



Social identity and labor market outcomes of immigrants

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Abstract

This paper explores the relationship between social identity and labor market outcomes of immigrants. Using survey data from Italy, we provide robust evidence that integrated immigrants, who state they have strong feelings of belonging to the societies of both the host and home country, have higher employment rates than do assimilated immigrants, who identify exclusively with the host country culture. Unlike previous literature, our findings indicate that assimilation does not necessarily provide a clear labor market advantage over immigrants who identify only with their original ethnic group. The positive labor market effect of integration is especially large for women, low-skilled, and immigrants with a brief experience in Italy and arriving in Italy at older ages, who generally face stronger barriers to entry into the labor market. The main mechanism driving the positive effect of multiple social identities points to belonging to local networks that ensure in-group favoritism and sharing of information.

Keywords Migration · Integration · Social identity · Acculturation · Culture · Labor market

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1 Introduction

Migrating is a major life-changing event associated with the (re-)definition of individuals' social identity and the reconsideration of their assignment to social groups. When settling in the host country, immigrants choose and follow different identification strategies, accepting or rejecting the cultural norms and values of both the host and home country.

A long tradition in economics and the social sciences centers around the pervasive influence of this choice on the socio-economic behavior and economic performance of migrants, focusing on two potentially opposing social identification strategies: social assimilation to the host society and identification with the home country society. While large consensus and empirical validations point to a positive association between social assimilation to destination country and labor market outcomes, great uncertainty prevails about the labor market influence of social identification with the country of origin. Some authors find evidence that a strong sense of attachment to the home country is always harmful to immigrants' economic outcomes (Battu et al. 2007; Battu and Zenou 2010; Bisin et al. 2011a, b, 2016). Another strand of the literature adopts a multidimensional concept of social identity that considers the possibility that immigrants may be attached at once both to the country of origin and to the host country and provides evidence of a positive correlation between social assimilation and economic outcomes (Cai and Zimmermann 2020; Constant et al. 2009a; Constant and Zimmermann 2008, 2009; Drydakis 2013; Gorinas 2014; Nekby and Rodin 2010; Piracha et al. 2022). Relevantly, results from this body of research suggest that the social identification with the home country is not always detrimental for the economic performance of immigrants, but that its effect also depends on whether it complements a contemporaneous attachment to the host country. Yet, the mechanisms that drive these patterns and explain the heterogeneous effects of social identities even detected by these studies have not been thoroughly explored.

We contribute to this literature by exploiting unique survey data on integration and labor market outcomes of immigrants living in more than two hundred municipalities in Italy and arriving from more than one hundred countries of origin. Using self-reported measures of feelings of belonging to both origin and destination countries, we provide robust evidence that identification not only with the host but also with the home society boosts the economic performance of the immigrants. Moreover, our findings indicate that immigrants who simultaneously identify with both home and host country groups have the highest probability of employment, while those who exclusively identify with the host country culture do not have a net occupational advantage. Then, we show that these effects are triggered by the different types of networks that immigrants with different social identities (are willing to) join.

Classical theories of social identity suggest, indeed, that feelings of belonging to the countries of destination and origin do not form and evolve autonomously, thus shaping the immigrants' labor market outcomes independently (Tajfel 1978; Tajfel and Turner 1979). Instead, identities are intertwined and evolve jointly to form a

super-ordinate social identity that eventually influences economic performance (Amiot et al. 2007; Gaertner and Dovidio 2000). According to these theories, especially the so-called acculturation theory (Berry 1980, 1997; Phinney et al. 2001), immigrants can be partitioned into four identity states (*acculturation strategies*) depending on how they relate to both destination and original ethnic groups: *integration*, *assimilation*, *separation*, and *marginalization*. Integrated immigrants are those who strongly identify with both their country of origin and destination. Assimilated ones, instead, strongly identify with the cultural norms and values of the destination country, but abandon those of their country of origin. At the other end of the spectrum, the separated retain a strong sense of identification only with their origin country group, while rejecting the destination culture. Finally, marginalized individuals identify neither with the destination nor with the origin cultures.

Building on these ideas, we empirically explore how the labor market performance of the immigrants is influenced by the independent impact of the single social identities and the compound effect of the multiple social identities resulting from the different acculturation strategies. To this end, our empirical strategy draws on a large survey carried out by the Foundation for Initiatives and Studies on Multi-Ethnicity (ISMU) which, uncommonly, records appropriate information about the feelings of belonging to both the destination and origin countries of about 12,000 immigrants living in Italy between 2008 and 2009. We exploit this information and estimate a model that permits the decomposition of the multiple social identities into each of their components: the home and host country attachments and their interaction that captures the costs or benefits associated with the simultaneous adherence to both social groups. Our findings first indicate that having a social identity is better than not having one at all; immigrants with strong feelings of belonging to either country of origin or destination have, indeed, a higher probability of being employed. Furthermore, although we find some evidence that simultaneous identification with both host and home country groups is costly and undermines the employment prospects of immigrants, our results show that the benefits generated by the interaction with different ethnicities are sufficiently great that integrated immigrants are more likely to be employed than those who are assimilated, separated, or marginalized. Our estimates additionally indicate that, despite the labor market benefits of even single social identities, assimilation alone does not necessarily provide a clear labor market advantage. Even though assimilated and separated immigrants have an employment premium with respect to the marginalized, we do not detect any statistically significant difference in the employment outcomes of assimilated and separated immigrants.

Taken together, these results establish that what really matters in explaining foreigners' employment probability in Italy is their simultaneous sense of belonging to the host country society and to their original ethnic group. We corroborate this idea in the second part of the paper, where we analyze the role of networks as a mechanism driving the labor market over-performance of the integrated immigrants. Theoretically, by nurturing the identity of a social group different from their original one, integrated individuals may be deemed betrayers of their original ethnic identity and hence be subject to discrimination and social exclusion from their home

country community, which threatens their employment chances.¹ On the other hand, identification with, and membership in, both national and ethnic communities provide in-group favoritism by both natives and foreigners (Akerlof and Kranton 2005; Chen and Li 2009) and access to extended and diversified networks through which integrated immigrants can more easily accumulate different type of knowledge and information about labor market vacancies and economic opportunities (Piracha et al. 2022).

In line with a network interpretation of the effects of social identities, we then provide direct evidence on the networks and types of communities that immigrants (are willing to) join and interact with, and first show that integrated immigrants are more likely to have both Italian and foreign friends as well as to join associations composed of both Italians and foreigners. These findings suggest that the positive effect of multiple social identities can be triggered by a more diversified and potentially enlarged set of job market information and positive peer effects that membership in different communities ensures. The heterogeneity analysis supports this interpretation by highlighting that integration benefits to a greater extent less secure and more discriminated individuals who generally face stronger barriers to entry into the labor market. Specifically, the positive effect of integration on employment probability is stronger for women and low educated, as well as immigrants with a brief experience in Italy and arriving at older ages, who potentially have low adaption to the new society, high attachment to the original ethnic culture, and high probability to work in sectors where information is more likely conveyed through informal networks (Bachmann and Baumgarten 2013; Cai and Zimmermann 2020; Calvó-Armengol and Jackson 2004). Otherwise, we find that assimilated and separated immigrants choose more specific and separated networks, with the former more likely associated with networks of natives and the latter to networks of foreigners. This pattern helps explain why we find no statistically significant difference in the employment rates of assimilated and separated immigrants, despite most of the literature showing that, in other settings and countries, assimilated migrants have a better economic performance than the separated (Casey and Dustmann 2010; Constant and Zimmermann 2009; Drydakis 2013). Local natives' networks are, indeed, potentially more extended but convey less specific information, while foreigners' networks can convey narrow but more specialized information on labor markets and economic sectors where immigrants mostly work. Then, on one side, by choosing to absorb only the destination country culture, assimilated immigrants may generally exploit great information from large natives' networks and find a job in the host country more easily than separated immigrants do. On the other side, however, specific characteristics of Italy and the Italian labor market may favor the separated immigrants who choose to settle in and identify only with their own ethnic community. Italy is, indeed, characterized by a large share of undocumented migrants

¹ Immigrants often choose not to nurture the host culture, although this could facilitate their employment chances, or not to directly accept job offers in order not to violate the social norms of the ethnic groups of their home country (Austen-Smith and Fryer 2005; Fordham and Ogbu 1986; Fryer and Torelli 2010; Oh 2021).

and a wide informal economy where immigrants are mostly employed. Both features lead to a high degree of sectoral concentration, augmenting the value of the specific information more likely conveyed within foreigners' networks.

We try to substantiate this latter hypothesis in the last part of the paper by investigating whether the highest employment probability of the integrated immigrants is prompted by specific advantages in some sectors of economic activity and if integration also affects the intensive margin and job quality of the immigrants. The estimates indicate that integration status guarantees an employment probability premium in the industry and service sectors but it penalizes the entry into commerce and, most importantly, it does not affect labor income. It is very likely, indeed, that occupation in the commerce sector is mostly facilitated by identification with, and participation in, one's own ethnic community such that absorbing also the host country culture causes integrated immigrants to bear psychological and transaction costs without any additional returns. Consistently, additional evidence indicates that separated immigrants are more likely than integrated immigrants to work in the commerce sector. Interaction with both destination and original ethnic groups thus instead widens the spectrum of the networks that may be useful to enter other sectors, even though it does not necessarily affect the intensive margin of the economic performance.

Studying the effects of identity on labor market outcomes is empirically challenging. Omitted variables, measurement error in the identity measures, sorting of immigrants across municipalities, and their selection over characteristics of the home countries as well as reverse causality are all likely sources of bias that prevent identification of a causal relation. In an effort to allay all these potential concerns, in our specifications, we always include a wide range of individual-level covariates, a set of municipality by country of origin fixed effects that account for (omitted) time-invariant characteristics of each ethnic group in each municipality as well as week and day of week by place of interview fixed effects to account for seasonality effects and potential selection of migrants in particular places of interview on specific days of the week. Moreover, we perform a large battery of robustness and sensitivity checks. We show that our findings remain robust and valid when we exclude specific groups of immigrants selected over personal characteristics (i.e., retirement age, years spent in Italy, legal status, etc.) or when we force our identification by adding a full set of age at arrival by years spent in Italy fixed effects that tighten estimations across individuals also within the same cohorts of age at arrival and length of time in Italy.² Finally, our results are robust also to the adoption of different measures of social identity based on subjective and objective indicators. Despite all the robustness checks, we cannot rule out potentially remaining endogeneity concerns; then, we interpret our findings only as correlations, without giving them any causal interpretation.

² We also find that estimated coefficients remain stable and our results unaffected when we drop municipalities and countries of origin in the tails of the distributions of total population, overall migrants' share of population, migrants' density per km^2 , unemployment rate, and per-capita income of the municipalities as well as geographic and cultural distances between Italy and home countries.

A further common concern about the empirical reliability and external validity of studies on migrants' social integration is that they are usually country-specific and, hence, their results lack generality. Although Italy is one of the most chosen destinations among European countries (Finotelli and Sciortino 2009; Fondazione ISMU 2020), existing evidence on the social integration of migrants in Italy is quite scant. Some scholars have explored the economic outcomes of undocumented immigrants employed mainly in the informal economy (Dustmann et al. 2017; Guriev et al. 2018; Pinotti 2017).³ As far as we know, the effects of social integration on the labor market performance of immigrants in Italy remain largely unexplored. Our study helps fill this void by extending the analysis to a different country and context and offering a contribution in the generalization of the state-of-art knowledge.

The paper is structured as follows. Section 2 highlights our contribution with respect to the relevant literature. Section 3 describes the background and the data and discusses some descriptive statistics. Section 4 investigates the relationship between the diverse (social) identities and the labor market performance of immigrants in Italy. Section 5 focuses on integrated immigrants to explore the potential sources of their over-performance on the labor market and to highlight other potentially economic effects of integration. The last section concludes.

2 Related literature

Our study builds on the economic literature that formalizes ideas from sociology and cross-cultural psychology (Akerlof and Kranton 2000, 2005), and it primarily addresses the growing empirical literature on the socio-economic impact of the immigrants' social identification with the home and host societies. This literature focuses mainly on two questions: what factors influence the choice of social identity, and what are the effects of immigrants' social identity on their socio-economic outcomes.

Related to the first issue, heterogeneous findings emerge depending on the different individuals' characteristics analyzed and on the specific features of the host countries (Algan et al. 2012; Åslund et al. 2015; Casey and Dustmann 2010; Constant et al. 2012). Gender, age at arrival, and permanence in the destination country of the immigrants emerge, in particular, as the most relevant factors determining the identity formation and its transmission across generations as well as the heterogeneous impact of the social identities on the economic outcomes of the immigrants (Abramitzky et al. 2014; Bleakley and Chin 2010; Constant et al. 2009a; Nekby and Rodin 2010). Looking at the host country features, instead, the policy of integration of the country of destination (Galli and Russo 2019; Gathmann and Keller 2018), the cultural distance between home and host countries, and the degree of diversity of

³ Others focused on the process of identity formation (Carillo and Dessy 2012), cultural integration (Adda et al. 2020; Bisin and Tura 2019), and the economic assimilation of immigrants (Mancinelli et al. 2009).

the local communities (Bazzi et al. 2019; Masella 2013) result in the major factors explaining the degree of social assimilation of the immigrants.

