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Paesani versus Paisanos: The Relative Failure of Spanish
Immigrants in Buenos Aires during the Age of Mass
Migration*

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Abstract

Millions of immigrants chose Argentina as the land of opportunity during the era of mass migration. Two immigrant groups, Italians and Spaniards, dominated the immigration flows. Despite higher literacy and their linguistic advantages, in Buenos Aires Spaniards fared worse when compared to Italians. By 1895, Italians enjoyed higher wages. What explains their paths in the city of Buenos Aires? We find that the Italian community capitalized upon pre-existing cultural traditions to establish denser and more effective networks to match their compatriots with economic opportunities. The more individualistic Spanish were unable to keep pace, despite their initial cultural, linguistic, and educational advantages.

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I. Introduction

The folk wisdom is that immigrants do better the more they speak the host country's language and share the host country's culture.¹ The American past provides evidence in favor of the folk wisdom: Timothy J. Hatton (1997) for example, found that British immigrants to the United States generally earned more than native-born white Americans. The Argentine experience during the *Belle Époque*, on the other hand, belies this folk wisdom. Spanish immigrants in the city of Buenos Aires failed to out-earn the native-born despite their cultural and linguistic similarities. In fact, we find that Spanish immigrants failed to out-earn Italian immigrants despite their linguistic advantages, higher literacy rates, and more skills upon arrival.

What explains the relative failure of the Spanish to assimilate in the city? We find that stronger Italian social networks better matched the skill sets of Italian immigrants with higher-paying occupations in Buenos Aires. The Spanish, conversely, did not successfully help each other enter higher-paying fields, clustered more in low paid occupations and their social networks were less able to match skills and jobs. The result was that the Italians moved farther and faster up the occupational ladder despite their disadvantages upon arrival.

This paper proceeds as follows: we start with a historical account of immigration to Buenos Aires during the late nineteenth century. We then describe the data and demonstrate the differences in the socio-economic situations of the Spanish compared to the Italians. The next

¹ For example, American and Dutch support for legalizing illegal immigrants rises when respondents are told that the immigrants speak the national language. The authors of these studies generally interpret these findings as evidence that natives believe linguistically, and culturally similar immigrants will do better in the new country. For the United States, see Levy and Wright (2016); Wright, Levy, and Citrin (2016); Hainmueller and Hopkins (2015). For the Netherlands, see Sniderman, Hagendoorn and Prior (2004).

sections analyzes the relative performance of the two groups' social networks at helping match immigrants to jobs and occupations. The last section concludes.

II. Historical background

International immigration to Buenos Aires began to accelerate in the 1860s and grew to massive proportions a decade later. The city was Argentina's main port and (after 1880) the seat of the federal government. Its geographic advantages at the mouth of the Paraná and Uruguay's rivers grew stronger as the country's railway network fanned out from the city across the Pampas. Buenos Aires became the political and commercial hub of Argentina and dominated the national economy in a way unparalleled in other countries of European settlement.²

As the Argentine economy grew, the Buenos Aires labour market transitioned from artisanal production to factory manufacturing. Factories began to produce consumer goods such as shoes, bricks, cigarettes, glass hardware, furniture, hats, liquor and clothing. In addition, the iron industry expanded; by 1894, Argentine firms began to produce modern steel products (Duggan 1998) . Rising tariffs and the devaluation of the local currency fuelled the trend (Rocchi 2006, chap. 1). The literature stresses the casual and uncertain nature of employment in industries such as the docks and the building trades, the large share of highly mobile unskilled workers and the high percentage of foreigners in artisan workshops and retail commerce. Day labourers (mostly immigrants) who had no links to any specific occupation made up a

² See Scobie (1974). Other classic studies include Bourd e, (1977) and Sargent (1976). For an analysis on the city's industrial development, see Rocchi (1999) and (2006). See also Gutierrez (1981) and Suriano (1994) on labor movements and living conditions.

significant proportion of the labour force (Cortés Conde 1997, pp. 198-99; Sabato and Romero 1992).

Buenos Aires' economic dominance meant that the city retained more than 40 per cent of the country's net immigration (Lattes and Rechini de Lattes 1975, p. 119). Other than a brief period of subsidized migration from November 1887 to May 1891, most of this mass movement was unplanned and driven by the decisions of the immigrants themselves.³ Buenos Aires became an extreme case of an immigrant city. As its population ballooned from 187,346 in 1869 to 663,854 in 1895 and 1.6 million by 1914, the foreign-born share of the population remained high at 49%, 52% and 51% respectively. The foreign-born share of the workforce was even higher, exceeding two-thirds (Bourd e 1977). These ratios were almost unparalleled in the Western Hemisphere. Only Winnipeg (with a population a tenth of Buenos Aires) surpassed it (at 56% in 1911). New York came in third, with a foreign-born population that peaked at 40% in 1910. Toronto, Chicago, Boston, Cleveland and Detroit followed with 39% (in 1911), 36%, 36%, 35%, and 34%, after which the numbers for American and Canadian cities tailed off rapidly.⁴

³ The subsidies consisted of free passage plus five days of free food and lodging at a government-run hotel. Argentine policy tried to get migrants to leave Buenos Aires for the frontier: the subsidized hotel stay would be extended to ten days if they signed a labor contract to travel onward to agricultural colonies for which the government would provide free railroad passage. The federal government ended the subsidies in two phases: in July 1890, the government shut down all overseas recruitment offices, although free passage was still available for applicants who could get relatives or potential employers to apply in Argentina. In May 1891, the Juarez Celman administration shut down the program entirely. See Fern andez (2018), p. 159. See also Swierenga (1998)

⁴ Even by 21st-Century standards, *Belle Epoque* Buenos Aires stands out. The only present-day major city in North America to match Buenos Aires's 1869-1914 numbers is Miami-Dade, with 51% in 2010. In that same year, the five boroughs of New York City were at 36% and Chicago's central county (Cook) stood at 21%; Los Angeles reached only 34%.

Spain and Italy dominated the migrant streams from the beginning. Of all the immigrants to Argentina during the period of mass migration, one of every four Italians and one-third of Spaniards settled in Buenos Aires. By 1869, both communities had established substantial colonies in Buenos Aires, numbering 44,000 Italian migrants and 15,000 Spanish ones. (See Figure 1.) Immigrants already made up a large share of Buenos Aires's population: the Italian-born population comprised 24% of the population and the Spanish-born made up 8%. The Italian community was larger than the Spanish, but both enjoyed five-digit populations and had already put down deep roots in the city. Relative migration rates waxed and waned over the next few decades but both communities continued to grow.: By 1895, the Italian-born comprised 27% of Buenos Aires's population and the Spanish-born made up a further 12%.

