Immigrants and Legal Status: Do Personal Contacts Matter?

Paper published in *Population, Space and Place* 27(1), 2020.

Simone Cremaschi
Università Bocconi
Dondena Centre for Research on Social Dynamics and Public Policy
ORCiD: 0000-0001-9032-855X
simone.cremaschi@unibocconi.it

Carlo Devillanova
Università Bocconi
Dondena Centre for Research on Social Dynamics and Public Policy,
CReAM, and Fondazione Franceschi
ORCiD: 0000-0002-7579-2386
carlo.devillanova@unibocconi.it

Abstract

Using unique Italian survey data on both documented and undocumented immigrants, we empirically quantify the correlation between different types of personal contacts and immigrants' documentation probability, while also disentangling the contacts' indirect associations via immigrant labour market outcomes (employment status and job characteristics). Our results indicate that contacts with both natives and family members have a positive and quantitatively large effect on immigrant documentation probability conditional on a large set of covariates. Contacts with members of the same ethnic group, in contrast, increase documentation probability only moderately, an effect explainable by these co-ethnics' association with employment probability. Moreover, our findings support the hypothesis that native contacts can connect immigrants with jobs that favour documentation.

Keywords: Immigrant integration; legal status; personal contacts; networks; labour market outcomes

---

We would like to thank Diego Gambetta, Johanna Gereke, Max Schaub, Hannes Kröger, Lorenzo Cappellari, Simone Ghislandi, Francesco Fasani, Tommaso Frattini, Paolo Pinotti, and participants at Dondena DoReMe (Milan, 2014), Siep (Pavia, 2014), AlpPop (LaThuile, 2015), the MPI–EUI Graduate Workshop (San Domenico di Fiesole, 2015), ECSR (Tallin, 2015), ALUM (Mannheim 2016), WZB MaD Colloquium (Berlin 2017) for helpful comments and suggestions. Simone Cremaschi thanks Fondazione Roberto Franceschi for financial support during part of the research. The usual disclaimer applies.

Corresponding author: Simone Cremaschi, Dondena Centre, Bocconi University, via Guglielmo Rontgen, 1, 20136 Milano, Italy.

1 INTRODUCTION

Undocumented immigration is at the core of the policy debate in most destination countries, with U.S. estimates being around 11.5 million (Hoefer et al., 2011) and European (EU–27) figures ranging between 1.9 and 3.8 million (Vogel et al., 2011). Legal status not only shapes immigrants' integration outcomes—including employment and wages (Borjas & Tienda, 1993), remittances (Amuedo-Dorantes & Mazzolari, 2010), and consumption behaviours (Dustmann et al., 2017)—but is a key factor of stratification within immigrant groups (Jasso, 2011; Menjívar, 2006). Yet, despite the great concern over and the pervasive effects of immigrant legal status, undocumented immigration remains an underexplored field, and knowledge about the process of accessing and retaining legal status is limited (Cvajner & Sciortino, 2010).

This paper contributes to the literature by empirically assessing the association between the personal contacts of immigrants and immigrants' probability of having legal status. Whereas previous studies highlight the relevance of the personal contact–legal status relation by focusing on specific pathways like no-visa entry (Liu, 2015; Massey et al., 2014; Singer & Massey, 1998; Vickstrom, 2014), overstaying and falling into irregularity (Vickstrom, 2014), and access to legalization programs (Hagan, 1998), we address the overall effect of personal contacts on documentation probability while also uncovering their indirect effect via their influence on the labour market (Calvó-Armengol & Jackson, 2004; Granovetter, 1973; Montgomery, 1994). Although largely overlooked in the research to date, immigrants' labour market outcomes—in terms of both employment status and job characteristics—are key not only in work-related entry and legalization schemes (Chauvin et al., 2013) but also in those that condition eligibility on different requirements, such as residence conditions (Hagan, 1994, 1998).