Concerning the effects of social identities, different socio-economic outcomes have been considered,⁴ but the most attention has been paid to the labor market impact of the immigrants' social identification. The main conclusion of most of this body of research is that the labor market outcomes of immigrants are mostly shaped by the attachment to the host country, while a strong attachment to the home country has, if any, a detrimental impact (Battu and Zenou 2010; Bisin et al. 2011a, b, 2016). Another strand of literature, instead, finds evidence that the social identification with the home country is not always detrimental for the migrants' economic outcomes, but it can also strengthen the labor market performance of the immigrants if it is accompanied also by a contemporaneous attachment to the host country. The hypothesis that individuals with multiple social identities may show different and likely better economic outcomes than individuals who only assimilate to the host country culture has been deeply explored by several authors that employ measures of social identity to account for the different degrees of attachment to both the cultures of the receiving and origin countries. The frontrunners of this approach are Constant and Zimmermann (2008) and Constant et al. (2009a) who categorize immigrants across the four identity strategies of the acculturation theory by combining several individuals' characteristics into the *ethnosizer* index. Then, Constant and Zimmermann (2009) apply this index to the study of the effects of the acculturation strategies on the employment rates and earnings of the immigrants in Germany. They provide evidence that integrated women are more likely to work than assimilated ones and that the earnings of both men and women are not affected by social identity. Likewise, Constant and Zimmermann (2009) and Delaporte (2019) find that integrated identity improves the employment outcomes of women and migrants of second generation. On the contrary, Nekby and Rodin (2010) provide evidence that in Sweden integrated and assimilated immigrants do not have different labor market performances. In applications to different contexts, similar results were also found by Drydakis (2013), Gorinas (2014), and Islam and Raschky (2015).

Differently from this literature, our findings indicate that in Italy, socially integrated migrants have also the highest probability of employment and that this effect is generally not limited to particular categories of migrants. However, also in our case, those who gain the most from integrated identity are the less secure immigrants as women, low-skilled, immigrants who arrive in old age, and who have been in Italy for a short time. In line with Cai and Zimmermann (2020), Piracha et al. (2022), and Pendakur and Pendakur (2005), we then explore the role of informal (i.e., friends) and formal (i.e., associations) networks to explain these results. Cai and Zimmermann (2020) and Piracha et al. (2022) find evidence that socially assimilated immigrants are also more likely to establish relationships with networks of natives and to use the natives' networks to find an occupation. Pendakur and Pendakur (2005) show that immigrants with strong ethnic identity are more likely to

⁴ Among various, the care of health (Antman et al. 2020), life-satisfaction (Angelini et al. 2015), neighborhood decision (Bisin et al. 2016), and home ownership (Constant et al. 2009b).

use foreigners' networks to find a job. Our analysis of the mechanisms complements these findings for the socially integrated immigrants, who, we find, are more likely to join networks and associations composed of both Italians and foreigners.

3 Background and data

Over the past three decades, Italy has undergone a profound change in its migration status, from a country of emigration to one of net immigration. At the turn of the century, Italy was one of the least common immigrant destinations in Europe, with foreigners making up just 2.6% of the population. The dramatic growth of immigration since then, bringing foreigners up to 10% of the total population compared with the EU average of 6.5%, has made Italy one of the top five European countries of arrival (Tragaki and Rovolis 2014). This rapid expansion of immigration was not uniform throughout Italy but especially concentrated in the northern regions, where 58.6% of foreigners live. Concurrently, a strong heterogeneity in the ethnic composition emerged as the new waves of immigrants arrived from a large number of countries of origin, mostly belonging to Eastern Europe (the largest group) and North Africa (the second largest group), with the Asian community lately joining these groups. After Spain and Portugal, Italy is also the preferred European destination for Latin Americans.

Unlike the former colonial powers (Spain, France, Britain), Italy has no privileged political or cultural ties with other countries, suggesting that the choice to immigrate to Italy depends more on geographical reasons or the ease of crossing borders than on any knowledge of or links with Italian society. This, in turn, implies that before they develop their migration plans, immigrants have little exposure to Italian culture so their social assimilation is more heavily influenced by factors that emerge after arrival.

New arrivals are usually low-skilled and tend to find work in less advanced sectors with mature technology. A good proportion enter the country illegally and are stabilized later on, thanks to recurrent ex-post regularization programs (Ambrosini 2013). The strategy of irregular entry is also possible thanks to Italy's large informal labor market, where immigrants can be employed even without a work permit. In this context, with a weak presence of controls and the absence of an effective labor market regulation, informal networks of both natives and foreigners become crucially important to acquire information on job vacancies. Similarly, associations (labor unions, non-governmental organizations, church-related institutions) play an important role in supporting the economic outcomes of immigrants by filling the void left by public institutions in providing immigrants with health care and other social services.

To sum up, the Italian case is paradigmatic of the so-called Southern European migration regime (Finotelli and Sciortino 2009), where the weak control of the borders, cyclical amnesties, unstable and ambiguous integration policies result in social integration being channeled mainly through local networks and associations of both natives and foreigners.

3.1 Data and descriptive statistics

To explore how different (social) identities affect the economic conditions of immigrants, our empirical analysis uses survey data collected by the ISMU Foundation by interviewing 12,049 immigrants between 2008 and 2009. It is a comprehensive survey on immigrants' integration in Italy, including information on feelings of belonging to host and home countries. In addition to specific questions on immigrants' identity, the survey provides information on social, cultural, political, and economic conditions of the respondents.⁵

Interviewed immigrants come from 127 different countries of origin mainly poorer than Italy, with most of them from Eastern Europe, Northwest Africa, and Asia (Fig. 1).⁶ They are located in 233 Italian municipalities distributed in both the North and South of Italy,⁷ with most of the sample living in municipalities concentrated in just a few regions, particularly Tuscany and Lombardy (Fig. 2).⁸ Reassuringly, the high correlation in the municipality-ethnic group shares of immigrants between the survey data (ISMU) and official census (ISTAT) ensures that our data are highly representative of the actual distribution of the ethnic groups across the Italian municipalities.

Table 1 presents the main characteristics of the full sample including both regular (about 90%) and irregular (10%) immigrants, aged 18 or older at the time of interview and with an average age at arrival in Italy of about 28 years old.⁹ Respondents, mostly males (52%) and married with children (57%), spend many years in Italy (on average 7.8 years) and have quite a high level of education; 62% of immigrants report at least a high school degree, with 19% of them stating they have a bachelor's degree or higher level of education. These characteristics also explain their mastery of Italian language; the average score of *Proficiency*, measured as the self-reported ability in speaking and reading, is 3.5 on a scale from 1 to 5. Finally, 27% of the sample are Catholic, 21% Orthodox, and 40% Muslim; the religious minorities are

⁵ A regional subsample of the ISMU dataset was also used by Dustmann et al. (2017), Guriev et al. (2018), and Pinotti (2017), who exploit only variation within the Lombardy region. We were granted access to the full Italian dataset, albeit available with a shorter time coverage. A detailed description is available in Cesareo and Blangiardo (2009) and additional information through the website www.ismu.org.

⁶ The ten most representative countries are Romania (13.68%), Albania (10.76%), Morocco (8.85%), China (5.82%), Philippines (4.11%), Peru (4.03%), Ukraine (3.98%), Egypt (3.47%), Bangladesh (3.36%), and Senegal (3.30%).

⁷ Municipalities (Comuni) correspond to LAU level 2 (formerly NUTS level 5) in the Eurostat definition. In our sample, they are distributed across 13 of the 20 Italian regions: Piedmont, Lombardy, Trentino-South Tyrol, Veneto, Emilia-Romagna, Tuscany, Marche, Abruzzo, Lazio, Campania, Molise, Apulia, and Sicily.

⁸ Most immigrants in the sample (about 85%) are located in the municipalities above the sample median of total population, migrants' density (per km^2), and income per-capita. Immigrants are more equally spread across municipalities when looking at the municipalities' distribution of the share of immigrants in total population and unemployment rate, with about half of the sample living in municipalities below and the other half in those above the median of municipalities' distribution.

⁹ There are no particular differences between the different samples in terms of individuals' characteristics.

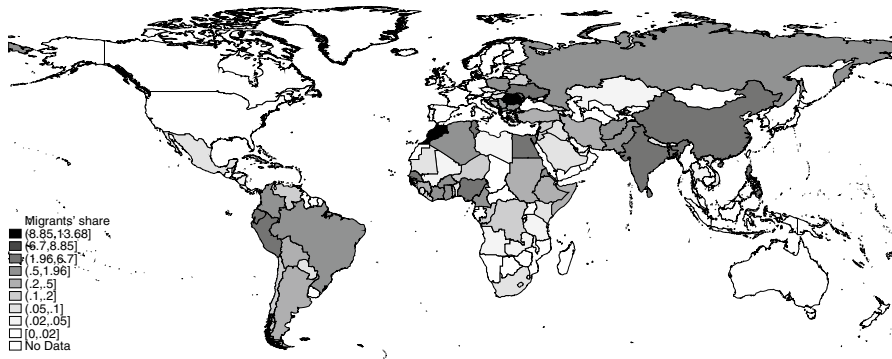


Fig. 1 Migrants' share by country of origin

represented by Coptic, Evangelical, Buddhist, Hindus, Sikh, and those professing other religions, while about 7% state no religious affiliation.

Economic performance of immigrants Our main measure of economic performance of immigrants is their employment status, *Employed*, defined by a binary indicator equal to one if respondents state they have a job at the time of the interview and zero otherwise. In the employed category (82%), we include all respondents regardless of whether they have a regular (70%) or irregular (about 10%) job, full (about 38%) or part time (20%) position and regardless of whether they are employers (3%) or employees. We exclude those who are not in a professional condition (almost 10%), mainly housewives and students. In our baseline estimations, we do not impose any further restrictions (i.e., retirement age), because in many cases migrants have to work also in non-standard market conditions and we want to measure how different identity strategies may broadly affect the employment prospects of individuals. We then consider several robustness checks.

Employed immigrants are distributed across four major sectors of economic activity, with 42% in the service sector (30% in services to people and 12% in services to firms), and 20% and 19% in commerce and industry, respectively. Few (2.6%) are employed in agriculture, with the remainder in other categories.

The survey allows us to shed some light on the intensive margin of the economic performance with a question on immigrants' labor income, collected as an eight-class measure. Among those with a positive income, the majority (67%) state a monthly net income from labor of between 600 and 1200 Euros, while 13% and 20% of the sample report an income lower than 600 and higher than 1200 Euros, respectively.¹⁰

¹⁰ The income classes with the corresponding share of immigrants are No Income (23.02%), < 600 (10.11%), 600–799 (16.43%), 800–999 (18.59%), 1000–1199 (16.20%), 1200–1499 (9.97%), 1500–2000 (3.93%), and > 2000 (1.74%).

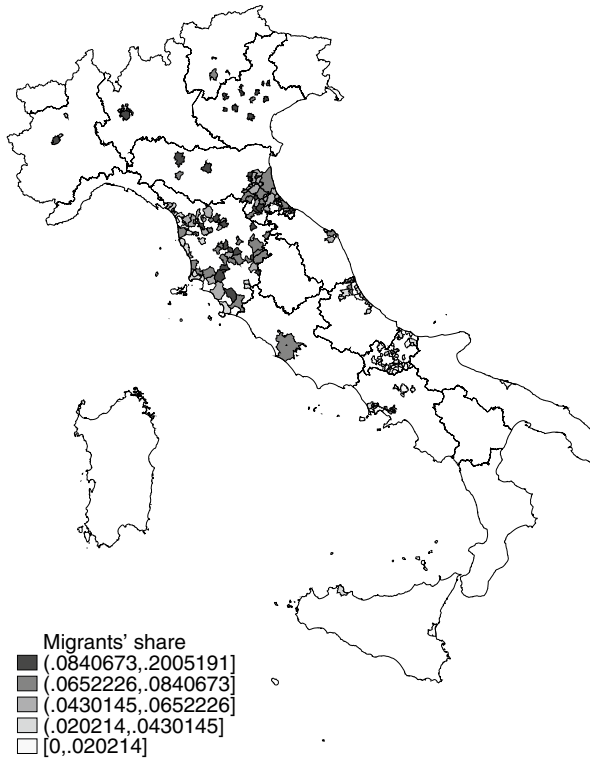


Fig. 2 Municipality location and migrants' share

Measures of social identity We measure immigrants' social identities with self-reported information about the respondents' identification with both host and home countries. In order to capture the different components of the immigrants' acculturation strategy, we need, in particular, pair of measures capturing the attachment to both the places of destination and origin. To this end, we build our main indicators of social identities by exploiting two specular survey questions that prompt immigrants to explicitly manifest their simultaneous self-identification with both the countries of destination and origin. In particular, we proxy the attachment to the country of destination with the dummy *Host identity* equal to one if the interviewee responds "Enough" or "Very Much" to the survey question "How much do you feel you belong to Italy?", and zero if the answer is "Far Too Little" or "Little." Likewise, the attachment to the country of origin is captured by the dummy *Home identity* equal to one if the interviewee responds "Enough" or "Very Much" to the survey question "How much do you feel you belong to your country of origin?", and zero otherwise.

