,133,113
Panel B. Stacked-by-Event I	Design					
Years w/ Italian Church	-0.098***	-0.437***	-0.617***	-0.185	0.143**	-0.014***
,	(0.017)	(0.083)	(0.208)	(0.166)	(0.070)	(0.005)
Mean Treatment	5.792	6.342	6.365	5.336	5.031	5.069
Mean Dep. Variable (1900)	1.130	24.18	54.91	57.35	84.93	3.046
Observations	1,514,132	752,069	1,036,127	2,250,213	1,450,349	1,359,487
$\frac{}{\text{State} \times \text{Decade FEs}}$	Yes	Yes	Yes	Yes	Yes	Yes
County FEs	Yes	Yes	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
County Controls × Decade	Yes	Yes	Yes	Yes	Yes	Yes
County Linear Trends	Yes	Yes	Yes	Yes	Yes	Yes
Ever Treated	Yes	Yes	Yes	Yes	Yes	Yes

 $\overline{Notes}$ : The table replicates the specification in column 4 of Tables 3, 4, and 5. 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 3, 4, and 5 for the description of controls. Standard errors, clustered at the county level, in parentheses. Significance levels: \*\*\* p<0.01, \*\*\* p<0.05, \* p<0.01.

Table C.2. Heterogeneity by Treatment Type II

	(1)	(2)	(3)	(4)	(5)	(6)
Dep. Variable:	Married	Residential	Naturalized	Speak	Labor	Log Occ.
1	to Native	Integration		English	Force	Score
Panel A. Number of Italian	Churches					
Average Italian Churches	-0.078***	-0.489***	-1.478***	-0.177	0.123**	-0.004
o .	(0.015)	(0.093)	(0.511)	(0.240)	(0.059)	(0.007)
Mean (s.d.) Treatment	4.395 (4.673)	4.780 (4.818)	4.661 (4.759)	4.124 (4.607)	3.831 (4.500)	3.860 (4.513)
Mean Dep. Variable (1900)	0.808	17.17	53.40	57.09	85.77	3.070
Observations	1,989,311	1,006,112	1,318,535	2,882,460	1,760,957	$1,\!655,\!382$
Panel B. Number of Italian	Priests					
Average Italian Priests	-0.036***	-0.260***	-0.875***	-0.101	0.076**	-0.003
	(0.011)	(0.064)	(0.313)	(0.129)	(0.034)	(0.002)
Mean (s.d.) Treatment	7.873 (8.813)	8.560 (9.064)	8.290 (8.945)	7.380 (8.652)	6.799 (8.414)	6.847 (8.438)
Mean Dep. Variable (1900)	0.808	17.17	53.40	57.09	85.77	3.070
Observations	1,989,311	1,006,112	1,318,535	2,882,460	1,760,957	1,655,382
$\frac{}{\text{State} \times \text{Decade FEs}}$	Yes	Yes	Yes	Yes	Yes	Yes
County FEs	Yes	Yes	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
County Controls × 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 specification in column 4 of Tables 3, 4, and 5, 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 3, 4, and 5 for the description of controls. Standard errors, clustered at the county level, in parentheses. Significance levels: \*\*\* p<0.01, \*\*\* p<0.05, \* p<0.01.

Table C.3. Heterogeneity by Treatment Type III  $\,$ 

	(1)	(2)	(3)	(4)	(5)	(6)
Dep. Variable:	Married	Residential	Naturalized	Speak	Labor	Log Occ.
-	to Native	Integration		English	Force	Score
Panel A. Number of Italian Ch	urches per Popula	ition				
Average Italian Churches over	-2.501*	-20.809***	-20.747	-30.503*	20.938**	0.380
1900 Population (in 100,000)	(1.427)	(7.329)	(18.952)	(15.921)	(9.373)	(0.499)
Mean Treatment	0.0114 (0.0314)	0.0126 (0.0349)	0.0127 (0.0337)	0.0108 (0.0301)	0.0104 (0.0291)	0.0105 (0.0293)
Mean Dep. Variable (1900)	0.808	17.17	53.40	57.09	85.77	3.070
Observations	1,989,311	1,006,112	1,318,535	2,882,460	1,760,957	1,655,382
Panel B. Number of Italian Ch	urches per Square	Mile				
Average Italian Churches	-1.587***	-15.779***	-73.860***	-10.856	4.073**	0.328*
per Square Mile	(0.282)	(1.320)	(10.881)	(7.730)	(1.589)	(0.170)
Mean Treatment	0.0809 (0.167)	0.0895 (0.176)	0.0840 (0.171)	0.0769 (0.163)	0.0687 (0.154)	0.0690 (0.155)
Mean Dep. Variable (1900)	0.808	17.17	53.40	57.09	85.77	3.070
Observations	1,989,311	1,006,112	1,318,535	2,882,460	1,760,957	1,655,382
$\frac{}{\rm State \times Decade \ FEs}$	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 specification in column 4 of Tables 3, 4, and 5, replacing the average number of churches per year during a decade by the total population (resp. county area in square miles) in 1900 in Panel A (resp. Panel B). See the notes to Tables 3, 4, and 5 for the description of controls. Standard errors, clustered at the county level, in parentheses. Significance levels: \*\*\*\* p<0.01, \*\*\* p<0.05, \*\* p<0.01.