[FIGURE 1]

The Italian community may have been larger than the Spanish, but transients made up a far larger share of the Italians. Between 1857 and 1880, 66% of all Italian immigrants returned home, compared to only 40% of the Spanish. After 1880, return migration rates fell for both groups but still remained lower among the Spanish, to 37% and 28% respectively. (See Figure 2.) Italians settled in Argentina in large numbers, but the size of the community conceals the transience of much Italian migration.

[FIGURE 2]

Buenos Aires provided the newcomers (whether transient and permanent) with economic opportunities. The proportion of skilled workers in the city steadily increased between 1870 and 1914 (Moya 1998, tab. 3.3). Moreover, opportunities abounded to move up the

occupational ladder. Of unskilled workers arriving in the 1880s, more than three-quarters had upgraded their occupations by 1895 (Pérez 2007, tab. 5). This is much higher than the 50 per cent found by Ferrie (1997) for the United States. Immigrants also came to dominate the other side of the labor market: by 1895, immigrants owned 92 per cent of the city's industrial firms and 80 per cent of its retail businesses (Scobie 1974).

Historians have documented the success of the Italian wave in the new country (Devoto 2006; Devoto and Rosoli 1995). In his classic study, Herbert Klein (1983, p. 323) concluded that by 1914, 'all the available data (...) point in the same direction of the extraordinary success for a people who had only entered the national economy and were still overwhelmingly of the first generation.' Not only did the Italians in Buenos Aires experience absolute upward mobility, but they moved up faster and farther than their compatriots in Chicago and New York.⁵ Samuel Baily (1999) summed up the conventional wisdom well when he attributed Italian success to a friendlier and more open receiving society and the absence of competition with other long-settled immigrant groups.

The historical consensus is that the Spanish were rather less successful than their Italian counterparts. The 'invisible immigrants,' however, have also received rather less attention, in part because their linguistic similarity to natives.⁶ With the notable exception of Moya most of the research done on the Spanish community has concentrated in the different regional groups and the mutual aid societies. The literature characterizes them as concentrated in unskilled and

⁵ Using new data, Pérez (2019) confirmed empirically that first- and second-generation Italians had better economic outcomes in Argentina than in the U.S. See also Klein, (1983) and Campante and Glaeser (2018).

⁶ Moya (1998). See also Fernández and Moya, (1999) and Clementi (1991)

semi-skilled jobs or the retail trade and enjoying little social mobility. In his pioneer work on the Spanish in the city of Córdoba, Szuchman (1980) concluded that none of the semi-skilled Spanish workers improved their position. Using data from a Spanish mutual aid society in Buenos Aires, Moya (1998, tab. 47) showed that between 1897 and 1912, the most common type of Spanish social movement was 'immobility.' Moya did not, however, uncover any evidence that Spanish immobility was due to discrimination. "[Argentine attitudes towards the Spanish] never reached the point of institutionalized discrimination or deep-seated enmity," although Argentines did grow increasingly disdainful towards immigrants in general (Moya 1998, p. 403; Also, Solberg 1970).

Recently, Da Orden (2005) presented a slightly more optimistic view of Spanish social mobility in Mar del Plata, a coastal city in the province of Buenos Aires. She linked the birth and marriage of immigrants' children and found that after an average of 26 years 51 per cent of Spanish immigrants had ascended the occupational ladder. Her results require two qualifications, however: first, the indicated mobility is lower than the rate for all Argentines calculated by Pérez (2017). Second, Mar de Plata was a unique city. Founded as a resort town for the Buenos Aires upper class in 1874, it only acquired a significant permanent population after 1886, when the railroad to the city of Buenos Aires was completed. Mobility findings from a brand-new settlement might not travel to larger existing cities like Buenos Aires.

Until recently, the largest two immigrant communities in late 19th century Buenos Aires have not been focus of a comparative study (Arroyo Abad and Sánchez-Alonso 2018). As mentioned above, the Italians in Buenos Aires have been compared to Italians in New York and Chicago

and the Spanish group has been studied in the general framework of European immigration in Argentina.

II-a Data and methods

Our paper builds on the individual-level data available for the city of Buenos Aires in the mid- to late 19th century. We have borrowed the Arroyo Abad and Sánchez-Alonso dataset to analyze the determinants of wage differentials between Italians and Spaniards. The dataset comprises a sample of adult males residing in the city of Buenos Aires in 1895 from the original census records of 1895.⁷ This dataset provides individual characteristics such as age, marital status, age, nationality, literacy, IPUMS-based occupation category, and average wage in current currency (*pesos moneda nacional*). For reasons discussed below we reassigned all occupations using the HISCLASS database that sorts occupations into various social classes based on the HISCO classification scheme.

We increased the data set with a variable for aptitude and skills. The aptitude and skill requirements for various occupations come from a 1956 study by the United States Employment Service. The U.S. government published the study in order to match unemployed workers to job opportunities under the terms of the Wagner-Peyser Act of 1933 (Gray 2013, p. 355). The study categorized the extent to which particular occupations needed particular skills. The researchers ordinally ranked requirements. For example, jobs requiring a great deal of

⁷ The random sample includes Italian and Spanish inhabitants of individuals and their household members (when applicable) selected according to surnames starting with the letters M and G, common initials in Spanish and Italian.⁷ This sample covers 3.4 per cent and 5.3 per cent of the Italian and Spanish population in the city of Buenos Aires. Here we provide a summary of the databases used; more detailed information is available in Arroyo Abad and Sánchez-Alonso (2018).

physical strength were given a “manual” rating of 5, while jobs like file clerk were given a rating of one. Rankings were made by people with field experience in the various occupations after reading a standardized description of the occupation from the 1949 *Dictionary of Occupational Titles*; no single individual was allowed to rate the skill requirements of more than two particular tasks. Trattner *et al* (1955) stress-tested the ratings by comparing ratings from factory visits with ones based on the *Dictionary of Occupational Titles* and found little difference. Rowena Gray (2013) compared the *Dictionary* definitions with ones listed in a 1918 U.S. Army index of occupations and found very little change in the skill content of various jobs. Following Gray (2013), we constructed variables for three kinds of skill requirements: manual, dexterity, and intellectual (including writing and arithmetic abilities). Manual abilities combined brute strength with two sensory perception measures (color and form perception), the latter being required to successfully carry out manual tasks. Dexterity averaged eye-hand-foot coordination, finger dexterity, motor coordination, and manual dexterity. Intellectual skill requirements comprised verbal, numeric and clerical. We then normalized all skill variables on a scale from zero to one, for greater comparability.

For our analysis on networks, we used the Somoza and Lattes (1967)’s 1869 and 1895 census samples⁸ and assigned occupations according to the HISCLASS scheme.⁹ We relied on this sample as it includes a key variable for network analysis: the neighbourhood for each individual. In addition, HISCLASS classifications are based on the 1965 edition of the *Dictionary of Occupational Titles* published by the U.S. Department of Labor (Van Leeuwen et. al. 2011, pp.