About 91% of the sample state they are attached to their home country, while 56.7% identify with the host country (Table 1). Given the potential overlap in the two identity questions, our data seem consistent with acculturation theories (Berry 1997; Constant and

Table 1 Summary statistics

	Observations	Mean	Std. dev.	Min	Max
Employed	10207	0.817	0.387	0	1
Home identity	11895	0.908	0.290	0	1
Host identity	11747	0.567	0.496	0	1
Male	11990	0.523	0.500	0	1
Age	11990	36.252	10.079	18	82
Age at arrival	11882	28.528	9.752	0	82
Years in Italy	11926	7.788	6.191	0	60
No education	11702	0.062	0.241	0	1
Compulsory	11702	0.318	0.466	0	1
High school	11702	0.430	0.495	0	1
BA degree +	11702	0.190	0.393	0	1
Proficiency	11987	3.503	1.093	1	5
Married	11881	0.567	0.496	0	1
Have children	11946	0.567	0.496	0	1
Muslim	11618	0.339	0.473	0	1
Catholic	11618	0.266	0.442	0	1
Orthodox	11618	0.212	0.409	0	1
Coptic	11618	0.004	0.062	0	1
Evangelical	11618	0.022	0.147	0	1
Other Christian	11618	0.019	0.137	0	1
Buddhist	11618	0.034	0.182	0	1
Hindu	11618	0.015	0.122	0	1
Sikh	11618	0.006	0.079	0	1
Other	11618	0.009	0.094	0	1
No religion	11618	0.074	0.261	0	1

Zimmermann 2008) categorizing immigrants along one of the four identity strategies: *integration*, *assimilation*, *separation*, and *marginalization* (Table 2). A first look at the cross-tabulation of the two identity variables reveals that most immigrants in the sample are distributed around two major groups: the *Integrated* (49.53%), who identify with both the host and home country cultures, and the *Separated* (41.27%) immigrants, who identify only with the culture of their country of origin while rejecting that of the country of destination. The residual 9% of the sample further splits up into *Assimilated* (7%) and *Marginalized* (2.13%) immigrants, with the former identifying only with the host country and the latter neither with the host nor with the home country cultures.¹¹

¹¹ Specifically, the *Integrated* are the immigrants answering “Enough” or “Very Much” to both home and host identity questions so that *Home* and *Host Identities* dummies are equal to one. The *Separated* are those reporting “Far Too Little” or “Little” sense of self-identification with the host country but “Enough” or “Very Much” self-identification with the home country so that *Home Identity* is equal to one but *Host Identity* is equal to zero. The *Assimilated* are those immigrants reporting “Far Too Little” or “Little” sense of self-identification with the home country but “Enough” or “Very Much” self-identification with the host country so that *Host Identity* is equal to one but *Home Identity* is equal to zero. Finally, the *Marginalized* are those answering “Far Too Little” or “Little” to both identity questions such that both dummies are equal to zero.

Table 2 Acculturation strategies

		Home identity		Total
		1	0	
Host identity	1	Integrated 49.53%	Assimilated 7.08%	56.61%
	0	Separated 41.27%	Marginalized 2.13%	43.4%
Total		90.8%	9.2%	100%

Table 3 reports some distinctive characteristics of immigrants according to their choice of group identity and highlights how the acculturation framework may improve our understanding of the immigrants’ identity choices and of the effects of these identities on their economic performance. First of all, integrated immigrants are much more likely to be employed than those with other identities, including the assimilated. As expected, integrated and assimilated migrants spend more time in Italy and have a better proficiency in Italian language and a higher human capital than do separated and marginalized. Immigrants are more homogeneous according to their age at the date of interview and arrival, with a slight predominance of males among separated and marginalized. Finally, integrated foreigners are more frequently married and with children, while Muslims are more likely to be separated and Christians assimilated.

4 Identity, acculturation strategies, and labor market performance

4.1 Empirical specification

To investigate the relationship between immigrants’ group identity and their labor market performance in Italy, we estimate the following model:

$$\begin{aligned}
 y_{iom} = & \beta_0 + \beta_1 Home\ identity_{iom} + \beta_2 Host\ identity_{iom} + \\
 & + \beta_3 Home\ identity_{iom} \times Host\ identity_{iom} + \\
 & + \mathbf{X}'_{iom} \delta + \alpha_{om} + \lambda_w + \mu_{dp} + \epsilon_{iom},
 \end{aligned}
 \tag{1}$$

where y_{iom} is the dummy *Employed* equal to one if immigrant i from country of origin o in the municipality m is employed and zero otherwise, and *Home identity* and *Host identity* are, in the baseline specification, the dummies capturing the immigrants’ self-identification with the countries of origin and destination.

We start estimating model Eq. 1 without the interaction term *Home identity* \times *Host identity* such that coefficients β_1 and β_2 identify only the main effects of the independent adherence to home and host country cultures. Next, we add to the right-hand side the interaction term *Home identity* \times *Host identity*, whose coefficient β_3 estimates further costs and gains from multiple social identities, allowing

us to gauge the labor market effects of all four acculturation strategies illustrated in Table 2. According to the full specification in Eq. 1, coefficient β_1 returns the estimate of the employment probability of *Separated* immigrants, for whom the dummy *Host identity* is equal to zero while *Home identity* is equal to one, with respect to the *Marginalized* ones, the reference category captured by the intercept β_0 . Likewise, β_2 quantifies the employment probability premium of *Assimilated* immigrants, for whom the dummy *Host identity* is equal to one while *Home identity* is equal to zero. This saturated empirical model also implies that we can compute the linear combination of the three coefficients, $\beta_1 + \beta_2 + \beta_3$, to retrieve the estimated probability of being employed of *Integrated* immigrants, for whom both *Host identity* and *Home identity* dummies are simultaneously equal to one, with respect to the *Marginalized*. Furthermore, we can also evaluate whether the four acculturation strategies are associated to statistically different outcomes on the labor market. Specifically, the difference in the estimated coefficients of *Integrated* and *Assimilated*, $\beta_1 + \beta_3$, returns an estimate of the different employment probabilities of immigrants who identify with both the destination and origin countries with respect to those who accept only the destination country identity. Similarly, the difference between *Integrated* and *Separated* is computed by the linear combination $\beta_2 + \beta_3$, while that between *Assimilated* and *Separated* by $\beta_2 - \beta_1$.

To avoid omitted variable concerns, in our estimations, we always include the vector \mathbf{X}_{iom} of individual-level covariates: *Age* (and its square), gender (*Male*), marital status (*Married*), presence of children (*Have children*), educational level (*No education, Compulsory, High school and BA degree +*), years spent in Italy (*Years in Italy* and its square), proficiency in Italian language (*Proficiency*), and religious affiliation.

Finally, our specifications include a set of municipality by country of origin fixed effects (α_{om}) to account for (omitted) time-invariant characteristics of each ethnic group in each municipality that are a potential source of bias (i.e., network effects, specific human capital, local labor market features, cross-municipality differences in natives' attitudes toward cross-ethnic groups of immigrants). We also add to the right-hand side week (λ_w) and day of week by place of interview (μ_{dp}) fixed effects to wash out part of the random measurement errors induced by the use of self-reported measures of identity as well as to account for seasonality effects and potential selection of migrants in particular places of interview on specific days of the week (e.g., unemployed immigrants interviewed on working days in particular places or immigrants with strong ethnic identity interviewed particularly in religious or ethnic places).¹²

¹² The survey indicates the following possible twelve places of interview: centers providing services and assistance (reception, work, health, counseling service, refectory, public offices), training centers (Italian courses, professional training courses, schools, universities), worship (churches, mosques, temples), ethnic shops (kebabs, Islamic butchers, take-aways, food products), entertainment (cinema, discos, sports facilities, bars, restaurants), shopping centers, meeting places (stations, squares, parks, lakes), markets (municipal markets, flower market, fruit and vegetable), workplaces or workforce recruitment (construction sites, textile laboratories, restaurants and hotels, gatehouses, agricultural fields and farms), associations and cultural centers, service centers (phone centers, money transfer agencies), private residences.

Table 3 Summary statistics by social identities

	Integrated	Assimilated	Separated	Marginalized
Employed	0.854	0.797	0.788	0.678
Male	0.513	0.450	0.540	0.573
Age	36.768	35.881	35.960	34.012
Age at arrival	27.899	25.341	29.948	26.797
Years in Italy	8.974	10.638	6.028	7.416
No education	0.046	0.067	0.077	0.099
Compulsory	0.287	0.259	0.369	0.293
High school	0.444	0.467	0.410	0.320
BA degree +	0.223	0.207	0.145	0.288
Proficiency	3.729	4.119	3.145	3.445
Married	0.585	0.455	0.572	0.475
Have children	0.577	0.507	0.573	0.498
Muslim	0.330	0.263	0.353	0.434
Catholic	0.276	0.333	0.252	0.120
Orthodox	0.210	0.219	0.212	0.288
Coptic	0.006	0.004	0.000	0.022
Evangelical	0.021	0.022	0.021	0.042
Other Christian	0.017	0.027	0.021	0.020
Buddhist	0.032	0.034	0.037	0.013
Hindu	0.018	0.010	0.012	0.002
Sikh	0.008	0.000	0.006	0.002
Other	0.008	0.009	0.009	0.014
No religion	0.074	0.079	0.077	0.043

4.2 Baseline results

Table 4 reports our baseline OLS estimates when regressing immigrants' employment status on their group identity conditional on the set of individual-level covariates and fixed effects.

In the first three columns, we examine the effects of the single components of the acculturation strategies by excluding the interaction term *Home identity* \times *Host identity*. In columns (1) and (2), we start by introducing the dummies *Home identity* and *Host identity* separately. Results in column (1) show that immigrants with a strong attachment to their home culture have a higher employment probability than those who do not feel they belong to their ethnic group. Likewise, column (2) reports that immigrants who identify with the culture of the host country are more likely to be employed than those who do not. These effects remain statistically significant and stable also when, in column (3), we introduce the two variables jointly. Hence, the positive and statistically significant coefficients of *Home identity* and *Host identity* suggest that identification not only with the host but also with the home countries increases the chances of being employed.

Next, in column (4) we introduce the interaction term *Home identity* \times *Host identity* to completely characterize the economic effects of the four acculturation identities. Its negative and statistically significant coefficient shows that acquiring and preserving both identities is costly and dampens the probability of the immigrants being employed. Notwithstanding, the coefficients of *Home identity* and *Host identity* not only remain positive and statistically significant, but they also substantially increase in magnitude. Differently from the models in columns (1)–(3), the coefficients of *Home identity* and *Host identity* in the specification of column (4) estimate the labor market effects for immigrants who not only identify with one of the two group cultures but who also simultaneously reject the other. Hence, the coefficient of *Home identity* implies that *Separated* immigrants, who identify only with their country of origin group while rejecting the destination country identity, are about 16 percentage points more likely to be employed than *Marginalized* individuals, who dismiss any identity. Thus, even individuals with so-called oppositional identities have an employment premium on the labor market with respect to those without any identity. Likewise, the *Host identity* coefficient demonstrates that *Assimilated* immigrants, who identify only with the host country culture while abandoning their home culture, have an employment probability about 14 percentage points higher than that of the *Marginalized*. Furthermore, and most importantly, the boost in the coefficients of *Home identity* and *Host identity* after the introduction of the interaction term ensures that the detrimental effect of the simultaneous identification with both host and home country groups is not strong enough to cancel out the benefits generated by interaction with different ethnicities. Indeed, the linear combinations of the coefficients from column (4) establish that *Integrated* immigrants, who concurrently identify with home and host countries, are those with the strongest performance on the labor market, with a probability of being employed 18.6, 5, and 2.3 percentage points higher than that of, respectively, *Marginalized*, *Assimilated*, and *Separated*.

Together, these results provide evidence that, while having a social identity is better than not having one at all, what really matters for the employment prospects of immigrants is their choice to retain a strong ethnic identity, in addition to absorbing the host country identity. This is also corroborated by the result in the last row of Table 4, which establishes that the sole assimilation does not provide a labor market advantage as the difference between the coefficients of *Assimilated* and *Separated* is not statistically significant. This quite striking result can be explained by paying attention to the possible channels through which social identity affects the economic outcome of immigrants: in-group favoritism and positive network externalities deriving from group membership. On one side, assimilation can give access to the majority group of the receiving society and, hence, to large local networks that can be a source of more general information for finding a job. On the other side, however, if migrants are concentrated mainly in specific sectors or informal economy, networks of native people could convey less useful information than that obtainable by foreigners' networks. Moreover, assimilation to the host country culture, especially when perceived as a violation of the social norms of one's home country group, can lead to weaker social ties and, hence, to a lower level of in-group favoritism of one's common ancestry community. For the separation identity, the opposite obtains. Our results are, then, consistent with the hypothesis that the levels

Table 4 Social identity, acculturation, and employment

	Dependent variable: employment status			
	(1)	(2)	(3)	(4)
Home identity	0.077*** (0.017)		0.077*** (0.019)	0.164*** (0.045)
Host identity		0.025** (0.011)	0.030*** (0.011)	0.137** (0.060)
Home × Host				-0.114** (0.057)
Linear combinations: acculturation hypothesis				
Integrated (Home + Host + Home × Host)				0.187*** (0.049)
Integrated - Assimilated (Home + Home × Host)				0.050** (0.023)
Integrated - Separated (Host + Home × Host)				0.023** (0.009)
Assimilated - Separated (Host - Home)				-0.027 (0.025)
R ²	0.476	0.472	0.475	0.476
Observations	9265	9152	9081	9081
Countries of origin (#)	121	121	121	121
Municipalities (#)	222	220	220	220
Mean dependent variable	0.818	0.818	0.819	0.819

Linear probability model estimates. The dependent variable is a dummy equal to 1 for employed and 0 otherwise. All regressions include individual controls, municipality × country of origin fixed effects, week, and day of week × place of interview fixed effects. Individual controls are Proficiency in Italian language, Years in Italy (and its square), Age (and its square), Male, Compulsory school, High school, BA degree +, Have children, Married, and Religion dummies. The linear combinations in column (4) report the estimates of the acculturation strategies; accordingly, *Home identity* and *Host identity* identify the separation and assimilation strategies, respectively, while the effect of integration is given by the sum of the coefficients of *Home identity*, *Host identity*, and *Home identity* × *Host identity*. Sample weights used. Robust standard errors clustered at municipality level in parentheses; * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

of in-group favoritism and network externalities exploited by fully assimilated immigrants are not necessarily higher than those immigrants would obtain by focusing on their origin community with a separate identity.

4.3 Robustness

Concerns about the identification of the effects of identity on employment status may be attenuated by our baseline empirical strategy that exploits a tight variation across immigrants within the same ethnicity-Italian municipality pair, interviewed in the same week and within the same day of the week by place of interview cells.

The drawback can be that estimates are biased due to too little variation (e.g., too few observations within cells) and other modeling assumptions. Then, we first test that the corresponding Probit estimates are consistent and in line with the OLS results, although with the marginal effects weakly smaller in size.¹³ Furthermore, our estimates remain virtually identical when we exclude municipalities, countries of origin, and weeks cells with less than 10 or 20 observations as well as when we drop the two most over-sampled Italian regions (Tuscany and Lombardy). Our baseline results are also robust to alternative fixed effects, and to various one-way and multi-way clustering of standard errors.¹⁴

Nevertheless, selection of immigrants over individuals' characteristics, their sorting across municipalities, and measurement error induced by the self-reported nature of the survey answers may still be sources of bias. To exclude that these may affect our main conclusions, we perform the following robustness checks.