Based on our literature review, we conclude that personal contacts may have contrasting effects on legal status and that this effect is likely to vary across different contact types. We also conclude that personal contacts increase the probability of having legal status if they positively associate with the probability of being employed and with job characteristics that can favour documentation, such as more-stable employment relationships. Therefore, while we remain agnostic on the association between personal contacts and legal status, we make two key testable predictions about the role of labour market outcomes in shaping the link between different contact types and documentation probability.

To test these predictions, we use a unique survey dataset collected in the southern Italian region of Calabria during the period 2007–2008. In addition to covering both documented and undocumented immigrants, these data include a proxy for personal contacts. Although irregularity is admittedly a multifaceted phenomenon that encompasses complex definitional issues (Jandl, 2004; Kraler, 2009), in our empirical investigation documented immigrants are identified as those who hold a residence permit that also allows them to work. Personal contacts are measured with a question asking about familial (family members), ethnic (same ethnic group), and native contacts available in Italy before arrival. Although this proxy imperfectly captures contacts availability after arrival, it solves any issues of reverse causality, a common concern in this research field. We are thus able to identify how personal contacts correlate with legal status and to assess their indirect effects via the labour market. In doing so, we also provide new quantitative evidence on how the personal contacts of immigrants influence their employment probability and specific job characteristics. To the best of our knowledge, this study not only is one of the very few to employ a sample that includes undocumented immigrants but is also the first to address this issue using Italian data. The latter is important because although research documents immigrants' heavy reliance on personal contacts to navigate a complex bureaucratic system, cope with limited channels of

legalization, and circumvent barriers on the official labour market (Ambrosini, 2012; Riccio, 2001), a systematic study of the role of immigrants' contacts in the Italian context remains lacking.

The regions on Europe's southern border, like Calabria, while characterized by poor economic conditions (Eurostat, 2016), have all experienced a dramatic increase in immigrant inflows in recent years (UNDESA, 2016) and have similar models of immigration (King, 2000). However, although scholars have noted that support via migrant networks is subject to severe constraints in such poor contexts (Cranford, 2005; Mahler, 1995; Menjívar, 2000; Rosales, 2014), a serious absence of microdata hampers our knowledge of immigrants' integration in the area, including labour market and legal status outcomes and the effect of personal contacts. Our study thus aims to begin filling this void.

Our estimates do provide evidence that having a personal contact increases documentation probability, but they reveal sharp differences across contact types. In particular, whereas the marginal effect of native contacts on legal status is about 20 percentage points independent of the controls included in the regression model, the effect of ethnic contacts is less than 10 percentage points and drops to zero once we control for employment status. This result suggests that co-ethnics help immigrants gain legal status mainly because they increase employment probability. This intuition is supported by our explicit examination of indirect labour market effects, which identifies a large positive impact of ethnic contacts on immigrant employment that is not evident for familial and native contacts. Our results also indicate that ethnic contacts are associated with occupations that are less likely to provide access to regularization programs, whereas the opposite seems to hold for native contacts. Taken together, these findings point to a complex interrelation between the personal contacts of individual immigrants and their legal and labour outcomes.

2 PERSONAL CONTACTS AND LEGAL STATUS

2.1 Documentation

In our study, we are interested in how personal contacts affect immigrants' legal status in the destination country, represented by "documented" and "undocumented" on the right side of Fig. 1. Although the political discourse on irregular migration tends to stress illegal entry (Vollmer, 2011), represented by the "no-visa" entry option in the figure, the latter accounts for a relatively small fraction of the undocumented population (Triandafyllidou, 2010). Rather, there is substantial mobility across legal statuses (Cvajner & Sciortino, 2010; Vickstrom, 2014), as illustrated by the eventual granting of humanitarian-protection-based residence permits to many of the visa-less forced immigrants landing on Mediterranean coasts. Moreover, once arrived, undocumented immigrants who meet specific eligibility criteria can access the regularization initiatives that are common in major immigration countries (Casarico et al., 2015; Kraler, 2009).[1] In many nations, however, the vast majority of undocumented immigrants are those who have remained in the host country after the expiration of a visa or temporary residence permit.[2] Such undocumented presences are influenced by immigrant decisions to stay or to move back to their homeland or to a new destination. The three possibilities available to immigrants—regularization, irregularity, and outmigration—are graphed in Fig. 1 as options (b), (c), and (d), respectively. All such transitions across legal statuses—and ultimately, the probability of immigrants holding a residence permit at a given time—depend not only on the institutional and legal context (De Genova, 2004, 2013) but also on push and pull migration factors and the economic and social