⁸ This dataset is a random sample of 1% of the total population. See Quartulli (2014).

⁹ See Van Leeuwen, Marco, and Mass (2011) for a comprehensive description on the HISCLASS system.

29-30). This allows for a seamless merge with our data on the skill requirements of various occupations.

III Spaniards and Italians in *Belle Époque* Buenos Aires

We start by comparing the Spanish and Italian migrant populations in the 1895 census sample.

Migrants made up 70 per cent of the labor force aged 14 and above. Spaniards and Italians made up the majority of the migrants; in 1895, the remainder mostly came from France, Britain, and Germany.¹⁰

The sectoral distribution of Spanish and Italian immigrants (see Table 1) does not lend itself to straightforward comparisons. Italians concentrated in manufacturing (Moya 1998, p. 222).

Spanish workers dominated the non-retail service professions.¹¹ They were also twice as likely to work in government as the Italians. The Spanish concentration in the service sector is broadly consistent with a story in which fluency in the local language and greater literacy gave Spanish immigrants a comparative advantage for service jobs.

[TABLE 1]

Comparative advantages, however, are not realized via an immaculate adjustment. Rather, workers move into the fields in which they possess a comparative advantage because that is where they receive the greatest remuneration. The wage data for all workers are not consistent with a story in which the Argentine labor market rewarded Spanish immigrants for their

¹⁰ Russia and the Ottoman-ruled Levant began sending migrants in significant numbers after 1895.

¹¹ Spanish dominance in these sectors is often pinned on their relative proficiency in the Spanish language, but the relative wage data presented in Table 2 make that an unlikely explanation, since greater language skills would presumably have shown up as a wage premium for Spanish workers.

language abilities. Rather, they tell a story of Italian success compared to the Spanish. (See Table 2.)

Recently, Zachary Ward (2020) analysed the return to English fluency for immigrants in the US. His results show that before First World War, few arrivals to the US from non-English-speaking sources came with English skills (about 30 percent of recent arrivals in the 1910 Census). Yet while many immigrants arrived without the ability to speak English, they had a high rate of language acquisition: within ten years of arrival, more than 80 percent of immigrants were able to speak some English.

Given the similarity of Italian and Spanish language and the fact that the Italian community in 1895 have been living in Buenos Aires longer than the Spanish group, we could conclude that not speaking Spanish was not a disadvantage for the Italian community in 1895.¹² Italian immigrants might have acquired basic Spanish skills relatively fast. In other words, we might have been overestimating the importance of speaking Spanish in the Buenos Aires labour market.

In the early twentieth century US, the occupational category analysis by Ward (2020) shows that immigrants who acquired English skills slightly moved up in the occupational distribution. There was a low occupational income return to host society language fluency which could be

¹² In 1895 only 22% of Spanish families had resided in Buenos Aires more than 10 years compared to 33% of Italian families. Arroyo Abad and Sánchez-Alonso, (2018) Fig. 5.

the case for the Spanish community in Buenos Aires. There was no (or low premium) for speaking Spanish except when entering government jobs (almost twice than Italians. Table 1)

Italian and Spanish immigrants earned roughly the same in the two highest rungs of the labor market (Table 2). Italians outearned the Spanish in two of the four middle categories and one of the two lower categories. Spanish immigrants out-earned Italian ones only among skilled workers — which also happened to be a category dominated by Italians. The Italian advantage, therefore, seems to have been one driven by particular occupations within categories and not by an Italian overrepresentation in high-wage categories.

[TABLE 2]

In addition to wage data, Table 2 presents data on age, literacy, and job requirements between the two groups. Italian workers were slightly older than Spanish ones. They were also significantly less likely to know how to read in any language. As discussed above, we determined job requirements using the *Dictionary of Occupational Titles*. Italian immigrants clustered in jobs intensive in physical labor and manual dexterity. On the other hand, the Spanish did *not* cluster in jobs requiring intellectual ability: the intellectual requirements of the jobs held by Italian immigrants and by Spanish ones were essentially identical.

The Italian parity in jobs requiring intellectual ability is even more striking when you consider that Spanish immigrants arrived with more white-collar backgrounds and significantly higher literacy. Despite their geographic origins in Italy's relatively industrialized north, roughly similar numbers of Spanish and Italians listed their occupation as farmers or unskilled laborers upon

arrival. The number of skilled workers was also roughly similar: 21.8 per cent for the Spanish versus 21.3 per cent for the Italians. Where Spanish immigrants far outpaced their Italian counterparts was in the share who had practiced a white-collar profession in the home country: Spanish immigrants were more than twice as likely as Italians to have come from a white-collar background. (See Table 3.)

[TABLE 3]

As for literacy, the Spanish-born significantly outpaced the Italians.¹³ In 1895, 90 per cent of Spanish immigrants in Buenos Aires were literate, well ahead of the 79 per cent rate among Italians and slightly above the 88 per cent rate among the native-born. Spanish-born immigrants were more literate than their Italian compatriots almost across the board; in fact, the gap widened as one went down the occupational scale. The prevalence of high literacy rates for Spanish workers even in unskilled jobs was remarkable. Unskilled Spaniards were more literate on average than Italian carpenters, butchers or railway switchmen, all professions in which being able to read would be useful. Spanish craftsmen (“skilled workers,” in HISCLASS), meanwhile, were more literate than Italians in *every* non-professional category.¹⁴

The occupation-upon-arrival data in Table 4 implies that Spanish immigrants almost immediately began to fall behind their Italian counterparts. This finding, however, could be driven by the relative failure of newer Spanish immigrants. Between November 1887 and May 1891, the

¹³ For the selectivity according to literacy in Spanish emigration, see Sánchez-Alonso (2000) The exception was the Canary Islands emigrants who directed mainly to Cuba. Juif (2015)

¹⁴ In fact, Spanish immigrants were more literate than the native-born in IPUMS occupational category 2 (managers, officials, and proprietors), category 3 (sales workers), category 6 (operatives), category 7 (service workers), and category 9 (unskilled). See Arroyo Abad and Sánchez-Alonso (2018), Fig. 2.

Argentine government offered free passage and subsidized temporary housing to European immigrants. Half the spots went to Spaniards. It is possible that the quality of immigrants deteriorated during the period of subsidized immigration since many Spanish immigrants came from the backward areas in the South. The evidence we have, however, does not bear this out. If anything, the quality of immigrants increased across all groups during the subsidized period with the farm proportion falling particularly quickly for the Spanish. (See Table 4.)