4.3.1 Other individuals' characteristics

In Table 5, we start excluding that the effects of identity on employment reflect other omitted individuals' characteristics and sample selection.

First, in columns (1)–(2) of Table 5, we restrict the sample to a more homogeneous group of individuals, excluding in (1) those who are in retirement age since older than 65 and in (2) also those who were born in Italy and those who have been in Italy for more than 20 years. Next, although we do not have direct information from the survey, we try to account for potential family and pre-migration economic characteristics (i.e., household or personal wealth). To this end, in columns (3) and (4), we exclude individuals who contemporaneously state they own a house and have been in Italy for only 2 and 5 years, respectively.¹⁵ The idea is that newly arrived migrants who state they own a house in Italy may disclose pre-migration wealth or characteristics that can simultaneously affect their identity formation and employment probability. Reassuringly, our baseline results remain stable in significance and magnitude. In columns (5) and (6), we account for the legal status of the immigrants as it may confound assimilation rate and employment outcomes. To mitigate concerns of bad controls and endogeneity, we proceed in two ways; in column (5), we include a dummy equal to one for individuals with a legal permit to stay and zero otherwise, while in column (6) we drop from the sample irregular immigrants without any legal permit. Results are in line with our baseline conclusions. The smaller

¹³ Due to the large number of fixed effects, the incidental parameter problem may be the source of this downward bias. For this and computational reasons, in the following, we report only linear probability estimates. Details are available upon request or in the working paper version.

¹⁴ Results are robust to introducing the fixed effects one-by-one, to adding municipality by week fixed effects and enlarging the geographical reference units by replacing the municipality by country of origin fixed effects with those of the Italian provinces by regions of the world. Likewise, findings do not change when we perform a variety of checks of one-way and multi-way clustering of standard errors on municipalities, countries of origin, weeks, days of week, and places of interview. Details are available upon request and in the working paper version.

¹⁵ About 17% of the full sample state they live in their own accommodation, with the remaining either in rented apartments (51%), shared houses (27%), or temporary places (5%).

Table 5 Robustness. Other individuals' characteristics

	Dependent variable: employment status						
	Sample restriction		Drop house owners and in Italy		Legal status		Age at arrival
	Working	All	Since 2 years	Since 5 years	Control	No irregular	Years in Italy FE
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
Home identity	0.164*** (0.045)	0.166*** (0.045)	0.171*** (0.045)	0.181*** (0.045)	0.166*** (0.046)	0.142*** (0.054)	0.116** (0.049)
Host identity	0.137** (0.060)	0.136** (0.063)	0.137** (0.060)	0.147** (0.063)	0.140** (0.061)	0.126** (0.062)	0.100** (0.049)
Home × Host	-0.114** (0.057)	-0.113* (0.060)	-0.117** (0.056)	-0.127** (0.060)	-0.120** (0.061)	-0.102* (0.061)	-0.063 (0.049)
Legal permit					0.156*** (0.028)		
Linear combinations: acculturation hypothesis							
Integrated	0.187*** (0.049)	0.189*** (0.049)	0.192*** (0.049)	0.201*** (0.049)	0.186*** (0.049)	0.166*** (0.057)	0.153*** (0.050)
(Home + Host + Home × Host)							
Integrated - Assimilated	0.050** (0.023)	0.053* (0.029)	0.054** (0.023)	0.054** (0.022)	0.046* (0.026)	0.039** (0.019)	0.053** (0.022)
(Home + Home × Host)							
Integrated - Separated	0.023** (0.009)	0.023** (0.009)	0.021** (0.010)	0.020** (0.009)	0.020** (0.008)	0.024** (0.009)	0.037*** (0.012)
(Host + Home × Host)							
Assimilated - Separated	-0.027 (0.025)	-0.030 (0.031)	-0.033 (0.026)	-0.034 (0.025)	-0.026 (0.025)	-0.016 (0.018)	-0.016 (0.023)
(Host - Home)							
R ²	0.475	0.490	0.471	0.472	0.486	0.512	0.624
Observations	9066	8707	9003	8882	8926	8047	9081
Countries of origin (#)	121	120	120	120	121	118	121
Municipalities (#)	220	220	220	220	220	218	220

Table 5 (continued)

Dependent variable: employment status						
Sample restriction		Drop house owners and in Italy		Legal status		Age at arrival
Working	All	Since 2 years	Since 5 years	Control	No irregular	Years in Italy FE
(1)	(2)	(3)	(4)	(5)	(6)	(7)
0.819	0.814	0.822	0.823	0.820	0.843	0.819

Linear probability model estimates. The dependent variable is a dummy equal to 1 for employed and 0 otherwise. All regressions include individual controls, municipality×country of origin fixed effects, week, and day of week×place of interview fixed effects. Column (7) includes also a full set of age at arrival×years in Italy fixed effects. Individual controls are Proficiency in Italian language, Years in Italy (and its square), Age (and its square), Male, Compulsory school, High school, BA degree +, Have children, Married, and Religion dummies. In columns (1)–(2), we restrict the sample to a more homogeneous group of individuals, including in column (1) only individuals in working age who are younger than 65 and in (2) individuals who were not born in Italy, who have been in Italy for less than 20 years, and who are younger than 65. In columns (3)–(4), we drop individuals who contemporaneously state they own a house and have been in Italy for only 2 and 5 years. In column (5), we add a dummy equal to 1 for individuals with a legal permit to stay and 0 otherwise, while in column (6) we drop irregular migrants without any permit. The linear combinations report the estimates of the acculturation strategies; accordingly, *Home identity* and *Host identity* identify the separation and assimilation strategies, respectively, while the effect of integration is given by the sum of the coefficients of *Home identity*, *Host identity*, and *Home identity*×*Host identity*. Sample weights used. Robust standard errors clustered at municipality level in parentheses; * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

point estimates signal that the legal status captures part of the willingness and rate of assimilation of the immigrants and that social identities may especially matter for those who need them the most, usually irregular immigrants who face stronger barriers to entry into the labor market (Gathmann and Keller 2018).

While in all the above specifications we account for the years spent in Italy as they can affect both identity formation and employment prospects of the immigrants (Abramitzky et al. 2014), in column (7) of Table 5, we force our baseline identification by adding a full set of *Age at arrival* \times *Years in Italy* fixed effects. Indeed, previous research has shown that also the age at arrival of immigrants can potentially affect their integration process and economic performance by shaping either skills or preferences, and hence their identity formation process, or both (Åslund et al. 2015; Bleakley and Chin 2004, 2010; Clots-Figueras and Masella 2013). However, both *Years in Italy* and *Age at arrival* may be potentially bad or endogenous controls, hence biasing our estimates. Most importantly, their effects may be not monotonic but depend on their interlinkages. Consider, for example, individuals of the same cohort of age of arrival but in the place of destination for different lengths of time; they are exposed to different processes of identity formation and accumulation of factors correlated with their economic performance. Likewise, immigrants from the same cohort of time spent in Italy, but arriving at different ages, tend to have different rates of assimilation and factor accumulation.¹⁶ Thus, in the last specification in column (7), we add a full set of *Age at arrival* \times *Years in Italy* fixed effects to account for the possibility that the time spent in the place of destination has a differentiated effect on both identity formation and economic performance depending on the age at arrival of the immigrants, and vice versa. Since coefficients are now estimated across individuals not only within the same municipality-country of origin cell but also within the same cohorts of age of arrival and length of time in Italy, this very demanding specification should allow us to further minimize concerns about selection, sorting, and also reverse causality of our baseline results. Results presented in column (7) are remarkably in line with our baseline conclusions, even though the point estimates of *Home identity* and *Host identity* become smaller. As a consequence, the interaction term becomes no longer statistically significant and the estimated effect for *Integrated* immigrants shrinks by about 3 percentage points with respect to the reference category of the *Marginalized*. Astonishingly, the employment premium that in our baseline estimates integrated immigrants hold with respect to the assimilated remains also quantitatively unaffected (around 5 percentage points).¹⁷

¹⁶ For instance, younger children learn languages more easily than older individuals, and this has been shown to be correlated with both employment probabilities and identity formation (Bleakley and Chin 2004, 2010; Clots-Figueras and Masella 2013). In our data, the positive effect of the time spent in Italy on employment rates is decreasing in the age at arrival, while its negative effect on the attachment to *Home identity* weakens more slowly for immigrants arriving early in life than for those arriving at a mature age.

¹⁷ Results are not driven by cells with “too few” individuals, as they are robust to excluding groups of *Age at arrival* and *Years in Italy* with less than 10 observations.

4.3.2 Sorting across municipalities of destination and selection by countries of origin

Other potential sources of bias of our baseline estimates are due to particular sorting patterns of immigrants across municipalities and to immigrants' selection over characteristics of home countries. For instance, immigrants more inclined to assimilate may choose to locate in municipalities with a more suitable environment to welcome them. As long as these municipalities are also those with differentiated employment possibilities, our baseline results would be biased. Likewise, individuals from home countries with particular cultural backgrounds may have different rates of assimilation and specific skills that affect their labor market performance. Consider, for example, immigrants who belong to countries with a long tradition of immigration to Italy. The long relationship between the sending and destination countries would facilitate the process of both cultural and economic adaptation to the host society, implying an upward bias in the estimates of the identity-employment relationship.

We deal with these concerns in different ways. First, in our estimates, we always use the large battery of municipality by country of origin fixed effects that capture any residual variation at municipality and country of origin level. Next, in an effort to allay any remaining concerns, we replicate our main estimates by excluding the bottom and top 5% of municipalities and countries of origin by total population, overall migrants' share of population, migrants' density per km^2 , unemployment rate, and per-capita income of the municipalities, as well as by geographic and cultural distances between Italy and home countries (Figures A.1-A.2-A.3 in the Online Appendix). Furthermore, we drop one-by-one the ten most representative countries of origin in the sample (Table A.1 in the Online Appendix). Under all these alternative permutations, coefficients remain remarkably stable and our main results valid.

4.3.3 Other measures of social identity

Our results hinge on the measures of the immigrants' self-identification with the countries of origin and destination. These indicators have the advantage of directly connecting the subjective attitudes and perceptions of the individuals to their identification process (Battu and Zenou 2010; Casey and Dustmann 2010; Nekby and Rodin 2010; Gorinas 2014). Furthermore, the specular survey questions asking the immigrants to declare how much do they feel to belong both to Italy and their country of origin allow us to measure rather finely the contemporaneous attachment of the immigrants to both origin and destination societies and, hence, to examine the labor market effects of also the acculturation strategies. However, some authors cast doubts about the suitability of such measures, since "subjective attitudes are just expressive manifestations of what is socially acceptable to say in public" (Algan et al. 2012 p.24). Consequently, these measures may depend on how the survey questions are designed and the answers collected, and they may capture only partially the actual feelings of the immigrants. Part of the literature, then, suggests inferring the immigrants' social identities from their actual behaviors using more objective indicators such as the use of language, intermarriage, and plans of citizenship, or

balancing both subjective and objective indicators (Bisin et al. 2011a; Constant and Zimmermann 2008; Constant et al. 2009a).

To take this into account, we use other measures of social identity and construct two pairs of proxies to discriminate between the simultaneous feelings toward both origin and destination countries (Table 6). Firstly, we experiment with a set of measures based on the immigrants' subjective judgments of their social identity. In particular, we measure the attachment to the country of origin (i.e., home identity) with the dummy *Interest in home country* equal to one if the respondent answers "Enough" or "Very Much" to the survey question "Are you interested in what happens in your home country?" and zero if the answer is "Far Too Little" or "Little." Conversely, we measure the host identity with the dummy *Glad to live in Italy* equal to one if the respondent answers "Good" or "Very Good" to the survey question "Overall, how are you in Italy?" and zero if the answer is "Neither good nor bad," "Bad," or "Very bad."¹⁸ The second set of measures of social identities captures relatively more objective attitudes and manifestations of the immigrants. We connect the home identity to the degree of homogamy or intra-ethnic marriages of the immigrants by constructing the dummy *Partner of same nationality* equal to one if the respondents state they are married or have a partner of the same nationality of origin and zero if the respondents state they have either no partner or a partner of other nationality, including the Italian one.¹⁹ Specularly, we measure the host identity with the dummy *Italian language at home* equal to one if immigrants answer 3 or more on a scale from 1 to 5, where 1 corresponds to "Never" and 5 to "Always," to the survey question "On a daily basis, how much do you use the Italian language at home/in the family?"²⁰ We also experiment constructing a pair of indexes using all the proxies for the home and host identities jointly in standard factor analysis and retaining the first principal component of each of the three indicators of social identities. Then, we construct the *Home identity Index* and *Host identity Index* as two dummies equal to one if the first principal components are greater or equal to their median values, and zero otherwise.²¹

As expected, the distribution of our subjective measures closely resembles those of our main self-identification indicators. In particular, the share of interviewed immigrants that state they are interested in what happens in their home country equals that of the immigrants that state they feel to belong to their country of origin

¹⁸ Piracha et al. (2022) also use a similar indicator to capture the strength of immigrants' social assimilation to the country of destination.

¹⁹ Among several studies, Adda et al. (2020), Angrist (2002), Bazzi et al. (2019), Bisin et al. (2016), Bisin and Tura (2019), and Meng and Gregory (2005) also use the rate of intermarriage or, conversely, of homogamy and intra-ethnic marriages as indicators of social assimilation and ethnic identity of the immigrants.

²⁰ Bazzi et al. (2019), Bleakley and Chin (2010), Clots-Figueras and Masella (2013), and Fouka (2019) also use the host country language at home as an indicator of the degree of assimilation of immigrants.