Table C.4. Long-run Exposure

	(1)	(2)	(3)	(4)	(5)	(6)
Dep. Variable:	Married to Native	Residential Integration	Naturalized	Speak English	Labor Force	Log Occ. Score
D 14 E 0 00		Integration		Elighsh	roice	Score
Panel A. Exposure Over 20						
Years w/ Italian Church	-0.084*** (0.008)	-0.360*** (0.056)	-0.271 $(0.176)$	-0.117 $(0.081)$	0.076*** $(0.023)$	-0.006*** (0.002)
Mean Treatment Mean Dep. Variable (1900)	9.709 0.929	10.85 18.59	10.66 32.74	8.913 61.15	8.534 94	8.573 1.951
Observations (1900)	1,989,311	1,006,112	1,318,535	2,882,460	1,760,957	1,655,382
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)	0.055*** (0.018)	-0.004** (0.002)
Mean Treatment	11.03	12.41	11.89	10.12	9.667	9.644
Mean Dep. Variable (1900)	0.947	18.78	30.22	61.78	95.36	1.786
Observations	1,731,667	887,064	1,175,085	2,494,235	1,512,910	1,442,643
Panel C. Differential exposu	re					
Years w/ Italian Church	-0.070***	-0.514***	-1.028***	-0.054	0.146***	-0.010**
in Last 0-10 Years	(0.016)	(0.116)	(0.366)	(0.212)	(0.043)	(0.005)
Years w/ Italian Church	-0.063***	-0.258***	-0.380*	-0.243	0.051**	0.001
in Last 10-20 Years	(0.010)	(0.060)	(0.230)	(0.162)	(0.024)	(0.003)
Years w/ Italian Church	-0.042***	-0.180**	0.465***	0.274**	-0.007	-0.008**
in Last 20-30 Years	(0.014)	(0.071)	(0.165)	(0.108)	(0.034)	(0.004)
Mean Treatment 0-10	7.189	7.674	7.702	6.788	6.557	6.548
Mean Treatment 10-20	3.163	3.783	3.421	2.758	2.605	2.602
Mean Treatment 20-30	0.814	1.092	0.905	0.695	0.621	0.610
Mean Dep. Variable (1900)	0.947	18.78	30.22	61.78	95.36	1.786
Observations	1,731,667	887,064	1,175,085	2,494,235	1,512,910	1,442,643
$\frac{}{\text{State} \times \text{Decade FEs}}$	Yes	Yes	Yes	Yes	Yes	Yes
County FEs	Yes	Yes	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
County Controls × 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 specification in column 4 of Tables 3, 4, and 5, using different time windows to measure exposure to Italian Catholic churches. See the notes to Tables 3, 4, and 5 for the description of controls. Standard errors, clustered at the county level, in parentheses. Significance levels: \*\*\* p<0.01, \*\* p<0.05, \* p<0.01.