[TABLE 4]

The overall picture is one of extraordinarily high advantages upon arrival for Spanish-born males. The average Spanish male immigrant was more literate than his contemporaries who remained in Spain, than Italian immigrants to Argentina, than southern European immigrants to the United States, and even native-born *porteños* (Sánchez-Alonso 2019, tab. 3). Moreover, Spaniards arrived with more-skilled work experience than their Italian counterparts. (See Table 4.) Finally, the Spanish were far more likely to be able to write in *Spanish* than literate Italians, who were literate in their home language but not the one in the new country.¹⁵

Sample means can only tell us so much. In order to check that the Spanish especially underperformed we estimated wage determinants using our 1895 census sample. We used a simple regression model adapted from Minns (2000) for all males over the age of 14 (see Table 5). We proxied human capital accumulation with literacy and labor market experience with age. For language, we created a dummy that took on a value of 1 for native-born

¹⁵ Although a plurality of Spanish immigrants came from Galicia and Galician was their family language, Spanish was taught in Galician schools.

Argentines and Spanish-speaking immigrants, and added a dummy variable for Spanish, Italian, and other immigrants. For the second specification, we normalized the scores for the intellectual, dexterity, and manual aptitudes required in each job, on the assumption that occupational intellectual and dexterity requirements further proxied human capital. The general specification was:

$$\ln(\text{annualwage}_i) = \beta_0 + \beta_1 \text{age}_i + \beta_2 \text{age}_i^2 + \beta_3 \text{literacy}_i + \beta_4 \text{language}_i + \gamma \text{Country}_i + \delta X'_i + \epsilon_i \quad (1)$$

[TABLE 5]

In specification one, the coefficient on literacy is large and highly significant, implying large labor market advantages for literate workers. The language coefficient is positive but not significant. There are two non-exclusive explanations for this result: (1) Italian immigrants found it relatively easy to acquire Spanish-language proficiency and (2) Italian immigrants sorted into professions where Spanish proficiency did not provide much advantage.¹⁶ There is also a large and significant *negative* coefficient for Spanish-origin. Once job requirements are taken into account, the negative coefficient fades: the Spanish wage differential is due to the fact that the Spanish sorted into occupations with lower skill requirements. This is a perplexing result, given the Spanish initial human capital advantage and the fact that they concentrated in occupations requiring highly remunerative intellectual skills much more than the Italians. (See Table 2: 41% of the Spanish worked in lower professional or clerical jobs, as against only 25% of the Italians.)

¹⁶ See Arroyo Abad and Sánchez-Alonso (2018) for more evidence.

Something was happening in Buenos Aires in 1895 to cause the Spanish to punch far below their proverbial weight: they were *not* recapitulating the experience of British immigrants to the United States, despite arriving with a large relative endowment of human capital.¹⁷ In fact, the Spanish-born in Argentina enjoyed a *larger* relative advantage compared to the native-born or the Italians than did the British-born in the United States over the native-born, the Germans, or the Irish. The Spanish in Argentina nonetheless failed to outperform their main competition.¹⁸

IV. What generated the Italian advantage?

We find that better immigrant networks explain the Italian advantage. Italians worked through a wide range of community institutions and informal contacts to match their compatriots not only to jobs but to *better-paying* jobs. The Spanish, by contrast, possessed no such advantage. In fact, the evidence suggests that the Spanish competed with each other and drove their compatriots out of remunerative occupations.

Immigrants found employment through their networks of friends, relatives, and co-ethnics.

These networks facilitate labor market matching, reducing search costs for both workers and firms.¹⁹ Devoto (2006, p. 127) presented evidence that migratory chains linked Italian

¹⁷ See Ferrie (1997) for data on the mobility of British immigrants to the U.S. relative to their Irish and German compatriots.

¹⁸ Ideally, we would want to trace immigrants across time, in order to reduce the concern that more productive Spanish immigrants migrated out of Buenos Aires or returned to Spain. We would also like to consider the experience of immigrants in the Buenos Aires labor market. Unfortunately, the census did not include information on reverse migration or year of arrival to Argentina. In this sense, our specification is not the same as previous studies such as Abramitzky et al. (2012).

¹⁹ Munshi (2003); Beaman (2012) differences in outcomes across refugee communities resettled inside the United States, although the effects varied across age cohorts depending on the age structure of the network

immigrants to specific occupations, ultimately allowing them to control specific trades. Baily (1999, pp. 96-99) also suggested that in Buenos Aires the Italians before 1900 gained employment via informal personal connections. Moya (1998, p. 397) found that among Spanish immigrants, those whose hometown communities were more prosperous 'fared better [in Buenos Aires] than did those who belonged to less successful immigrant networks, even if their level of skills, age, gender, and length of residence in the new country were identical. Their invisible skill lay in the success of the townsfolk who had preceded them in the chain, in belonging to a network that included more business owners or other influential people who could lend them a hand, in who they knew rather than what they knew'.²⁰

We know that networks are important but were the Italian networks better? In order to answer this question, we estimated the network effect for the Italian and the Spanish communities. Using the Somoza and Lattes sample for the 1895 census, we observed the foreign population in the city of Buenos Aires in 1895 and their characteristics such as age, literacy, occupation, and neighborhood. We then determined the occupational category in which each group held the largest relative wage advantage: lower professional and clerical occupations for Italians; skilled workers for Spanish. For a Spanish or an Italian immigrant in the most relatively remunerative occupation for their ethnicity in their neighborhood (denoted as M_{icon} , an indicator variable with value 1 if immigrant is of Spanish or Italian origin and is employed in the main occupation defined by HISCLASS), we estimated the effect of having a share of their

²⁰ See also Hatton and Leigh (2011).

compatriots in the same occupation within their neighborhood (I_{on} and S_{on} for Italians and Spaniards respectively).

In the equation (2) Table 6 below, the coefficients of interest are β_1 and β_2 . We control for other factors that could affect occupational choice of these two immigrant groups such as the share of their own countrymen in the neighborhood (M_{cn}), the proportion of males employed in the given occupation o in the neighborhood n (O_{on}), and the share of Argentines employed in the same occupation in the neighborhood (A_{on}) to capture the propensity of employment in that particular occupation in that neighborhood. We also include individual controls such as age, literacy, language, and marital status.

$$Pr(M_{icon}) = \beta_0 + \beta_1 I_{on} + \beta_2 S_{on} + \beta_3 M_{on} + \beta_4 O_{on} + \beta_5 A_{on} + \beta_7 X'_i + \epsilon_{icon} \quad (2)$$

Network effects are sizable and significant for Italians. (See Table 6.) Spanish networks effects, however, are negative and significant (albeit small): the more Spaniards from a neighborhood whom entered the relatively best-paid occupation, *the* less likely that their co-ethnics would enter that occupation (see column 1). A skeptical reader might argue that our results are being driven by weaker Spanish networks in the outskirts of the city, where Italians predominated.²¹ In column 2, therefore, we restrict our analysis to the core of the city as defined by the municipal boundaries in 1869. The relative impact of Spanish networks relative to Italian ones rises to 60 per cent but remains nonetheless far lower.