²¹ For both sets of home and host identity measures, the first principal components explain around 50% of the total variance; the factor loadings further show that the first components are equally driven by the self-identification and subjective variables, whereas the objective indicators contribute only to a lesser extent. These features also explain that the composite indexes are strongly correlated with the self-identification and subjective measures but only poorly correlated with the objective indicators.

Table 6 Other measures of social identity and acculturation strategies

Host	Home	Interest in home country		Total
		1	0	
Glad to live in Italy	1	Integrated 62.03%	Assimilated 6.79%	68.8%
	0	Separated 28.79%	Marginalized 2.39%	31.2%
Total		90.8%	9.2%	100%

Host	Home	Partner of same nationality		Total
		1	0	
Italian language at home	1	Integrated 17.39%	Assimilated 27.84%	45.2%
	0	Separated 29.58%	Marginalized 25.19%	54.8%
Total		47%	53%	100%

(a) Subjective measures

(b) Objective measures

(i.e., 90.8% in panel 6a as in Table 2). A similar pattern emerges for the host identity and the four acculturation strategies. The share of immigrants that state they are glad to live in Italy is only slightly greater than that of the immigrants that state they feel to belong to the country of destination; this also explains the partially over-representation of the integrated immigrants across the four acculturation strategies with respect to the case when we use our main self-identification measures. Looking at the relatively more objective manifestations of the immigrants’ social identity, panel 6b indicates that the distributions of *Partner same nationality* and *Italian language at home* are more homogeneous than those induced by the self-identification and subjective measures above.²²

Table 7 reports the estimates of the specifications when we use the other subjective and objective proxies for the social identities to validate our baseline results and provide broader evidence of the labor market effects of the identification process of the immigrants. Columns (1)–(5) present the estimates when we use the other subjective measures, *Interest in home country* and *Glad to live in Italy*, as proxies for the attachment to, respectively, the home and host countries. Reassuringly, our baseline results remain stable in significance and magnitude. Both the measures of home and host social identities maintain the positive correlation with the probability of employment of the immigrants and drive the labor market premium of the integrated immigrants also with respect to the assimilated and separated ones.

Next, in columns (6)–(10), we repeat our exercise using the set of objective measures, *Partner same nationality* and *Italian language at home*. It is remarkable that, despite the different distributions between the self-identification, subjective, and objective measures, our baseline results remain confirmed when we use more objective proxies for the social identities. We do not only continue to share with the literature the positive correlation between host identity and employment as we find that the immigrants using the Italian language at home have a statistically significant and positive probability of being employed. Considerably, our baseline results that the immigrants with a stronger attachment to the country of origin have a higher probability of employment remain also confirmed when we use the more objective

²² The cross-tabulations of the indexes across the four acculturation strategies and the pairwise correlations of all the measures of social identities are in Tables A.2–A.3 in the Online Appendix.

indicators. In particular, contrary to previous results pointing to a positive association between intermarriage and employment (Meng and Gregory 2005), we find that immigrants who retain a stronger attachment to their country of origin by choosing a partner of the same nationality have a greater probability of employment than those who choose exogamous relationships. This result is stable across the parsimonious and saturated specifications, where we use the proxies for both the home and host identities jointly. In particular, integrated immigrants who contemporaneously choose a partner of the same nationality and speak the Italian language at home continue to have a probability of employment higher than that of assimilated and separated immigrants, who retain only one of the two identities. Finally, findings remain stable and confirmed when we use the indexes of social identities.

Overall, the estimates in Table 7 reassure that our baseline findings are not driven by randomness in the subjective judgments of the immigrants but that they are likely uncovering a robust and deep correlation between the attachments to the home and host countries, the formation of multiple identities, and the labor market performance of the immigrants.

5 Sources of the economic effects of integration

So far, we have established that regardless of the measure used as a proxy for the social identities, integrated immigrants are more likely to be employed than all the others — assimilated, separated, and marginalized immigrants. To uncover what drives our findings, we now turn our attention to the possible sources of this differentiated performance and the potential mechanisms behind the economic effects of integration. To this end, we focus on integrated immigrants and, for different outcomes y_{iom} , estimate the following model:²³

$$y_{iom} = \beta \text{Integrated}_{iom} + \mathbf{X}'_{iom} \delta + \alpha_{om} + \lambda_w + \mu_{dp} + \varepsilon_{iom}, \quad (2)$$

where Integrated_{iom} is the dummy equal to one if immigrants i from country of origin o in the Italian municipality m declare the contemporaneous attachment to both home and host countries according to either the self-identification, subjective or objective measures, or zero otherwise. Following our main empirical strategy, we always include the vector \mathbf{X}_{iom} of basic individual-level characteristics, the set of municipality by country of origin (α_{om}), week (λ_w), and day of the week by place of interview (μ_{dp}) fixed effects and we also add age at arrival by years in Italy fixed effects to strengthen our identification (see Table 5).²⁴

²³ Results of the full model of the four acculturation strategies are available upon request.

²⁴ Results are robust to excluding these age at arrival by years in Italy fixed effects and are available upon request.

Table 7 Social identity, acculturation, and employment. Other measures of social identities

Dependent variable: employment status														
Other measures of identity														
Subjective					Objective					Index				
Home identity: interest in home country					Home identity: partner same nationality					Home identity index				
Host identity: glad to live in Italy					Host identity: Italian language at home					Host identity index				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Home identity (other measure)	0.060***	0.061***	0.119***	0.137***	0.034**	0.038**	0.035*	0.036*	0.065***	0.065***	0.113***	0.126***		
	(0.020)	(0.022)	(0.041)	(0.045)	(0.014)	(0.015)	(0.020)	(0.022)	(0.016)	(0.019)	(0.027)	(0.032)		
Host identity (other measure)	0.085***	0.087***	0.158***	0.181***	0.028**	0.042***	0.040**	0.032*	0.066***	0.075***	0.141***	0.159***		
	(0.016)	(0.015)	(0.046)	(0.055)	(0.014)	(0.014)	(0.017)	(0.019)	(0.012)	(0.013)	(0.037)	(0.036)		
Home × Host (other measures)	-0.077	-0.109*	(0.054)	(0.055)	(0.025)	(0.025)	(0.027)	(0.027)	0.005	0.020	-0.075*	-0.100**	(0.042)	(0.040)
Integrated (Home + Host + Home × Host)	0.200***	0.209***	0.080***	0.088***	0.080***	0.080***	0.088***	0.088***	0.179***	0.186***	(0.027)	(0.028)		
	(0.033)	(0.044)	(0.025)	(0.026)	(0.025)	(0.025)	(0.026)	(0.026)	(0.027)	(0.027)	(0.027)	(0.028)		
Integrated - Assimilated (Home + Home × Host)	0.042	0.028	0.040**	0.056***	0.040**	0.040**	0.056***	0.056***	0.038	0.027	(0.027)	(0.028)		
	(0.029)	(0.028)	(0.019)	(0.017)	(0.019)	(0.019)	(0.017)	(0.017)	(0.027)	(0.027)	(0.027)	(0.028)		
Integrated - Separated (Host + Home × Host)	0.081***	0.073***	0.045**	0.052**	0.045**	0.045**	0.052**	0.052**	0.066***	0.060***	(0.015)	(0.014)		
	(0.018)	(0.018)	(0.021)	(0.024)	(0.021)	(0.021)	(0.024)	(0.024)	(0.021)	(0.024)	(0.015)	(0.014)		
Assimilated - Separated	0.039	0.045	0.004	-0.004	0.004	0.004	-0.004	-0.004	0.028	0.033				

Table 7 (continued)

		Dependent variable: employment status														
		Other measures of identity														
Subjective		Objective					Index									
Home identity: interest in home country		Home identity: partner same nationality					Home identity index									
Host identity: glad to live in Italy		Host identity: Italian language at home					Host identity index									
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)		
		No		Yes		No		Yes		No		No		Yes		
		(0.029)		(0.034)		(0.015)		(0.018)		(0.024)		(0.030)				
(Host - Home)	No	No	No	Yes	No	No	No	No	Yes	No	No	No	No	Yes		
Age at arrival X Years in Italy FE	0.477	0.481	0.485	0.629	0.477	0.475	0.479	0.479	0.636	0.481	0.477	0.486	0.486	0.647		
R ²	0.298	0.314	0.262	0.262	0.262	0.262	0.262	0.262	0.262	0.262	0.262	0.262	0.262	0.262		
Observations	122	121	121	121	122	122	122	122	122	121	121	121	121	121		
Countries of origin (#)	222	222	222	222	222	221	221	221	221	222	219	219	219	219		
Cities (#)	0.818	0.818	0.818	0.818	0.821	0.821	0.825	0.825	0.825	0.822	0.822	0.826	0.826	0.826		
Mean dependent variable																

Linear probability model estimates. The dependent variable is a dummy equal to 1 for employed and 0 otherwise. All regressions include individual controls, municipality X country of origin fixed effects, week, and day of week X place of interview fixed effects. Individual controls are Proficiency in Italian language, Years in Italy (and its square), Age (and its square), Male, Compulsory school, High school, BA degree +, Have children, and Religion dummies. The dummy Married is absorbed by the Partner same nationality dummy and hence dropped in columns (6)–(15). The linear combinations report the estimates of the acculturation strategies: accordingly, Home identity and Host identity identify the separation and assimilation strategies, respectively, while the effect of integration is given by the sum of the coefficients of Home identity, Host identity, and Home identity X Host identity. Sample weights used. Robust standard errors clustered at municipality level in parentheses; *p < 0.1; **p < 0.05; ***p < 0.01.

5.1 Heterogeneous effects of integration

Table 8 presents the first set of results, where the variable of interest is the dummy *Employed*. The main explanatory variable is the dummy *Integrated* measured by the different proxies of social identities; then, the coefficient β now identifies the employment prospects of integrated immigrants with respect to those not integrated — assimilated, separated, or marginalized.

To start with, columns (1) and (2) corroborate our main results that integrated immigrants have an employment probability higher than that of all the others. Depending on the specification without (col. 1) or with (col. 2) age at arrival by years in Italy fixed effects and the measures used, the estimates indicate that integrated immigrants, who retain a strong attachment toward their country of origin in addition to absorbing the host country identity, are between 4 and 8 percentage points more likely to be employed than all the other immigrants. Results from the more stringent specification in column (2) also show that the coefficients of *Integrated* are very close across the models using the different self-identification, subjective, and objective measures and the composite index to construct the integration dummies (panels A–D). Overall, the very close magnitude of the *Integrated* coefficients across the different measures is also a further check that our main results are not driven by random judgments of the immigrants and correspondingly measurement errors.

Thus, in columns (3)–(10), we explore possible sources of these findings, splitting the sample across some relevant characteristics of the individuals. Columns (3) and (4) report estimates for gender subsamples and show that the effect of integration is slightly stronger among the female group, with the probability of employment of the integrated women between 7 and 14 percentage points higher than that of non-integrated women depending on the measure and indicator used (col. 4). The decomposition along the four acculturation strategies derived from the baseline self-identification measures further highlights that this effect is driven by the higher employment rates of the integrated women with respect to those assimilated and separated, among which, instead, we do not find any statistically significant difference in the probability of employment, as in our baseline specifications (Fig. 3). Conversely, among the male group, results are more mixed; the effect of integration is generally smaller than that detected among the female group, and it is barely statistically significant, if anything, with respect to the assimilated and separated males.

Next, we consider the effects of splitting the sample among immigrants below and above the median length of time in Italy (6 years) and the median age at arrival in Italy (27 years old). Looking at the heterogeneity by years in Italy, columns (5) and (6) show the effect of integration among *Short* and *Long* stay immigrants, who have been in Italy for less or more than 6 years, respectively. Based on our baseline self-identification measures, we find that only the coefficients for immigrants in Italy for a short period are statistically significant (panel A). This evidence suggests that those who benefit relatively more from the integration process appear the most vulnerable immigrants, with little experience in Italy and, hence, with low adaptation, and small specific human capital to spend on the labor market. A similar prediction emerges when distinguishing *Young* and *Old* immigrants by their age at arrival

Table 8 Heterogeneous gains from integration

Dependent variable: employment status										
Baseline	Gender		Years in Italy			Age at arrival		Education		
	Estimates	Male	Female	Short	Long	Young	Old	Low	High	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
Panel A — baseline self-identification measures										
<i>Integrated</i> \equiv <i>Home</i> \times <i>Host identities</i>										
Mean dependent variable	0.819	0.819	0.805	0.835	0.733	0.894	0.827	0.810	0.794	0.833
Integrated	0.035***	0.045***	0.044**	0.072***	0.066***	0.016	0.032	0.079***	0.065***	0.011
	(0.009)	(0.012)	(0.017)	(0.017)	(0.019)	(0.017)	(0.020)	(0.020)	(0.022)	(0.015)
R ²	0.474	0.623	0.759	0.802	0.710	0.695	0.678	0.748	0.823	0.743
Observations	9081	9081	5141	3940	4601	4480	4541	4540	3656	5425
Panel B — subjective measures										
<i>Integrated</i> \equiv <i>Interest in home</i> \times <i>Glad to live in Italy</i>										
Mean dependent variable	0.818	0.818	0.806	0.835	0.731	0.896	0.827	0.809	0.793	0.833
Integrated	0.081***	0.073***	0.059**	0.086***	0.067***	0.060***	0.088***	0.083***	0.093***	0.064***
	(0.015)	(0.015)	(0.023)	(0.019)	(0.019)	(0.017)	(0.021)	(0.024)	(0.022)	(0.017)
R ²	0.484	0.627	0.757	0.802	0.708	0.691	0.680	0.748	0.822	0.740
Observations	9262	9262	5236	4026	4702	4560	4628	4634	3714	5548
Panel C — objective measures										
<i>Integrated</i> \equiv <i>Partner same nationality</i> \times <i>Italian language at home</i>										
Mean dependent variable	0.825	0.825	0.820	0.831	0.736	0.901	0.835	0.814	0.806	0.836
Integrated	0.050***	0.060***	0.030	0.141***	0.062*	0.046**	0.088***	0.069**	0.077**	0.057***
	(0.019)	(0.020)	(0.019)	(0.029)	(0.033)	(0.018)	(0.023)	(0.027)	(0.037)	(0.021)
R ²	0.478	0.635	0.760	0.816	0.724	0.698	0.683	0.766	0.829	0.751
Observations	8490	8490	4876	3614	4201	4289	4327	4163	3412	5078