[1] Regularization initiatives have granted legal status to over 5 million individuals in the EU since 1996 (Brick, 2011).

[2] Visa overstayers account for up to 70% of undocumented presences in Italy (Fasani, 2010).

resources accessible to immigrants (Massey et al., 2014). Our analysis focuses on the role of personal contacts.

Fig. 1 about here

2.2 The Role of Personal Contacts

Scholars have long noted how social interaction shapes many realms of the migration and adaptation process (Boyd, 1989; Massey et al., 1987), including the migration decision (Massey & Espinosa, 1997), assimilation in terms of labour market outcomes (Munshi, 2003), linguistic skills (Chiswick & Miller, 2005), welfare use (Bertrand et al., 2000), political participation (Hritzuk & Park, 2000), and naturalization (Abascal, 2017).[3] Also emphasized has been the role of personal contacts in immigrant documentation, first articulated by Hagan (1994) in her analysis of regularization among undocumented Maya immigrants in Houston. Subsequent research has pointed to the relevance of personal contacts in determining specific legal-status transitions (as depicted in Fig. 1) by focusing on the migration streams between Mexico and the U.S. (Massey et al., 2014; Singer & Massey, 1998) and between sub-Saharan Africa and Europe (Liu, 2015; Poeze, 2010; Vickstrom, 2014). Personal contacts substantially alter immigrants' perception of the costs associated with illegality, such as missed access to welfare programs and civil rights, and the chances of accessing and maintaining legal status. Research also highlights the role of contacts in

[3] The literature on the effects of personal contacts largely overlaps with studies on social networks and social capital (see Bourdieu, 1980; Coleman, 1988; Durlauf & Ioannides, 2010; Lin, 2001), where the latter is defined as "the ability of actors to secure benefits by virtue of their membership in social networks or other social structures" (Portes, 1998, p. 6).

conveying information, providing material assistance and emotional and cultural support, and exerting normative pressure.[4]

No-visa entry. The contrasting effects of personal contacts on visa entry (Liu, 2015) may range from the facilitation of illegal entry through pre-arrival border-crossing information and post-arrival material assistance to the encouragement and support of legal entry (Poeze, 2010) through dissemination of information on and assistance with visa application procedures and visa-related programs (e.g., family-reunification or sponsor-based schemes). Contacts may also express disapproval of illegal border-crossing attempts. Nevertheless, research identifies no clear effect of personal contacts on no-visa entry (Liu, 2015; Vickstrom, 2014)—although contacts with migration experience strongly predict undocumented trips (Massey et al., 2014)—and large heterogeneity across measures of social capital and areas of origin (Liu, 2015; Massey et al., 2014).

Overstay and irregular stay. Research suggests that personal contacts increase immigrants' chances of survival in irregularity by offering such material resources as housing and/or financial and logistic support and by compensating for immigrants' limited access to formal services (Cvajner & Sciortino, 2010; Rosales, 2013). Personal contacts can also transmit information on how to circumvent institutional constraints and to access alternative welfare services like health care (Devillanova, 2008; Huschke, 2014; Menjívar, 2002). We find no explicit conceptualization of the link between personal contacts and overstaying in the literature. Nevertheless, Vickstrom (2014) documents a negative impact of having

[4] In general, personal contacts are expected to alter individuals' desires, beliefs, and opportunities by modifying the costs and benefits associated with the related behaviors (Hedström, 2005). See also DiMaggio and Garip (2012) for a typology of network-effect mechanisms.

children or a spouse in the destination region on the probability of overstaying as well as no significant effect for the number of other personal contacts.