[TABLE 6]

²¹ Moya (1998) Chap. 4; Baily (1999) Chap. 5

An even more skeptical reader might argue that networks take time to form: Spanish immigrants might not have been in the country long enough to enjoy their benefits. Unfortunately, the Argentine census did not include data on the year of arrival for the foreign-born population. To overcome this problem, we examined the effect of the occupational network on single males under 26 years of age (see columns 3 and 4) on the assumption that they would have been in the country for substantially less time than their elders on average.²² The results still hold. When we restricted the under-26 sample to the city core as it existed in 1869, the negative Spanish network effect became a bit weaker, but not by much. The positive Italian effect, conversely, remained fairly constant across all specifications. When Italians entered a relatively well-paid occupation, they brought their countrymen with them; when Spaniards did the same, they pushed their countrymen out.

As usual, endogeneity could threaten the validity of our results. For example, demand shocks and other unobservable factors might affect occupational choices of both Spaniards and Italians. Similarly, occupational choices could drive network formation. To assuage these concerns, we instrumented the occupational choice of Spaniards and Italians with the preexisting network. (See columns 5 and 6.) We used the 1869 national census to estimate the share of Italians and Spaniards in the most popular occupation per neighborhood.

An extremely skeptical reader could claim that using a lagged instrument is problematic since past unobservables might make their way into the future. For example, it may be that some specific unobserved skill or characteristic of immigrants from Spain or Italy was particularly

²² This group was not as marginal as one might presume: the average immigrant was young, under the age of 26.

useful in the same locations across both time periods. This is not a problem for us for three reasons. First, the economy of Argentina changed dramatically between 1869 and 1895. 1869 precedes the sustained wave of export-led growth that created the *Belle Époque*. In real terms, Argentine export volumes did not begin growing until 1878. The export mix changed as volumes accelerated. In 1869, livestock products made up *all* of the country's exports, with more than half of that consisting of wool. By 1895 over 34 per cent of exports consisted of various grain products and 8 per cent consisted of meat products.²³ The internal economy also transformed. Reliable statistics on manufacturing begin only in 1875, but real output rose by a factor of 4.2 between 1875 and 1895, with factory production driving out cottage industry and the output of iron products increasing a vertiginous fivefold (Rocchi 2006, p. 18). The rural population share fell from 71 per cent to 63 per cent. It is therefore unlikely that some unobservable skill characteristic of the immigrants drove occupational network formation in both 1869 *and* 1895, given the changes in Argentina's production structure.

Second, our geographic coverage is the city of Buenos Aires, and the economy of Buenos Aires changed even more than the national economy. Mass migration from Europe did not start until the 1870s. The city didn't become the federal capital until 1880. Manufacturing production grew from an extremely low base and in a variety of industries that had been unknown in 1869. In 1897, Patroni described the creation of industries in Buenos Aires that 'without dispute only twenty years ago were unknown here,' and Rocchi (2006) stressed that Argentine factories were virtually non-existent before the 1870s (Patroni 1897, p. 9).

²³ See Martin, (1871), Vol. 8, p. 484. For the timing of the export growth boom and export shares, see Fajgelbaum and Redding (2014), pp. 43 and 53.

Finally, there is little correlation between the previous occupations declared by immigrant arrivals to Argentina and the ultimate work that they pursued in-country. Almost all Italians declared themselves to be either farmers or unskilled laborers upon arrival (see Table 3): there was little demand for farm skills inside the city of Buenos Aires and unskilled workers are by definition unskilled. Moreover, the mass migration to Argentina after 1870 was driven as much by the exogenous drop in transport costs and time brought by the development of the steamship as it was by the growth of the Argentine economy. Transatlantic transport times dropped from 61 days in the 1860s to 20 days by the 1890s. The fall in transport times resulted in a corresponding drop in the opportunity cost of transport: the cost of the fare plus the cost of lost wages paid in Buenos Aires during the trip between the 1860s and the 1890s fell by 43 per cent for an unskilled Spanish emigrant and by 72 per cent for a skilled one (Moya 1998, p. 39). Given these three historical factors, our instruments appear to satisfy the exclusion restriction.

Our IV estimations (columns 5 and 6) support our main results. The F-tests indicate strong instruments. The negative network effect for the Spanish disappears, but the positive effect remains quite small compared to the Italians. Italian networks remain strong and significant. The results are similar for all immigrants and for males under age 26.

Ethnic and social networks may function efficiently and serve to match the skills and aptitudes brought by immigrants to job requiring their skills. Or alternative, the availability of ethnic and social contacts and the opportunity of finding a job faster and more easily may convince an immigrant to undertake an occupation where his abilities are not fully exploited. In other words, networks may produce a mismatch between workers' comparative productive

advantage and their occupational choices (Bentolila et. al. 2010). Consider the following heuristic example. Carmelo gets off the boat from Genoa, where he is greeted by his uncle and go down to the local community association. If networks match solely on occupation, then Carmelo's skills won't matter. Giuseppe tells Carmelo, "Hey, I know a carpenter, let me get you a job as a carpenter," and gets Carmelo a job as a carpenter. In this case, networks can produce a mismatch workers' comparative advantage and their occupational choices.

On the other hand, if networks operate to match immigrants with the jobs that they are most suited for, then Giuseppe will say, "So, Carmelo, you tell me you know from carpentry. I know a guy who knows a guy who needs a carpenter." If one group has a network that works more like the second example than the first, then workers in that group will specialize more, get jobs more in line with their comparative advantage, and as a result earn more.

Luckily, it is possible to decompose occupations by the type and intensity of skills needed.

Italians, for example, concentrated in skilled jobs such as carpenters and cooks, while Spaniards worked in sales and clerical positions such as bank tellers and railroad baggagemen. Carpenters, according to our data on relative skill requirements, had a comparative advantage in dexterity relative to intellectual tasks. Cooks, on the other, had no clear comparative advantage between the two, scoring low in both dexterity and intellectual skills. Railroad baggagemen (who were in charge of the baggage car and insuring that checked bags arrived at the proper destinations) did not have a clear advantage between dexterity or intellectual skills (scoring high on both) while bank tellers enjoyed an advantage in intellectual skills over dexterity.