Table 8 (continued)

Dependent variable: employment status											
Baseline		Gender		Years in Italy			Age at arrival		Education		
Estimates		Male		Female		Short	Long	Young	Old	Low	High
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(10)	
Panel D — social identity index											
<i>Integrated</i> \equiv <i>Home index</i> \times <i>Host index</i>											
Mean dependent variable	0.826	0.820	0.834	0.739	0.901	0.838	0.814	0.807	0.838	0.838	
Integrated	0.068*** (0.014)	0.063*** (0.013)	0.049*** (0.017)	0.092*** (0.021)	0.041** (0.016)	0.069*** (0.015)	0.086*** (0.022)	0.124*** (0.021)	0.029* (0.016)	0.029* (0.016)	
R ²	0.484	0.644	0.825	0.729	0.714	0.692	0.773	0.838	0.765	0.765	
Observations	8234	8234	4731	4058	4176	4195	4039	3317	4917	4917	

Linear probability model estimates. The dependent variable is a dummy equal to 1 for employed and 0 otherwise. All regressions include municipality \times country of origin fixed effects, week, and day of week \times place of interview fixed effects. Individual controls are Proficiency in Italian language, Years in Italy and Age (and their square), Male, Compulsory school, High school, BA degree +, Have children, and Religion dummies. The dummy Married is absorbed by the *Partner same nationality* dummy and hence dropped in panel C. From column (2) onward, we also introduce age at arrival \times years in Italy fixed effects and drop Years in Italy and Age (and their square) from the base set of individual characteristics. We exclude the Male dummy in columns (3) and (4), and the education dummies in columns (9) and (10). Sample weights used. Robust standard errors clustered at municipality level in parentheses; * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

in Italy. According to the estimates from our baseline self-identification measure in columns (7) and (8) of panel A, the effect of integration is statistically significant only for *Old* immigrants who arrived at a mature age and potentially have a high attachment to the original ethnic culture, and encounter more obstacles during their adaptation and learning process (i.e., language, specific human capital). These findings are supported by the breakdown into the four acculturation strategies according to which integrated immigrants for a short time in Italy and arriving in Italy in adulthood are more likely to be employed than assimilated, separated, and marginalized, while no statistically significant differences arise for the corresponding opposite groups (Fig. 3). The results are finally confirmed when we use the other proxies for social identities, even though the differential effects of integration across the subgroups become smaller (panels B–D). In these cases, the coefficients are statistically significant across both the two pairs of subgroups, but the labor market effect of integration continues to be stronger for the immigrants since a short period in Italy and for those who arrived at a mature age.

Lastly, in columns (9) and (10), we look separately at the effects of integration for low educated, with no or compulsory education, and highly educated immigrants, with high school, a bachelor's degree, or higher degree. Likewise the other cases, the evidence broadly indicates that the labor market effect of integration is higher for the lower educated immigrants as we find that the coefficients among the low educated group are always higher than those among the highly educated group, for which the effect of integration further results not statistically significant in different specifications. Consistently, we detect a statistically significant labor market premium for the low educated integrated immigrants, with respect to those assimilated and separated, but not for the highly educated who are integrated (Fig. 3).

Overall, the significant heterogeneity we detect suggests that those who benefit relatively more from the simultaneous identification with host and home country groups are the less secure and more discriminated individuals for whom the integration process may guarantee greater participation in extended networks and social inclusion.

5.2 Mechanisms

The previous analysis prompts a possible mechanism through which integration may encourage the employment chances of immigrants; namely, the simultaneous identification with both home and host country groups grants access to extended networks that are the source of job market information and opportunities. To corroborate this interpretation, in Table 9, we present more direct evidence on the networks and types of communities that integrated immigrants (are willing to) join and interact with. We start looking at the friends' network using three dummies: *Foreign*, *Italian*, and *Both*, each of them equal to one if immigrants have friends, respectively, mainly foreign, mainly Italian or of both nationalities, and zero otherwise. Then, we analyze another type of social network that informs on the associations the immigrants may join. To this end, we construct four dummies: *Foreign*, *Italian*, *Both*, and *No association*, each of them equal to one if immigrants actively take part in associations

constituted mainly by foreigners, mainly by Italians, by both groups or if they do not join any associations, and zero otherwise. The evidence in panel A from our baseline self-identification measures shows that integrated immigrants are more likely to have both Italian and foreign friends and less likely to have only foreign friends (cols. 1–3). Likewise, results in columns (4)–(7) establish that integrated immigrants are more likely to join associations of Italians and foreigners and less likely not to participate in any associations. This pattern is confirmed when we compare the four acculturation strategies according to the networks the immigrants mostly join. Figure 4 illustrates, in particular, that integrated migrants are more likely to have friends and join associations of both Italians and foreigners also than assimilated and separated immigrants. Otherwise, two quite opposite behaviors emerge, when we compare assimilated and separated immigrants. As expected, assimilated immigrants are less likely to have only foreign friends and more likely to have only Italian friends, while the reverse holds for the separated ones. Overall, these findings reveal that the labor market over-performance of the integrated immigrants can be connected to their higher propensity to join more diversified networks with respect to assimilated and separated. A high degree of networks diversity can, indeed, support relatively more immigrants who face more concentrated labor markets, as in the case of Italy, where there is a strike separation between formal and informal economy and immigrants are concentrated in particular sectors. Our results are confirmed when we also use the alternative measures of integration (panels B–D).

In Table 10, we further examine this channel by providing evidence of the influence of the networks on the labor market performance of the immigrants. Panel A presents estimates of the relationship between friendship and the employment status of immigrants. We find that immigrants with mostly Italian friends or both Italian and foreign friends do not have an employment probability greater than those with predominantly foreign friends (the reference category). However, the results obtained by splitting the sample between integrated and not integrated immigrants reveal that this lack of an average effect is due to the heterogeneous impact of the network.²⁵ The estimates in columns (2) and (3) show, indeed, that a positive and statistically significant correlation between friends' network and employment emerges only for the integrated immigrants, consistently with our hypothesis that integration favors the labor market performance of the immigrants by fostering the participation in extended and more diversified networks. In the rest of the table, we deepen our analysis of the heterogeneous effects of local and ethnic networks by investigating their labor market impact at the different stages after immigrants have moved to Italy.²⁶ In particular, in columns (4)–(9), we examine the effects of friendship on the probability of employment of immigrants who have been in Italy for a short and long time. The results indicate that having both local and ethnic friends or hanging out mainly with Italian friends supports the employment status only of integrated immigrants who have been in Italy for a short time (cols. 4–6), while the network effect disappears in the long run (cols. 7–9). Next, panel B reports the

²⁵ We use our baseline self-identification measures to distinguish between integrated and not integrated. Results remain stable when we use the other measures of social identity.

²⁶ We thank an anonymous referee for raising this point.

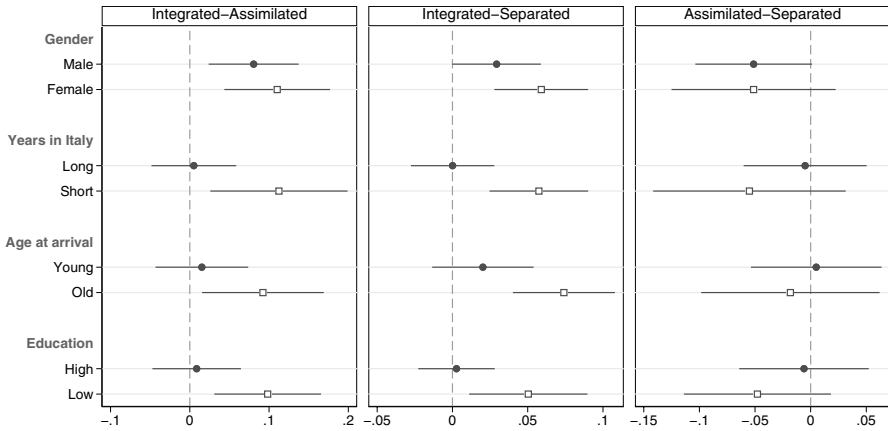


Fig. 3 Heterogeneity effects across the acculturation strategies. The figure displays the coefficients of the acculturation strategies derived as the linear combinations of the baseline self-identification measures *Home identity* and *Host identity* by the different subgroups. Intervals reflect 90% confidence levels. Full regressions are available upon request

network-employment analysis for the case of participation in associations. Unlike the results on the friendship’ network, we find that joining an association of Italian and foreign people or characterized by a prevalence of Italians increases the participation in the labor market of integrated immigrants who have been in Italy for a long time. In line with previous findings (Piracha et al. 2022), this evidence points to the different roles that the formal and informal networks would play over time. On one side, integrated immigrants who have recently arrived in Italy benefit mainly from the networks of friends, likely because this network is easier accessible in the short term. On the other side, in the long run, immigrants appear to benefit the most from the network of associations, which are probably more efficient than friendship in supporting the job search but also harder to join in a short time.

5.3 Other outcomes

In this last section, we try to substantiate our findings by investigating whether the highest employment probability of the integrated immigrants is triggered by specific advantages in some sectors of economic activity and if integration also affects the intensive margin and the job quality of the immigrants. To this end, we firstly estimate separate regressions using six mutually-exclusive dummies: *Agriculture*, *Industry*, *Commerce*, *Service to firms*, *Service to people*, and *Other*, each of them taking value one if immigrants are employed in the specific sector and zero if employed in the other sectors.²⁷ Results from Table 11 indicate that heterogeneity in

²⁷ Although multinomial logit estimations are computationally unfeasible due to the large number of fixed effects, we find that OLS and multinomial logit estimates from basic models without fixed effects return very similar results, both in statistical significance and magnitude of the coefficients. Results available upon request are also robust to the inclusion of the unemployed category in the sector employment dummies.

Table 9 Mechanisms. Friends and associations networks

	Dependent variable						
	Friends' type			Association composed by			
	Foreign	Italian	Both	Foreign	Italian	Both	No association
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Panel A — baseline self-identification measures							
<i>Integrated</i> \equiv <i>Home</i> \times <i>Host identities</i>							
Mean dependent variable	0.511	0.156	0.333	0.081	0.036	0.101	0.782
Integrated	-0.144***	0.009	0.135***	-0.007	0.008	0.041***	-0.042**
	(0.027)	(0.015)	(0.020)	(0.014)	(0.005)	(0.011)	(0.020)
R^2	0.621	0.597	0.543	0.586	0.598	0.595	0.609
Observations	10451	10451	10451	10271	10271	10271	10271
Panel B — subjective measures							
<i>Integrated</i> \equiv <i>Interest in home country</i> \times <i>Glad to live in Italy</i>							
Mean dependent variable	0.512	0.155	0.333	0.083	0.036	0.098	0.783
Integrated	-0.060***	0.000	0.060***	0.017	0.007	0.030***	-0.054***
	(0.018)	(0.013)	(0.012)	(0.015)	(0.005)	(0.007)	(0.016)
R^2	0.606	0.591	0.531	0.582	0.590	0.586	0.602
Observations	10657	10657	10657	10464	10464	10464	10464
Panel C — objective measures							
<i>Integrated</i> \equiv <i>Partner same nationality</i> \times <i>Italian language at home</i>							
Mean dependent variable	0.510	0.155	0.335	0.084	0.036	0.096	0.784
Integrated	-0.054**	0.017	0.037*	0.041**	0.019*	0.002	-0.062***
	(0.025)	(0.016)	(0.019)	(0.017)	(0.011)	(0.014)	(0.022)
R^2	0.618	0.612	0.547	0.606	0.620	0.600	0.619
Observations	9766	9766	9766	9592	9592	9592	9592
Panel D — social identity index							
<i>Integrated</i> \equiv <i>Home index</i> \times <i>Host index</i>							
Mean dependent variable	0.508	0.156	0.335	0.081	0.036	0.098	0.784
Integrated	-0.136***	-0.002	0.137***	0.016	0.018***	0.045***	-0.080***
	(0.023)	(0.016)	(0.022)	(0.013)	(0.005)	(0.010)	(0.019)
R^2	0.636	0.624	0.565	0.613	0.633	0.610	0.631
Observations	9455	9455	9455	9298	9298	9298	9298

Linear probability model estimates. All regressions include basic individual controls, municipality \times country of origin, week, day of week \times place of interview, and age at arrival \times years in Italy fixed effects. Individual controls are Proficiency in Italian language, Years in Italy and Age (and their square), Male, Compulsory school, High school, BA degree +, Have children, and Religion dummies. The dummy Married is absorbed by the *Partner same nationality* dummy and hence dropped in panel C. Sample weights used. Robust standard errors clustered at municipality level in parentheses; * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

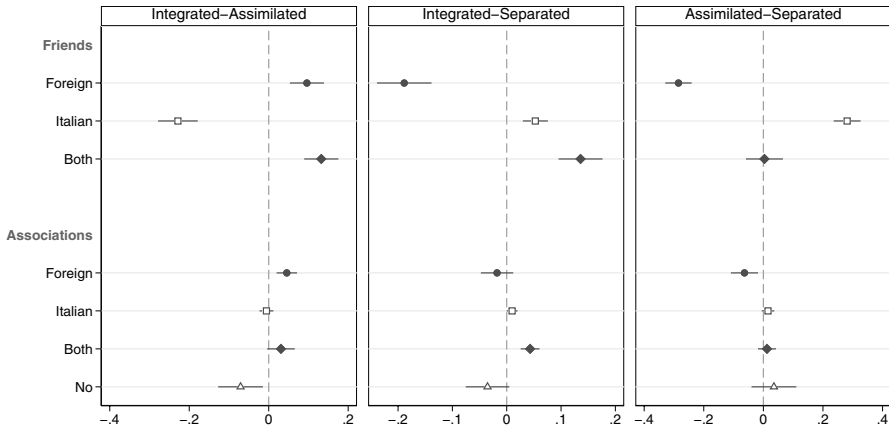


Fig. 4 Network mechanisms across the acculturation strategies. The figure displays the coefficients of the acculturation strategies derived as the linear combinations of the baseline self-identification measures *Home identity* and *Host identity* by the different subgroups. Intervals reflect 90% confidence levels. Full regressions are available upon request

the sector of employment of the immigrants should not drive our main results. The only statistically significant correlation we find indicates that integrated immigrants are 4 percentage points less likely to work in the *Commerce* sector. Since occupation in the commerce sector is likely most facilitated by the identification with and participation in either the local or one’s ethnic community (i.e., small ethnic shops), we interpret these findings as evidence that absorbing multiple social identities causes integrated immigrants to bear psychological and transaction costs without any additional returns. Consistently, Fig. 5 shows that immigrants with unique or oppositional social identities (Battu et al. 2007; Battu and Zenou 2010) are more likely to find a job in the commerce sector than integrated ones. Conversely, in the industry and service sectors, the interaction with both destination and original ethnic groups widens the spectrum of the networks that allow integrated immigrants to be more likely to find a job than do assimilated individuals.