Regularization. Personal contacts may affect the individual probability of gaining legal status after arrival, not only by helping undocumented immigrants meet eligibility requirements but also by influencing individual desire to apply for legalization. Examples of the former channel include providing the stable accommodation needed for application, financial aid, information on the technical workings of the application, and, as in the context of the 1986 U.S. IRCA, affidavits to support it (Hagan, 1994, 1998). As for the latter channel, personal contacts can shape individuals' beliefs about the expected benefit of applying for amnesty. For example, in the case of IRCA, after a few months, formal eligibility was no longer a significant consideration for migrants applying for legalization, which depended more strongly on information on stories of successful legalization within the community (Hagan, 1998, 63). Hagan (1998) also documented how the labour market consequences of different types of personal contacts played a key role in explaining program take-up rates: for example, how the segregation of women in live-in domestic jobs found through co-ethnic referral prevented access to legalization.

Employment. In general, personal contacts increase immigrant documentation probability if they correlate positively with the *probability of being employed* and, conditional on employment, with *job characteristics* that are relevant for accessing and maintaining legal status. This link, although documented for the U.S. IRCA, is likely to be even stronger for the work-related entry schemes and legalization initiatives common across the globe.[5] For example, not only does having a stable occupation make it easier to prove past

[5] Legal entry under visa-sponsorship schemes, common in major immigration countries, conditions the issuance and/or renewal of a residence permit on having an employer willing to support the application. Employment-based legalization programs and mechanisms (Brick, 2011) are particularly likely in European (Chauvin et al., 2013) and especially southern

residence and employment experience, but job stability reduces the probability of falling into irregularity if renewal is conditional on being employed. In employment-based regularization initiatives whose application procedures require employer involvement (Chauvin et al., 2013), personal contacts can better connect job seekers with employers willing to participate in the process. Hence, although the vast literature on the labour market effects of personal contacts is heterogeneous in terms of adopted measures and analytic methodologies, it generally agrees that the effects—on either employment probabilities, wages, or other job characteristics—can vary greatly with contact type (Burt, 2001; Granovetter, 1973; Lin, 1999; Portes, 1998). Indeed, the quantitative evidence on immigrants' personal contacts indicates broad effect heterogeneity across contact types.[6] For instance, although contacts with natives do appear to raise employment probability (Kanas et al., 2011; Lancee, 2010), the effect on income and upward mobility remains unclear (Lancee, 2010; Moroșanu, 2016; Kanas et al., 2012). Conversely, personal contacts did appear to enhance the employment outcomes of Mexican immigrants in the U.S. (Munshi, 2003), although their effectiveness varied by both contact type (friendship vs. familial ties) and legal status (Aguilera & Massey, 2003; Amuedo-Dorantes & Mundra, 2007). Research has also shown that contacts are helpful in finding employment only in comparably low positions in the labour market (Kalter &

European countries (Kraler, 2009). Employment requirements also played an important role in the U.S., where the 1986 IRCA-SAW program legalized over 1.2 million unauthorized immigrants conditional on their having been employed in the agricultural sector.

[6] In general, the identification of causal relations for personal contacts is extremely demanding in terms of data and/or experimental variation (Blume et al., 2011; Mouw, 2006). This fact, together with a distressing scarcity of suitable data, explains why, other than the notable exceptions of Kanas et al. (2011, 2012) and Kalter and Kogan (2014), causal evidence from the European context remains limited. Studies based on impersonal contacts—measured by the spatial proximity of individuals similar in ethnicity, language, or country of origin—do provide more causal evidence of a positive effect on immigrants' employment probabilities and earnings, but allow no differentiation between contact types (Damm, 2014; Martén et al., 2019).