To capture the power of ethnic networks, we classified individuals based on the relative skill of the main occupation category of their own countrymen. We constructed an indicator variable that took a value of 1 if an immigrant i from country c in neighborhood n chose an occupation with the relative skillset s (M_{icsn}) equal to or greater than the ratio for the most common occupational category for members of that group. For Italians, the relative skillset was a dexterity/manual ratio equal or higher than the mean for skilled workers (see Table 4). For Spaniards, the relative skillset was an intellectual/dexterity ratio equal or higher than the mean for sales and clerical workers. We are interested in identifying the effect of the Italian and Spanish network through the relative skillsets for each immigrant group (I_{sn} and S_{sn} for Italians and Spaniards respectively). As previously, we control for immigrant share in the neighborhood (M_{cn}), native share in skillset s in the neighborhood (A_{sn}), and skillset share in the neighborhood (S_{sn}). We also include individual's characteristics (language, age, age-squared, and marital status) (X'_{ison}).

$$Pr(M_{icsn}) = \beta_0 + \beta_1 I_{sn} + \beta_2 S_{sn} + \beta_3 M_{cn} + \beta_4 S_{sn} + \beta_5 A_{sn} + \beta_7 X'_i + \epsilon_{icsn} \quad (3)$$

Italian networks were stronger and did a better of matching than Spanish networks. The results hold when we restrict our analysis to the central city (specifications 2 and 4) or to single men under age 26 (specifications 3 and 4). They also hold when we employ instrumental variables to account for potential endogeneity (specifications 5 and 6). In short, Italian networks were more efficient than Spanish ones, regardless of whether we measure them by their ability to pull workers into relatively high-wage occupations or by their ability to match workers with jobs requiring the comparative skill advantages held by their co-ethnics. Spanish networks were less

efficient and seem to have produced a mismatch between Spanish immigrants' skills and their occupational choices.

[TABLE 7]

What led the Italian community to develop better and stronger networks than their Spanish compatriots? The (mostly northern) Italians brought a strong tradition of association from the home country.²⁴ Putnam (1993, pp. 139-42) traces the origins of a strong significant networks of social and economic obligations in the Northern and Central regions of Italy back to medieval times. These networks facilitated the development of mutual aid societies and cooperatives in post-unification Italy, which in turn strengthened the existing social networks.²⁵

No such developments occurred in Spain. By mid-nineteenth century, the prevalence of mutual aid societies was lower than in contemporary England, France or northern Italy. Low participation in associations in Spain transferred to the Americas: according to Fernández only a minority of Spanish immigrants had participated in associations of different sort back in the Peninsula.²⁶

Moya explains Spanish institutional life in Buenos Aires as an interaction between the home country cultural traits and the reality found in the host country. By mid-nineteenth century, Spaniards in Argentina confronted an independent republic still hostile to the old colonizers. The existence of other large immigrant communities in Buenos Aires pushed the Spaniards to form national, and not regional or local, institutions (moya 1998, pp. 302-302). Our results (table 11)

²⁴ Manuals printed in Italy showing how to build a mutual aid society were common in Argentina. Devoto and Fernandez (1988)

²⁵ For a criticism of Putnam, see Tarrow (1996). Also, Moretti (1999)

²⁶ Fernández (1992) p. 333; Devoto (2002) p. 241 also mentioned the weaker association tradition among Spanish immigrants relative to Italians.

show that whatever the case the Spanish networks were weaker than Italians explaining occupational choices.

The historical evidence indicates that the Italian population established institutionalized networks almost upon arrival. By 1870, they had established an extended, resource-rich and powerful institutional structure around a small group of large mutual aid societies (Baily 1999 chap. 7). These networks expanded as new migrants arrived. By 1895, of the almost 200 associations registered in Buenos Aires, 28 per cent were for Italian nationals whereas only 5.4 per cent aimed their efforts at the Spanish. The Italian advantage is even more pronounced when we consider membership rather than the number of organizations: in 1895, the Italians registered 44,000 members of formal associations. Native-born Argentines could barely muster half as many, and the Spaniards brought up the rear (Arroyo Abad and Sánchez-Alonso 2018, pp. 364-65). The role of these associations cannot be minimized. They served as hubs for information and networking within the national communities and decreased the costs of adaptation to the new city.

The early strength of these networks might seem surprising, because of the transient nature of Italian migration. It is likely that transience worked against the Italians. The Italian network expanded dramatically after 1880, when migration became more stable, with the founding of newspapers, banks, clubs, hospitals and other organizations during the 1880s. That said, the real strength of Italian community was in the mutual-aid traditions that they brought from their home country and used to benefit transient and permanent migrants alike. To quote Samuel Baily (1999, p. 189): '[The Italian institutions] of the Buenos Aires community were significantly more developed, participation of the Italians in them much greater, and their assistance in the

process of adjustment therefore more extensive' than for other immigrants or the native-born. None of this is to say that the Spanish created no institutional networks in the new country — they clearly did — but Spanish institutional structure remained less powerful and more limited as late as the 1900s (Devoto 2006, p. 231; Fernández 1989).

The strength of Italian networks can also be related to demographic characteristics such as the predominance of Italian family groups. In Buenos Aires, 62 percent of the Italian households in 1895 were extended households and 40 percent of them had also boarders (Baily 1999, tab. 37). On the contrary, 64 percent of Spanish families living in Buenos Aires were nuclear families and less than 4 percent extended families (Sánchez-Alonso 2004, tab. 7). Labour economists have long recognized the importance of social networks for finding a job and workers' performance in the labour market. Following Boorman (1975), they distinguish between strong and weak social ties, the former more important for the network strength and usually proxied by ties among family members and close friends.²⁷ We have no data to test historically the strength of a network and the presence of strong or weak social ties among immigrants' communities in Buenos Aires. However, we can speculate that the more numerous and extended Italian families created stronger social ties in the Italian community and provided more support and information of the labour market for their compatriots. Combined with the rich associational life of the Italian community might give some clues on the superiority of Italian networks.

²⁷ See also Montgomery (1991). For a recent application to immigrants in Canada, see Goel and Lang (2019) showing that the probability of finding a job through a network is higher if the immigrants has strong ties to someone near whom he lives.

V Conclusions

The era of mass migration brought a net movement of 2.5 million of Europeans to Argentina. Four out of every ten immigrants settled in Buenos Aires. The city by the river grew sevenfold between 1869 to 1914 to reach almost 1.5 million. The two predominant European arrivals were from Spain and Italy. The Spaniards, armed with higher literacy and knowledge of the mother tongue, surprisingly fared worse compared to Italians. Looking at occupational skills, wages, social status and real estate ownership all paint the same picture.

The question is, why did the Italians pull ahead? We find that the strength of the Italian networks was key for their compatriots' success. Italians established denser and wider networks early on and seem to have developed strong social ties among them. These older and denser social networks facilitated their integration into the labor market and consolidated their success. As a result, Italians earned more even when controlling for their disadvantage in literacy and language.