The last two columns of Table 11 explore the effects of integration on the intensive margin of immigrants’ economic performance. Exploiting survey information about labor income, we use two variables: *Income classes*, collected as an eight-class measure and, for robustness, *Income dummy* equal to one for incomes greater than 1000 Euros and zero otherwise. In these two latter specifications, we also include the full set of sector fixed effects. Results indicate that integration status does not affect the intensive margin of the economic performance since there is no statistically significant difference in the income prospects of integrated and non-integrated immigrants when we use either the eight-class measure of income (col. 7) or the dummy variable equal to one for incomes greater than 1000 Euros and zero otherwise (col. 8).

Overall, our findings are consistent with a network mechanism according to which the impact of identity is driven by the effect that the (act of) belonging to

Table 10 Network, employment, and social identity

		Dependent variable: employment status									
Baseline		Short			Long						
All	Integrated	Not integrated	All	Integrated	Not integrated	All	Integrated	Not integrated	All	Integrated	Not integrated
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(7)	(8)	(9)
Panel A — network type: friends											
Mean dependent variable	0.819	0.853	0.787	0.734	0.771	0.712	0.895	0.907	0.876	0.907	0.876
Mainly Italian	0.004	0.044*	-0.001	0.008	0.140**	-0.013	0.017	-0.012	-0.047	-0.012	-0.047
	(0.022)	(0.025)	(0.037)	(0.038)	(0.061)	(0.064)	(0.032)	(0.033)	(0.050)	(0.033)	(0.050)
Both	0.009	0.027*	-0.017	0.039**	0.057**	0.0125	-0.003	0.017	-0.043	0.017	-0.043
	(0.015)	(0.016)	(0.021)	(0.018)	(0.026)	(0.030)	(0.018)	(0.022)	(0.043)	(0.022)	(0.043)
R ²	0.617	0.785	0.766	0.704	0.867	0.816	0.683	0.849	0.895	0.849	0.895
Observations	9254	4393	4598	4703	1841	2710	4551	2552	1888	2552	1888
Panel B — network type: associations											
Mean dependent variable	0.819	0.854	0.787	0.733	0.770	0.711	0.896	0.909	0.877	0.909	0.877
Italian	0.022	0.093**	0.049	-0.117**	-0.058	-0.217*	0.140***	0.223***	0.087	0.223***	0.087
	(0.029)	(0.047)	(0.077)	(0.055)	(0.125)	(0.124)	(0.035)	(0.072)	(0.106)	(0.072)	(0.106)
Both	0.050*	0.063	-0.005	-0.006	-0.021	-0.078	0.081**	0.091**	-0.145	0.091**	-0.145
	(0.027)	(0.039)	(0.053)	(0.064)	(0.084)	(0.085)	(0.032)	(0.040)	(0.089)	(0.040)	(0.089)
No association	-0.060**	0.003	-0.090**	-0.111**	-0.092	-0.077	0.019	0.090**	-0.121***	0.090**	-0.121***
	(0.0250)	(0.033)	(0.042)	(0.046)	(0.073)	(0.069)	(0.027)	(0.041)	(0.043)	(0.041)	(0.043)
R ²	0.627	0.784	0.770	0.713	0.863	0.817	0.688	0.854	0.896	0.854	0.896
Observations	9102	4322	4530	4616	1807	2664	4486	2515	1866	2515	1866

Linear probability model estimates. The dependent variable is a dummy equal to 1 for employed and 0 otherwise. All regressions include basic individual controls, municipality × country of origin, week, day of week × place of interview, and age at arrival × years in Italy fixed effects. Individual controls are Proficiency in Italian language, Male, Compulsory school, High school, BA degree +, Have children, Married, and Religion dummies. Sample weights used. Robust standard errors clustered at municipality level in parentheses; * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

communities has on the access to the labor market through in-group favoritism and information sharing.

5.4 Further discussion on identities and networks

Our findings highlight the role of the individuals' choice of networks as a relevant channel through which social identities may determine immigrants' labor market outcomes. Contrary to this interpretation, another explanation could be that pre-existing and exogenous communities shape the social identity of the immigrants (Lazear 1999; Bazzi et al. 2019). According to this alternative explanation, it would not be the social identity that shapes the relationships that migrants build during their stay in the host society, but rather it would be the ethnic composition of pre-existing local communities that influences the choice of identity by affecting the costs and benefits of assimilating to the destination country culture or retaining one's ethnic identity.

To explore the validity of this possibility, in the absence of specific data on pre-existing networks, we analyze whether the integration of immigrants from any given country is affected by the size of their community in their residing area, computed as the share of same origin immigrants living in the municipality with respect to the overall municipality population. Since data on the country of origin composition of the municipalities are available only from the official census (ISTAT) for 2004–2009, we proceed in two ways. First, to exploit the whole sample, we regress the self-identification measure of integration on a time-invariant version of this share, computed at the year before the survey, at the end of 2007. Next, under the hypothesis that, at least when immigrants arrive in a place, individuals from the same country of origin form immigrants' most likely network, we restrict our analysis to those arriving in Italy between 2004 and 2009, and compute the migrants' share for each year before the arrival of each immigrant. Table 12 presents the results. Starting with the more parsimonious specifications, in columns (1) and (10), we find no evidence of correlation, on average, between the probability of integration and the share of immigrants residing in Italy before immigrants enter. Next, we add to the right-hand side the interaction terms between the migrants' share and a set of individuals' characteristics, and we continue to find that immigrants' origin group does not affect integration. Columns (2)–(3) and (11) show that there is no heterogeneity across males and females in the effects of the composition of local communities on identity. Reassuringly, the same pattern holds also when we consider the interaction term between the migrants' share and the years spent in Italy by the immigrants. Under the hypothesis that it is the exogenous networks that shape the identity of the individuals, we should, indeed, expect also that the effect of networks is stronger for newly arrived immigrants.²⁸ Results in columns (4)–(5) and (12) and Fig. 6 do not support this hypothesis since the years spent in Italy have no impact on the marginal effects of the country of origin community of the immigrants. More

²⁸ We thank an anonymous referee for highlighting this point.

Table 11 Effects of integration on sector employment and income

	Dependent variable									
	Employment in					Income				
	Agriculture	Industry	Commerce	Service firms	Service people	Other	Classes	Dummy		
Mean dependent variable	0.026 (1)	0.193 (2)	0.196 (3)	0.119 (4)	0.303 (5)	0.162 (6)	2.558 (7)	0.329 (8)		
Integrated	0.001 (0.005)	0.024 (0.015)	-0.040* (0.021)	0.021 (0.016)	-0.001 (0.013)	-0.005 (0.013)	0.032 (0.056)	0.006 (0.012)		
R ²	0.593	0.677	0.667	0.609	0.762	0.604	0.814	0.699		
Observations	7912	7912	7912	7912	7912	7912	9158	9158		
Countries of origin (#)	117	117	117	117	117	117	119	119		
Municipalities (#)	219	219	219	219	219	219	226	226		

Linear probability model estimates. All regressions include basic individual controls, municipality × country of origin, week, day of week × place of interview, and age at arrival × years in Italy fixed effects. Individual controls are Proficiency in Italian language, Male, Compulsory school, High school, BA degree +, Have children, Married, and Religion dummies. Sample weights used. Robust standard errors clustered at municipality level in parentheses; * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

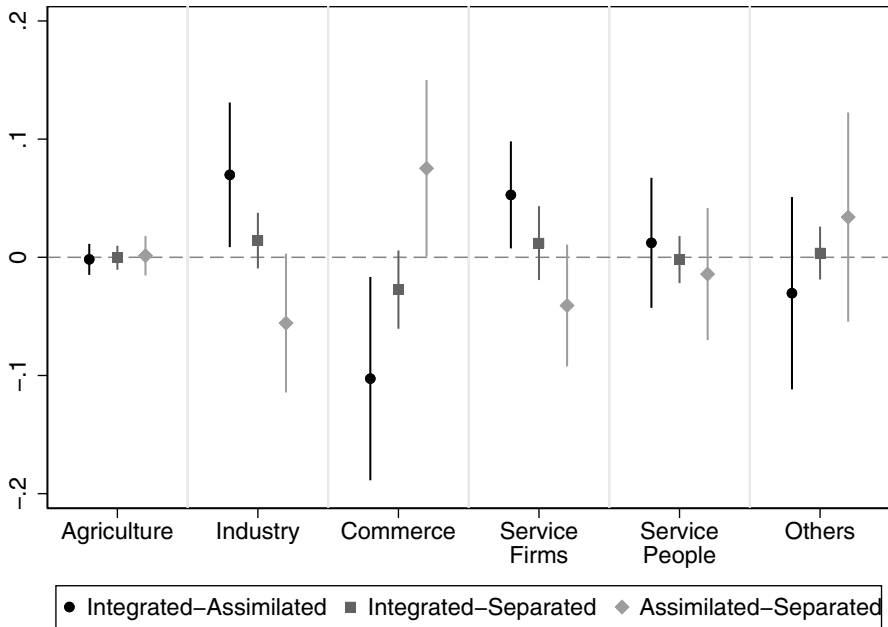


Fig. 5 Acculturation strategies and sector employment. The figure displays the coefficients of the acculturation strategies derived as the linear combinations of the baseline self-identification measures *Home identity* and *Host identity* by the different subgroups. Intervals reflect 90% confidence levels. Full regressions are available upon request

starkly, Fig. 6 highlights that, in both the full and restricted sample, the municipality share of immigrants’ origin group does not affect the identity of not even the immigrants just arrived (i.e., in Italy for only 0 or 1 year), for whom the origin community should be the more likely source of networks. We find similar results also in the remaining columns when we analyze the heterogeneous effects by age at arrival and educational levels of the immigrants.

Overall, these findings corroborate our hypothesis that it is the identity of the immigrants that shapes and determines their participation at the different networks and not the contrary (Cai and Zimmermann 2020; Piracha et al. 2022). Indeed, even though the choice of social identity could be in principle influenced by pre-existing networks, this does not seem to apply the Italian case because our results point to the direct and relevant role of social identity in shaping the values and norms to which immigrants adhere and then the local networks they choose to live with. This is not surprising when considering that the dramatic expansion of the migration phenomenon and the rapid change in the ethnic composition with the arrival of new ethnic groups occurred in few years. This Italian migratory pattern has then restrained the formation of consolidated and well-established ethnic communities able to influence the choice of identity of the newly arrived immigrants.

Table 12 Network effect on identity

		Dependent variable: integrated														
		Full sample							Restricted sample							
		Share before survey (constant value at end 2007)														
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
Migrants' share		0.004 (0.016)	0.000 (0.023)	0.010 (0.015)	0.007 (0.025)	0.014 (0.027)	0.159 (0.133)	0.153 (0.133)	0.210 (0.158)	0.096 (0.113)	0.114 (0.134)					
Migrants' share × Male			0.008 (0.017)	0.002 (0.018)							0.030 (0.026)					
Years in Italy				-0.001 (0.001)	-0.001 (0.001)				0.043 (0.037)							
Age at arrival					-0.000 (0.001)	0.000 (0.001)							0.002 (0.002)			
Compulsory									-0.008 (0.023)	-0.002 (0.026)				0.052 (0.118)		
High school									-0.007 (0.031)	0.009 (0.031)				0.042 (0.092)		
BA degree +									-0.033 (0.033)	-0.002 (0.031)				0.003 (0.087)		
Municipality FE	Yes	Yes	-	Yes	Yes	-	Yes	-	Yes	-	-	-	-	-	-	
Country of Origin FE	Yes	Yes	-	Yes	Yes	-	Yes	-	Yes	-	-	-	-	-	-	
Municipality × Origin FE	No	No	Yes	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R ²	0.193	0.193	0.397	0.193	0.398	0.193	0.397	0.193	0.193	0.397	0.728	0.728	0.728	0.728	0.728	
Observations	10,552	10,552	10,552	10,552	10,552	10,552	10,552	10,552	10,552	10,552	4047	4047	4047	4047	4047	
Countries of origin (#)	122	122	122	122	122	122	122	122	122	122	103	103	103	103	103	
Municipalities (#)	229	229	229	229	229	229	229	229	229	229	201	201	201	201	201	

Table 12 (continued)

Dependent variable: integrated														
Full sample							Restricted sample							
Share before survey (constant value at end 2007)														
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Mean dependent variable	0.494	0.494	0.494	0.494	0.494	0.494	0.494	0.494	0.494	0.388	0.388	0.388	0.388	0.388