Table C.5. Summary Statistics: Linked vs. Baseline Sample, 1900

		Baseline			Linked	
	Mean	Std. Dev.	Obs.	Mean	Std. Dev.	Obs.
Panel A. Main Variables						
Years w/ Italian Church	3.808	3.909	285,430	3.908	3.989	13,997
		Main	Individual	Level Out	tcomes	
Married to Native	1.711	12.967	165,477	2.996	17.049	7,977
Residential Integration	20.139	40.104	125,269	22.872	42.004	6,803
Naturalized	51.762	49.969	173,918	59.945	49.004	9,040
Speak English	61.402	48.683	285,430	74.293	43.703	14,000
Log Occupational Score	3.061	0.314	243,556	3.105	0.330	11,883
In Labor Force	85.330	35.381	285,430	84.879	35.827	14,000
		Main I	Household	Level Out	tcomes	
Number of Children	1.147	1.491	136,465	1.263	1.601	7,297
Italian Score	44.576	32.625	66,117	48.286	30.320	3,608
Catholic Score	34.122	36.613	66,117	38.415	36.213	3,608
Panel B. Main County Level Characteristic	es					
County Population	516,910	533,776	285,430	502,452	495,775	13,997
Urban Share	0.695	0.335	285,430	0.760	0.281	14,000
Black Share	0.040	0.097	285,430	0.030	0.059	14,000
Immigrant Share	0.267	0.113	285,430	0.271	0.095	13,997
Italian Immigrant Share	0.026	0.017	285,430	0.023	0.016	13,997
Irish Immigrant Share	0.054	0.033	285,430	0.056	0.030	13,997
Other Europeans Immigrant Share	0.187	0.083	285,430	0.192	0.071	13,997
Share Native Men 15-64 in Labor Force	0.785	0.040	285,430	0.776	0.033	13,997
Share Native Men 15-64 in Manufacturing	0.185	0.085	285,430	0.200	0.079	13,997
Years w/ Railroad	40.841	23.017	285,430	47.427	18.814	13,997
Years w/ non-Italian Church	5.477	3.803	285,430	5.495	3.918	13,997
Italians' Regional Homogeneity	0.095	0.032	247742	0.092	0.018	13,489
Italians' Religiosity	43.397	8.038	285,430	44.265	5.475	13,997
Catholic Population Share (1890)	0.009	0.015	285,430	0.006	0.012	14,000
Panel C. Additional Individual Characteris	stics					
Age	34.150	11.920	285,430	30.549	9.992	14,000
Married	57.975	49.360	285,430	56.979	49.512	14,000
Years in the US	8.585	7.789	285,430	9.926	7.694	14,000
Literacy	59.961	48.998	285,430	70.586	45.567	14,000
In Manufacturing	11.245	31.592	285,430	12.686	33.282	14,000
Married to Italian	89.178	31.066	$122,\!535$	81.272	39.016	6,760

Notes: The table reports summary statistics for men in the linked and the baseline sample, as of 1900. See Appendix C for more details about the linked sample. For a description of the variables, see Tables A.1 and A.2. The number of observation is different for Married to Native and Married, because the former can be defined only when the spouse is present (for otherwise their nativity is not available), while the latter is defined also when the spouse is not present. Married to Italian is defined for fewer individuals, because exact country of birth of the spouse must be reported, and this variable is sometimes missing.

Table C.6. Testing Selective In-migration

	(1)	(2)	(3)	(4)	(5)	(6)
Dep. Variable:	Married	Residential	Naturalized	Speak	Labor	Log Occ.
	to Native	Integration		English	Force	Score
In-migrant	56.156	-18.979	51.905	-141.955***	243.121***	-0.099
	(35.450)	(76.907)	(69.613)	(39.106)	(46.831)	(0.562)
In-migrant $\times$	-0.108	-0.029	0.188	-0.171	-0.073	0.003
Years w/ Italian Church (1900-1920)	(0.166)	(0.386)	(0.284)	(0.187)	(0.207)	(0.003)
Mean Dep. Variable (1900)	3.001	22.74	61.10	74.29	84.90	3.105
Mean Treatment (1900-1920)	16.45	16.38	16.36	16.31	16.31	16.32
Observations	7,932	6,758	8,530	14,000	13,978	11,860
County FEs	Yes	Yes	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
Ever Treated	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The sample includes first generation Italian immigrant men 15+ who, in 1920, lived in a county that received at least one Italian Catholic church between 1890 and 1920 and who could be linked between 1900 and 1920. The linked sample is taken from Abramitzky et al. (2020). For additional restrictions (specific to each outcome), see also Tables 3, 4, and 5. All regressions control for: county fixed effects, the baseline battery of household and individual level controls (number of adults in the household and fixed effects for marital status, years in the US, and age), a dummy equal to one (In-migrant) if the individual was living in a different county in 1900 (relative to the county of residence in 1920), and the interaction between the latter and the years of exposure to Italian and non-Italian Catholic churches between 1900 and 1920. Standard errors, clustered at the county level, in parentheses. Significance levels: \*\*\* p<0.01, \*\*\* p<0.05, \*\* p<0.01.