Networks explain the relative success of the Italians in Buenos Aires. Networks influenced Italian occupational choice within Buenos Aires neighbourhoods. Networks matched immigrants with better paying jobs more suited towards their skill set. This network effect was more effective for the Italian community, which created powerful networks early on and enjoyed the advantage of being the 'old' immigrants. These networks allowed the *paesani* to better integrate into this vibrant city than the *paisanos*.

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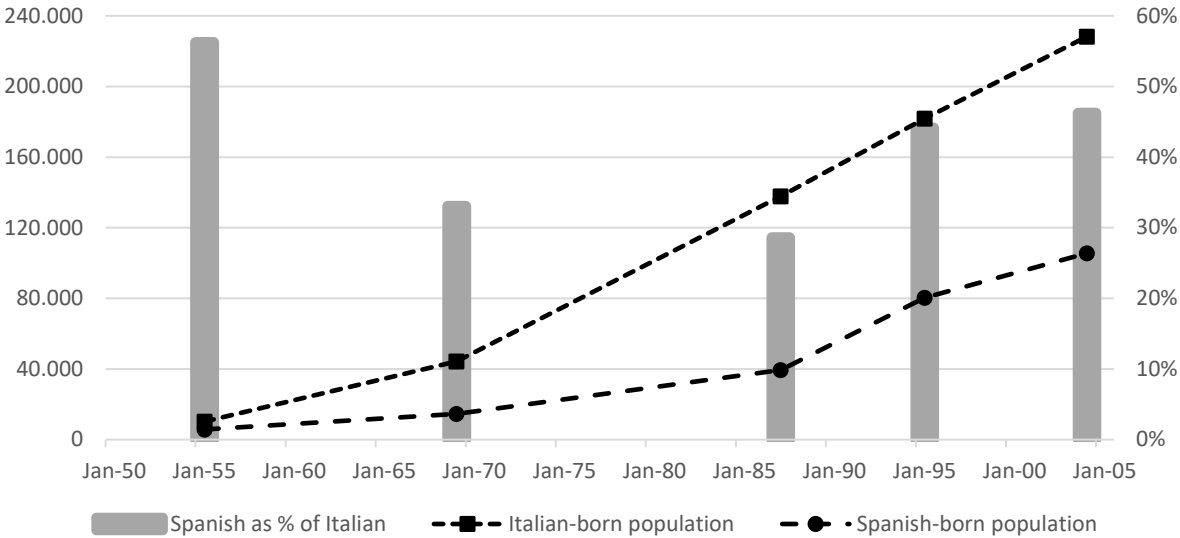
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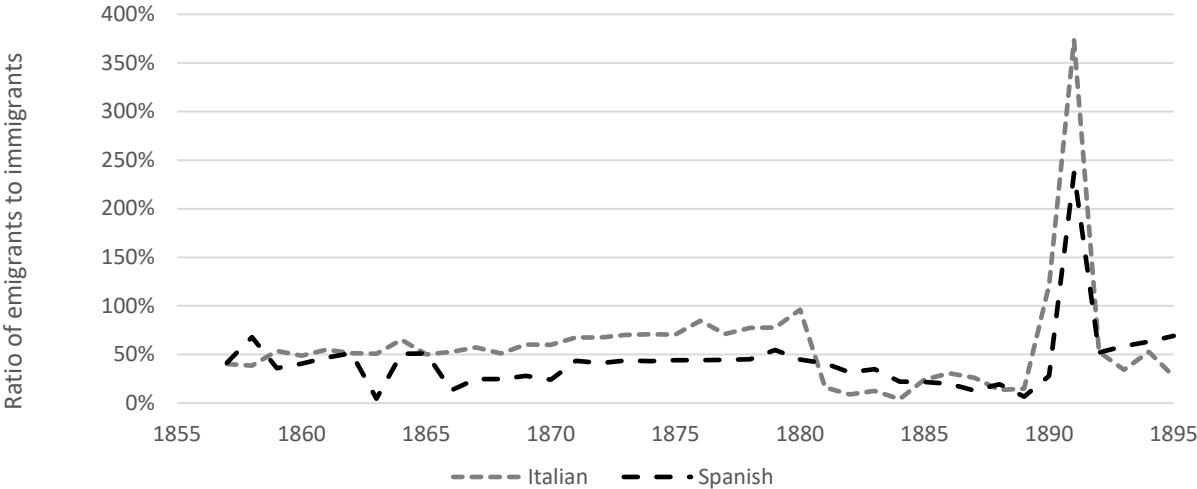
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Figure 1: Spanish and Italian-born populations, 1855-1904



Source: *Segundo Censo Nacional 1895*—vol. I., ch. 2, tab. 1

Figure 2: Italian and Spanish Immigration and Emigration flows, 1857-1895



Sources: Based on Ferenzci and Willcox (1929)

Table 1: Sectoral distribution of labor in Buenos Aires in 1895, percent of each group working in each sector

	Spanish	Italian	Native-born
Primary	1.5%	1.3%	1.4%
Manufacturing	22.3%	43.5%	38.0%
Retail	18.8%	21.5%	20.8%
Services	40.2%	24.6%	28.7%
Government	8.0%	4.4%	5.3%
Transportation	9.2%	4.6%	5.8%
Total	100.0%	100.0%	100.0%

Source: Based on Somoza and Lattes (1967).

Table 2: Means difference for Italians and Spanish

Average wage by occupational Hisclass category			Advantage	Share of workers	
	Italians	Spanish		Italians	Spanish
Higher managers	2,555	2,555	none	0%	1%
Higher professionals	3,553	3,299	none	2%	2%
Lower managers	2,143	2,440	none	2%	1%
Lower prof and clerical, sales	1,273	1,137	Italian***	17%	23%
Lower clerical and sales	937	827	Italian***	8%	18%
Skilled workers	887	942	Spanish***	42%	22%
Lower skilled workers	689	655	Italian***	15%	16%
Unskilled workers	609	605	none	13%	18%
All workers	968	933	Italian*		
Individual characteristics					
Average age (years)	34	32	Italian***		
Share literate	79%	90%	Spanish***		
Average job requirements					
Manual ability	0.29	0.26	Italian***		
Dexterity	0.28	0.24	Italian***		
Intellectual ability	0.28	0.28	none		

Notes: ***, **, * denote significant at 1%, 5%, and 10% respectively

Sources: Based on Arroyo Abad and Sánchez-Alonso (2018).