Linear probability model estimates. The dependent variable is a dummy equal to 1 for integrated individuals and 0 otherwise. All regressions include individual controls, week, and day of week \times place of interview fixed effects. Individual controls are Proficiency in Italian language, Years in Italy (and its square), Age (and its square), Male, Compulsory school, High school, BA degree +, Have children, Married, and Religion dummies. In the full sample, the migrants' share is the municipality-country of origin share (over total municipality population) of migrants computed from official statistics (ISTAT) in December 2007 before the survey. In the restricted sample, the migrants' share is the municipality-country of origin share (over total municipality population) of migrants computed from official statistics (ISTAT) in the January of the year of arrival in Italy and it is time-varying and depends on the year of arrival of the migrants. Since data from ISTAT are available only since 2004 onward, the specifications in columns (10)–(14) are restricted to the individuals arrived in Italy between 2004 and 2009. Since the restricted sample regressions in columns (10)–(14) exploit the year of arrival in Italy of migrants, then we also include a set of municipality \times year of arrival and country of origin \times year of arrival fixed effects to account for selection effects generated by push and pull factors. Sample weights used. Robust standard errors clustered at municipality level in parentheses; * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

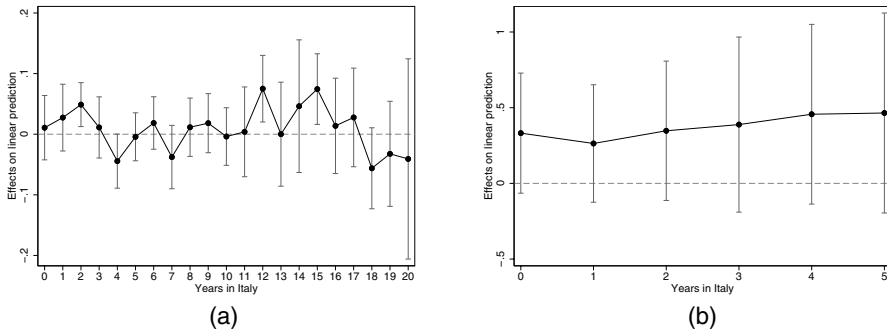


Fig. 6 Marginal effects of municipality-country of origin share of migrants by years in Italy. The share (over total municipality population) of migrants from country of origins o in municipality m is computed from official census (ISTAT) at **a** December 2007, before the survey started (full sample), and **b** at the year before individuals arrived in Italy. In this latter case, the sample is restricted to migrants arrived in Italy between 2004 and 2009. Figure in panel **a** is based on column (4) of Table 12, figure in panel **b** on column (12)

6 Concluding remarks

Immigrants' integration in Europe represents a priority in the political agenda of the European Community. Many studies recently carried out in several European countries indicate that self-identification with the culture and customs of the country of destination improves the economic inclusion of immigrants, while a strong social identity has, if any, a detrimental impact. Yet, evidence about Italy is quite scant. To our knowledge, this is the first paper exploring the integration process of immigrants in Italy which challenges this view.

We provide strong and robust evidence that integrated immigrants, who simultaneously retain a strong ethnic identity and absorb the identity of the host country, have the highest probability of being employed in Italy. By contrast, assimilated immigrants, who strongly identify with the host country while rejecting their home country identity, are no more likely to be employed than separated immigrants who retain a strong sense of identity only with their original ethnic group, while rejecting the host country culture.

Analysis of the potential mechanisms suggests that, although simultaneous identification with both host and home country groups can be costly, the positive effect of multiple social identities is especially triggered by the belonging to local networks. We corroborated this idea first by showing that integration benefits to a greater extent the immigrant workers who generally face stronger barriers to entry in the labor market: specifically, women and low-skilled, as well as those with little experience in Italy and arriving in Italy at older ages. We then presented direct evidence on the networks that integrated immigrants join and interact with, showing that integrated immigrants are more likely to have both Italian and foreign friends and to join associations of both Italians and foreigners. We further show that integration status guarantees an employment probability premium in industry and services sectors, but it penalizes entry into commerce and it does not affect labor income.

Our results have an important policy implication, highlighting the fact that integration policies which promote full assimilation models, i.e., policies that push for greater identification with the destination country, without allowing for immigrants to retain their origin culture, could be ineffective or, at least, not ensure the best potential pay-off for foreigners.

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Declarations

Conflict of interest The authors declare no competing interests.

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References

- Abramitzky R, Boustan LP, Eriksson K (2014) A nation of immigrants: assimilation and economic outcomes in the age of mass migration. *Journal of Political Economy* 122(3):467–506
- Adda J, Pinotti P, Tura G (2020) There’s more to marriage than love: the effect of legal status and cultural distance on intermarriages and separations. Discussion paper 14432, Centre for Economic Policy Research, London, https://cepr.org/active/publications/discussion_papers/dp.php?dpno=14432
- Akerlof GA, Kranton RE (2000) Economics and identity. *Quarterly Journal of Economics* 115(3):715–753
- Akerlof GA, Kranton RE (2005) Identity and the economics of organizations. *Journal of Economic Perspectives* 19(1):9–32
- Algan Y, Bisin A, Verdier T et al (2012) *Cultural integration of immigrants in Europe*. Oxford University Press, Oxford

- Ambrosini M (2013) Immigration in Italy: between economic acceptance and political rejection. *Journal of international migration and integration* 14(1):175–194
- Amiot CE, de la Sablonnière R, Terry DJ et al (2007) Integration of social identities in the self: toward a cognitive-developmental model. *Personality and Social Psychology Review* 11:364–388
- Angelini V, Casi L, Corazzini L (2015) Life satisfaction of immigrants: does cultural assimilation matter? *Journal of Population Economics* 28(3):817–844
- Angrist J (2002) How do sex ratios affect marriage and labor markets? Evidence from America's second generations. *The Quarterly Journal of Economics* 117(3):997–1038
- Antman FM, Duncan B, Trejo SJ (2020) Ethnic attrition, assimilation, and the measured health outcomes of Mexican Americans. *Journal of Population Economics* 33(4):1499–1522. <https://doi.org/10.1007/s00148-020-00772-8>
- Åslund O, Böhlmark A, Skans ON (2015) Childhood and family experiences and the social integration of young migrants. *Labour Economics* 35:135–144
- Austen-Smith D, Fryer RD (2005) An economic analysis of acting white. *Quarterly Journal of Economics* 120:551–583
- Bachmann R, Baumgarten D (2013) How do the unemployed search for a job? Evidence from the EU Labour Force Survey. *IZA Journal of European Labor Studies* 2(1):2–22
- Battu H, Zenou Y (2010) Oppositional identities and employment for ethnic minorities: evidence from England. *Economic Journal* 120:F52–F71
- Battu H, Mwale M, Zenou Y (2007) Oppositional identities and the labour market. *Journal of Population Economics* 20:643–667
- Bazzi S, Gaduh A, Rothenberg AD et al (2019) Unity in diversity? How intergroup contact can foster nation building. *The American Economic Review* 109(11):3978–4025
- Berry JW (1980) Acculturation as varieties of adaptation. In: Padilla AM (ed) *Acculturation: theory, models and some new findings*. Westview, Boulder, CO, pp 9–25
- Berry JW (1997) Immigration, acculturation and adaptation. *Applied Psychology: an International Review* 46(1):5–68
- Bisin A, Patacchini E, Verdier T et al (2011) Ethnic identity and labour market outcomes of immigrants in Europe. *Economic Policy* 25(65):57–92
- Bisin A, Patacchini E, Verdier T et al (2011) Formation and persistence of oppositional identities. *European Economic Review* 55(8):1046–1071
- Bisin A, Patacchini E, Verdier T et al (2016) Bend it like Beckham: ethnic identity and integration. *European Economic Review* 90:146–164
- Bisin A, Tura G (2019) Marriage, fertility, and cultural integration in Italy. Working paper 26303, National Bureau of Economic Research. <https://doi.org/10.3386/w26303>
- Bleakley H, Chin A (2004) Language skills and earnings: evidence from childhood immigrants. *Review of Economics and statistics* 86(2):481–496
- Bleakley H, Chin A (2010) Age at arrival, English proficiency, and social assimilation among US immigrants. *American Economic Journal: Applied Economics* 2(1):165–92
- Cai S, Zimmermann KF (2020) Social assimilation and labor market outcomes of migrants in China. GLO Discussion Paper 716, Global Labor Organization (GLO), Essen
- Calvó-Armengol A, Jackson MO (2004) The effects of social networks on employment and inequality. *The American Economic Review* 94(3):426–454
- Carillo MR, Dessy O (2012) L'identità etnica degli immigrati stranieri in Italia: quale modello di integrazione? In *Flussi migratori e capitale umano. Una prospettiva regionale*, Carocci, Rome
- Casey T, Dustmann C (2010) Immigrants' identity, economic outcomes and the transmission of identity across generations. *Economic Journal* 2:F31–F51
- Cesario V, Blangiardo GC (2009) *Indici di integrazione, un'indagine empirica sulla realtà migratoria italiana*. Franco Angeli, Milan
- Chen Y, Li SX (2009) Group identity and social preferences. *American Economic Review* 99(1):431–457
- Clots-Figueras I, Masella P (2013) Education, language and identity. *The Economic Journal* 123(570):F332–F357
- Constant A, Nottmeyer O, Zimmermann K (2012) Cultural Integration in Germany. In: Algan Y, Bisin A, Verdier T, et al (eds) *Cultural integration of immigrants in Europe*. Oxford University Press, chap 3, p 55–74
- Constant AF, Zimmermann KF (2008) Measuring ethnic identity and its impact on economic behaviour. *Journal of the European Economic Association* 6:424–433

- Constant AF, Zimmermann KF (2009) Work and money: payoffs by ethnic identity and gender. *Research in Labor Economics* 29:3–30
- Constant AF, Gataullina L, Zimmermann KF (2009) Ethnosing immigrants. *Journal of Economic Behavior and Organization* 69:274–287
- Constant AF, Roberts R, Zimmermann KF (2009) Ethnic identity and immigrant homeownership. *Urban Studies* 46(9):1879–1898
- Delaporte I (2019) Ethnic identity and the employment outcomes of immigrants: evidence from France. GLO Discussion Paper 345, Global Labor Organization (GLO), Essen
- Drydakis N (2013) The effect of ethnic identity on the employment of immigrants. *Review of Economics of the Household* 11(2):285–308
- Dustmann C, Fasani F, Speciale B (2017) Illegal migration and consumption behavior of immigrant households. *Journal of the European Economic Association* 15(3):654–691
- Finotelli C, Sciortino G (2009) The importance of being southern: the making of policies of immigration control in Italy. *European Journal of Migration and Law* 11(2):119–138
- Fondazione ISMU (2020) XXV RAPPORTO SULLE MIGRAZIONI 2019. Franco Angeli Edizioni
- Fordham S, Ogbu JU (1986) Black students' school success: coping with the "Burden of Acting White". *The Urban Review* 18(3):176–206
- Fouka V (2019) Backlash: the unintended effects of language prohibition in US schools after World War I. *The Review of Economic Studies* 87(1):204–239
- Fryer RG, Torelli P (2010) An empirical analysis of "acting white". *Journal of Public Economics* 94(5–6):380–396
- Gaertner SL, Dovidio JF (2000) Reducing intergroup bias: the common ingroup identity model. Psychology Press, Philadelphia, PA
- Galli F, Russo G (2019) Immigration restrictions and second-generation cultural assimilation: theory and quasi-experimental evidence. *Journal of Population Economics* 32(1):23–51
- Gathmann C, Keller N (2018) Access to citizenship and the economic assimilation of immigrants. *The Economic Journal* 128(616):3141–3181
- Gorinas C (2014) Ethnic identity, majority norms, and the native-immigrant employment gap. *Journal of Population Economics* 27(1):225–250
- Guriev S, Speciale B, Tuccio M (2018) How do regulated and unregulated labor markets respond to shocks? Evidence from immigrants during the Great Recession. *The Journal of Law, Economics, and Organization* 35(1):37–76
- Islam A, Raschky P (2015) Genetic distance, immigrants' identity and labour market outcome. *Journal of Population Economics* 28(3):845–868
- Lazear EP (1999) Culture and language. *Journal of Political Economy* 107(S6):S95–S126
- Mancinelli S, Mazzanti M, Piva N et al (2009) Education, reputation or network? Evidence on migrant workers employability. *Journal of Socio-Economics* 39:64–71
- Masella P (2013) National identity and ethnic diversity. *Journal of Population Economics* 26(2):437–454
- Meng X, Gregory RG (2005) Inter-marriage and the economic assimilation of immigrants. *Journal of Labor Economics* 23(1):135–174
- Nekby L, Rodin M (2010) Acculturation identity and employment among second and middle generation immigrants. *Journal of Economic Psychology* 31:35–50
- Oh S (2021) Does identity affect labor supply? working paper 9487, CESifo
- Pendakur K, Pendakur R (2005) Ethnic identity and the labour market. Working Paper Series 05–10, Vancouver Centre of Excellence
- Phinney JS, Horenczyk G, Liebkind K et al (2001) Ethnic identity, immigration, and well-being: an interactional perspective. *Journal of Social Issues* 57(3):493–510
- Pinotti P (2017) Clicking on heaven's door: the effect of immigrant legalization on crime. *American Economic Review* 107(1):138–68
- Piracha M, Tani M, Cheng Z et al (2022) Social assimilation and immigrants' labour market outcomes. *Journal of Population Economics*. <https://doi.org/10.1007/s00148-021-00883-w>
- Tajfel H (1978) Differentiation between social groups: studies in the social psychology of intergroup relations. Academic Press, Oxford, England
- Tajfel H, Turner JC (1979) An integrative theory of intergroup conflict. In: Austin WG, Worchel S (eds) *The social psychology of intergroup relations*. Brooks-Cole, Monterey, CA, pp 33–47
- Tragaki A, Rovolis A (2014) Immigrant population in Italy during the first decade of the 21st century: changing demographics and modified settlement patterns. *European Urban and Regional Studies* 21(3):286–300