Kogan, 2014), producing detrimental effects in segmented labour markets by lowering wages and employment probabilities (Enchautegui, 2002; Green et al., 1999) and/or leading to ethnically concentrated jobs (Elliott, 2001).

Heterogeneous effects. Outside the labour market arena too, access to personal contacts does not necessarily imply a positive effect on integration outcomes. For example, the negative impacts of immigrant networks may include the damaging effects of levelling and in-group norms on individual economic advancement and integration (Portes & Sensenbrenner, 1993). In particular, studies point to the limited functioning of social support networks among immigrants in poor contexts. Indeed, access to personal contacts does not necessarily imply their activation: this latter depends much on the resources and the normative judgement of the potential helpers, and different contacts tend to provide specific forms of assistance depending on the intimacy and trust shared with the person in need (Menjívar,, 2002). Evidence from poor immigration contexts thus tends to highlight the negative effects of immigrant contacts as possible conduits of misinformation (Menjívar, 2002; Rosales, 2014), channels of exploitation (Cranford, 2005; Mahler, 1995; Rosales, 2014) and occupational segregation (Hondagneu-Sotelo, 2001; Ramirez & Hondagneu-Sotelo, 2009), and sources of damaging envy and competition (Mahler, 1995; Menjívar, 2002).

3 HYPOTHESES

To empirically address the association between immigrants' personal contacts and documentation probability, which the above research suggests is theoretically ambiguous, we put forward the following mutually exclusive hypotheses:

Hypothesis 1a: Personal contacts will be associated with a higher probability of being documented.

Hypothesis 1b: Personal contacts will be associated with a lower probability of being documented.

Personal contacts are expected to increase documentation probability if immigrants improve their employment outcomes in terms of both employment probability and job characteristics. This link, however, is likely to vary based on type of personal contact. We summarize these observations in the form of two testable predictions:

Hypothesis 2: Under H1a (H1b), the association between personal contacts and legal status will decline (increase) in absolute value when the employment status is included in a model predicting documentation probability for those contacts associated with a higher employment probability.

Considering first the case of a positive association between contact type and legal status (H1a), we hypothesize that it will be partially driven by the employment effect of the contact, if any. If so, when we control for individual employment status, the personal contact–legal status correlation will decline relatively more for contacts having a larger positive employment effect. In the case of H1b, however, controlling for employment will exacerbate the negative correlation for contacts having a higher probability of being employed.

Hypothesis 3: Under H1a (H1b), once we control for employment, contacts that maintain a higher (lower) correlation in absolute value with documentation probability will be associated with employment characteristics that favour documentation.

According to this hypothesis, given a positive correlation between personal contacts and immigrant documentation probability, once employment status is controlled for, we expect contacts showing higher correlations to have job characteristics that are more useful for

accessing regularization programs. The reasoning is analogous to the case of H1b: better job characteristics are associated with less negative correlation between contacts and legal status.

4 CONTEXT AND DATA

This analysis uses a unique 2007–2008 dataset of both documented and undocumented immigrants living in the southern Italian region of Calabria.

4.1 Context

European countries are characterized by striking internal disparities, with regions whose GDP per capita (NUTS 2, PPPs) is less than 75% of the EU-28 average disproportionally concentrated along the southern and eastern borders (Eurostat, 2016). During the last few years, these regions have experienced a dramatic increase in their foreign populations: in particular, peak migration pressure stemming from the Middle East crisis (UNDESA, 2016). Most of these regions also belong to a group of countries—Greece, Italy, Portugal, and Spain—that scholars associate with a common Mediterranean immigration model (King, 2000) in which foreign workers have high employment rates but are concentrated in lower-status occupations and in the informal sector (Ballarino & Panichella, 2015; Reyneri, 2001; Reyneri & Fullin, 2011). This incorporation model characterizes Italy in general (Fullin & Reyneri, 2011; Pugliese, 2002) but southern Italian regions in particular (Avola, 2015).