Table C.7. County Demographics and Church Exposure

	(1)	(2)	(3)	(4)	(5)	(6)
Dep. Variable:	Log County Pop.	Log Imm. Pop.	Log Italian Imm. Pop.	Imm. Share of County Pop.	Italian Share of County Pop.	Italian Share of Imm. Pop.
	1 ор.	т ор.	тинг. т ор.	County 1 op.	County 1 op.	
Years w/ Italian Church	0.004	0.005	-0.002	0.070	-0.005	-0.023
	(0.006)	(0.007)	(0.009)	(0.050)	(0.019)	(0.068)
Mean Treatment 3.034	8.150	3.034	3.034	3.034	3.034	3.034
Mean Dep. Variable (1900)	10.22	8.157	4.473	17.23	0.919	6.587
Observations	1,422	1,422	1,422	1,422	1,422	1,422
$\frac{}{\text{State} \times \text{Decade FEs}}$	Yes	Yes	Yes	Yes	Yes	Yes
County FEs	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 estimates county-decade panel regressions for counties with at least one Italian immigrant for whom outcomes are observed in Tables 3, See the notes to Tables 3, 4, and 5 for a description of the main regressor and controls. All regressions are weighed by number of individuals included in the analysis reported in column 3 of Tables 3, 4, and 5. Standard errors, clustered at the county level, in parentheses. Significance levels: \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.01.

Table C.8. Sex Ratios

(1)	(2)	(3)	(4)	(5)	(6)
		(Women/M	en) Ratio		
All	Natives	Ita (1st & 2nd gen)	Ita (1st gen)	All Immigrants	Young
-0.000 (0.001)	0.000 (0.001)	0.003 $(0.002)$	0.002 $(0.002)$	0.001 $(0.002)$	-0.000 (0.002)
3.034 0.855 1,422	3.034 0.900 1,422	3.034 0.379 1,422	3.034 0.352 1,422	3.034 0.749 1,422	3.034 0.900 1,422
Yes Yes Yes	Yes Yes Yes	Yes Yes Yes Yes	Yes Yes Yes Yes	Yes Yes Yes Yes	Yes Yes Yes Yes
	All -0.000 (0.001) 3.034 0.855 1,422  Yes Yes Yes	All Natives  -0.000 0.000 (0.001) (0.001)  3.034 3.034 0.855 0.900 1,422 1,422  Yes	(Women/Mom	(Women/Men) Ratio           All         Natives         Ita (1st & 2nd gen)         Ita (1st gen)           -0.000         0.000         0.003         0.002           (0.001)         (0.002)         (0.002)           3.034         3.034         3.034         3.034           0.855         0.900         0.379         0.352           1,422         1,422         1,422           Yes         Yes         Yes           Yes         Yes         Yes	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$

Notes: The table estimates county-decade panel regressions for counties with at least one Italian immigrant for whom outcomes are observed in Tables 3, 4, and 5. The dependent variable is the number of women relative to the number of men in a county-decade, for each group reported at the top of the column. Sex ratios are computed focusing on individuals, belonging to each specific group, who are at least 15 years old in columns 1 to 5. Sex ratios in column 6 are computed only for individuals in the age range 15-35 (included). See the notes to Tables 3, 4, and 5 for a description of the main regressor and controls. All regressions are weighed by number of individuals included in the analysis reported in column 3 of Tables 3, 4, and 5. Standard errors, clustered at the county level, in parentheses. Significance levels: \*\*\* p<0.01, \*\* p<0.05, \* p<0.01.

Table C.9. Controlling for Predicted Industry Growth and Italian Immigration

	(1)	(2)	(3)	(4)	(5)	(6)		
Dep. Variable:	Married	Residential	Naturalized	Speak	Labor	Log Occ.		
	to Native	Integration		English	Force	Score		
Panel A. Controlling for Predicted Industry Growth								
Years w/ Italian Church	-0.098***	-0.460***	-0.622***	-0.139	0.169***	-0.011***		
	(0.013)	(0.087)	(0.227)	(0.137)	(0.051)	(0.004)		
Mean Treatment	6.889	7.421	7.528	6.470	6.236	6.263		
Mean Dep. Variable (1900)	0.808	17.17	53.40	57.09	85.77	3.070		
Observations	1,989,311	$1,\!006,\!112$	1,318,535	$2,\!882,\!460$	1,760,957	$1,\!655,\!382$		
Panel B. Controlling for Pre	edicted Imm	igration						
Years w/ Italian Church	-0.098***	-0.460***	-0.622***	-0.139	0.169***	-0.011***		
	(0.013)	(0.087)	(0.227)	(0.137)	(0.051)	(0.004)		
Mean Treatment	6.889	7.421	7.528	6.470	6.236	6.263		
Mean Dep. Variable (1900)	0.808	17.17	53.40	57.09	85.77	3.070		
Observations	1,989,311	1,006,112	1,318,535	2,882,460	1,760,957	1,655,382		
State × 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 specification in column 4 of Tables 3, 4, and 5, augmented with the predicted industry growth (Panel A) and woth the Italian, Irish and other European migration (Panel B) constructed using a Bartik-approach as described in the text. See the notes to Tables 3, 4, and 5 for a description of the main regressor and controls. Standard errors, clustered at the county level, in parentheses. Significance levels: \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.01.