Table 3: Immigrant occupations upon arrival, 1882-94

	Italians	Spaniards	Other
White Collar	5.4%	11.7%	18.9%
Skilled Blue Collar	15.9%	10.1%	18.1%
Farmers	35.2%	34.7%	33.2%
Semi-Skilled	4.7%	4.7%	5.5%
Unskilled	34.1%	32.8%	14.3%
Unknown	4.7%	6.0%	10.1%

Source: Segundo Censo Nacional 1895—vol. I. p. 651

Table 4: Occupational share by skill category and country of origin

Italy	Skilled			Semi-Skilled	Unskilled	Unknown
	White Collar	Blue Collar	Farmers			
Pre-subsidy	3.1%	15.9%	38.7%	2.0%	38.8%	1.5%
Subsidized	7.8%	16.8%	30.9%	8.1%	27.7%	8.6%
Post-subsidy	10.8%	11.5%	31.2%	7.0%	31.2%	8.4%
Full period	5.4%	15.9%	35.2%	4.7%	34.1%	4.7%

Spain	Skilled			Semi-Skilled	Unskilled	Unknown
	White Collar	Blue Collar	Farmers			
Pre-subsidy	8.2%	7.8%	42.2%	2.1%	37.8%	1.8%
Subsidized	12.9%	12.3%	31.0%	6.7%	28.5%	8.6%
Post-subsidy	22.3%	5.7%	20.6%	4.1%	36.8%	10.6%
Full period	11.7%	10.1%	34.7%	4.7%	32.8%	6.0%

Other	Skilled			Semi-Skilled	Unskilled	Unknown
	White Collar	Blue Collar	Farmers			
Pre-subsidy	13.8%	12.8%	47.8%	3.2%	19.2%	3.2%
Subsidized	21.0%	22.9%	23.6%	7.4%	10.8%	14.3%
Post-subsidy	34.3%	9.7%	20.8%	3.9%	12.6%	18.7%
Full period	18.9%	18.1%	33.2%	5.5%	14.3%	10.1%

Source: based on Pérez (2017) dataset

Table 5: Wage determinants

	Ln(wage)	
	(1)	(2)
Age	0.0081*** (0.0023)	0.0053** (0.0019)
Age ²	-0.0001 0.0000	0.0000 0.0000
Language	0.0815 (0.0494)	0.0269 (0.0397)
Literacy	0.2189*** (0.0122)	0.0350*** (0.0092)
Spanish	-0.1228*** (0.0180)	-0.0248 (0.0142)
Italian	-0.0006 (0.0520)	0.0270 (0.0417)
Other	0.0084 (0.0473)	0.0102 (0.0381)
Intellectual		2.1680*** (0.0384)
Dexterity		0.7248*** (0.0617)
Manual		-0.7167*** (0.0698)
R ²	0.048	0.422
N	6577	6575

Notes: ***, **, * denote significant at 1%, 5%, and 10% respectively

Table 6: Networks based on occupation

Network analysis

Based on wage advantage - HISCLASS occupation

	(1)	(2)	(3)	(4)	(5)	(6)
	OLS	OLS	OLS	OLS	IV	IV
% Italians in occupation (I_{on})	0.3373*** (0.0390)	0.3046*** (0.0374)	0.3526*** (0.0353)	0.3236*** (0.0356)	0.3460*** (0.0656)	0.3211*** (0.0511)
% Spaniards in occupation (S_{on})	-0.0166*** (0.0039)	-0.0182*** (0.0051)	-0.0152*** (0.0043)	-0.0140** (0.0055)	0.0200*** (0.0066)	0.0175* (0.0102)
% occupation (O_{on})	-0.5372*** (0.1651)	-0.5244** (0.2199)	-0.4294** (0.1842)	-0.3464 (0.2317)	-0.3646 (0.2553)	-0.1222 (0.1675)
% countrymen (M_{cn})	0.5428*** (0.1079)	0.5488*** (0.1178)	0.5178*** (0.1377)	0.5538*** (0.1561)	0.5015*** (0.1476)	0.4871*** (0.1766)
% Argentines in occupation (A_{on})	-0.4248** (0.1663)	-0.6593** (0.2582)	-0.2299** (0.1063)	-0.3784** (0.1653)	-0.8061*** (0.2634)	-0.5486*** (0.1482)
N	3,008	2,138	580	422	2,275	408
R ²	0.8276	0.8419	0.8618	0.8609	0.797	0.846
<i>First stage</i>						
F-test						
% Italians in wage HISCLASS in 1869 (I_{on})					38.09	15.46
% Spaniards in wage HISCLASS in 1869 (S_{on})					16.87	14.66
<i>Sample</i>						
1869 boundaries	No	Yes	No	Yes	Yes	Yes
Single and <26	No	No	Yes	Yes	No	Yes

Notes: ***, **, * denote significant at 1%, 5%, and 10% respectively. Standard errors clustered by neighborhood. All specifications include age, age-squared, marital status, literacy, and language as controls. We include neighborhood and country of origin fixed effects.

Table 7: Networks based on skillset

Network analysis

Based on most comparative advantage - skills

	(1)	(2)	(3)	(4)	(5)	(6)
	OLS	OLS	OLS	OLS	IV	IV
% Italians in occupation (I_{on})	3.4125*** (0.1708)	3.1677*** (0.1405)	3.3449*** (0.3104)	3.1804*** (0.3454)	11.4586*** (4.0037)	10.1808** (4.8105)
% Spaniards in occupation (S_{on})	0.7739** (0.3060)	0.8235** (0.2950)	0.0901 (0.6717)	-0.2588 (1.0562)	545.3981 (461.5748)	407.9345 (441.0818)
% with skill (O_{on})	0.0358 (0.0702)	0.0384 (0.0737)	0.1117 (0.1777)	0.1970 (0.2266)	1.0750*** (0.2829)	0.8846*** (0.2999)
% countrymen (M_{cn})	0.3021 (0.2162)	0.2719 (0.2277)	0.1391 (0.5145)	-0.1157 (0.7058)	0.5514*** (0.0617)	0.5154*** (0.1090)
% Argentines with skill (A_{on})	0.0358 (0.0702)	0.0384 (0.0737)	0.1117 (0.1777)	0.1970 (0.2266)	0.0866 (0.0990)	0.0818 (0.1090)
N	3,008	2,138	580	422	2,940	586
R ²	0.4564	0.4480	0.5002	0.5138	0.7367	0.7972
<i>First stage</i>						
F-test						
% Italians in wage HISCLASS in 1869 (I_{on})					21.08	16.57
% Spaniards in wage HISCLASS in 1869 (S_{on})					1.77	0.98
<i>Sample</i>						
1869 boundaries	No	Yes	No	Yes	No	Yes
Single and <26	No	No	Yes	Yes	No	Yes

Notes: ***, **, * denote significant at 1%, 5%, and 10% respectively. Standard errors clustered by neighborhood. All specifications include age, age-squared, marital status, literacy, and language as controls. We include neighborhood and country of origin fixed effects.