Table C.10. First and Second Generation Italians

	(1)	(2)	(3)	(4)	(5)	(6)
Dep. Variable:	Married to Native	Residential Integration	Naturalized	Speak English	Labor Force	Log Occ. Score
Years w/ Italian Church	-0.087*** (0.021)	-0.461*** (0.089)	-0.620*** (0.225)	0.187 $(0.178)$	0.183*** (0.053)	-0.012*** (0.004)
Mean Treatment Mean Dep. Variable (1900) Observations	6.999 1.031 2,138,835	$7.420 \\ 17.52 \\ 1,052,044$	7.469 53.44 1,323,947	6.767 59.18 3,362,133	6.510 84.89 2,003,495	6.493 3.072 1,844,366
State × 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

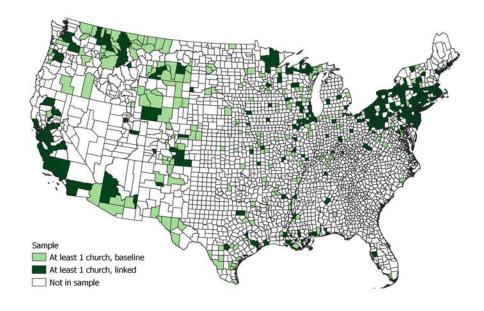
 $\overline{Notes}$ : The table replicates the specification in column 4 of Tables 3, 4, and 5, by including both first and second generation Italian immigrants, and controlling for a dummy equal to one for being a first generation immigrant. Second generation Italian immigrants are defined as individuals 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 3, 4, and 5 for a description of the main regressor and controls. Standard errors, clustered at the county level, in parentheses. Significance levels: \*\*\*\* p<0.01, \*\*\* p<0.05, \*\* p<0.01.

Table C.11. Robustness Inference

	(1)	(2)	(3)	(4)	(5)	(6)
Dep. Variable:	Married	Residential	Naturalized	Speak	Labor	Log Occ.
	to Native	Integration		English	Force	Score
Panel A. State Level Cluster	ring					
Years w/ Italian Church	-0.099***	-0.457***	-0.618**	-0.140	0.170**	-0.011***
	(0.018)	(0.079)	(0.265)	(0.122)	(0.082)	(0.003)
Mean Treatment	6.889	7.421	7.528	6.470	6.236	6.263
Mean Dep. Variable (1900)	0.808	17.17	53.40	57.09	85.77	3.070
Observations	1,989,311	1,006,112	1,318,535	$2,\!882,\!460$	1,760,957	$1,\!655,\!382$
Panel B. Commuting Zone I	Level Cluster	ring				
Years w/ Italian Church	-0.098***	-0.456***	-0.618***	-0.140	0.170**	-0.011***
	(0.014)	(0.078)	(0.217)	(0.104)	(0.067)	(0.003)
Mean Treatment	6.889	7.422	7.528	6.471	6.237	6.263
Mean Dep. Variable (1900)	0.808	17.16	53.40	57.09	85.77	3.070
Observations	1,989,155	1,006,009	1,318,404	2,882,200	1,760,776	1,655,212
State × 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

 $\overline{Notes}$ : The table replicates the specification in column 4 of Tables 3, 4, and 5. Standard errors, in parentheses, are clustered at the state level in Panel A, and at the commuting zone level in Panel B. See the notes to Tables 3, 4, and 5 for a description of the main regressor and controls. Significance levels: \*\*\*\* p<0.01, \*\*\* p<0.05, \* p<0.01.

Figure C.1. Comparing Baseline and Linked Samples (Ever Treated Counties)



Notes: The figure plots counties that received at least one Italian Catholic church between 1890 and 1920 included in the: baseline sample (light and dark green); and, in the linked sample (dark green).