In this respect, Calabria, which encompasses five provinces and 409 municipalities, offers a compelling case. This region, whose per-capita GDP is about two-thirds of the Italian average, has a 26.9% poverty rate that is over five times that of the national rate of 4.9% (Istat, 2015). Likewise, its employment rate is only around 33.6%, 10 percentage points less than the national rate, with a remarkably high incidence of irregular work, about 29% in

2009, whereas the national average is 12%.[7] At the beginning of 2007, Calabria had approximately 2 million residents (3.4% of the Italian population), including 50,871 officially resident foreigners representing 2.5% of the total population, much lower than the 9% in the more dynamic northern and central regions. In recent years, however, the area is experiencing a spectacular increase in migration inflows—including a particularly high 44.5% between 2007 and 2008 (Istat, 2016). Calabria is also characterized by a high undocumented presence that in 2008 represented over 30% of the total immigrants in southern Italy (vs. 15% nationally, which fell to 6% in 2013; ISMU, 2013). This share reached its maximum of 38.9% in the Calabrian province of Crotone (ISMU, 2008).

Because the Italian regulatory framework does not allow legal entrance for reasons of job search,[8] since 1998 the main legal channel for entrance for work reasons has been the quota agreements, which accounted for 150,000 entries in 2008. These agreements, although *de jure* targeted at prospective immigrants with an employer willing to hire them, *de facto* operate as a "mini-regularization program of (employed) people already in the country" (Ambrosini & Triandafyllidou, 2011, p. 253). At the same time, access to family-reunification visa schemes is far from automatic: Italy imposes relatively restrictive income, housing, and legal-status conditions on primary migrants before they can bring in their family members. These factors help to explain the frequent operation of irregular reunification pathways in the Italian context (Vickstrom & González-Ferrer, 2016).

[7] Unless otherwise indicated, the data used in this section are drawn from the Italian National Institute of Statistics (http://dati.istat.it/), accessed in October 2016.

[8] See Fasani (2010) for an account of Italian immigration law and for data on trajectories of entrance and regularization.

Italy has run numerous amnesty programs, which account for the country's large share of documented foreigners.[9] The largest legalization program, implemented in 2002 with over 700,000 applications, granted legal status to as many undocumented immigrants as the 91.3% of regular presences in 2003 in southern Italy (compared with 47.9% nationally; Istat, 2005). Since 2002, amnesty programs have conditioned eligibility on being employed at the time of application, which is a common requirement of regularization programs in southern European countries (Kraler, 2009). It is worth emphasizing that the institutional design of both legalization schemes in Italy—quota agreements and amnesty programs—implies that undocumented immigrants must be employed in order to access legal status. At the same time, the available evidence does not identify any clear effect of gaining legal status on immigrants' probability of being employed, with studies documenting positive (Pan, 2012), null (Kaushal, 2006), or even negative (Amuedo-Dorantes & Bansak, 2011) effects.

A further distinguishing feature of the Italian immigration framework is that most residence-permit categories allow immigrants to work. For instance, as of the beginning of 2008 (Istat, 2016), 91.42% of the non-EU foreign citizens lawfully residing in Calabria for work (45.36%), family (41.40%), study (1.72%), or asylum (2.94%) could accept employment, although all students were subject to an hourly limit. Other exceptions included asylum seekers and those under humanitarian protection (0.6%), who were not allowed to work during the first 2 months (6 months in 2007) following arrival. Hence, only about 2.5% of the documented presence in Calabria at that time (which resembled the presence nationally) was likely to be ineligible for a work permit.

[9] Mass legalization programs in 1986, 1990, 1995, 1998, 2002, 2009, and 2012 legalized approximately 1.85 million immigrants, a very large number for a country that hosted about 3.6 million documented immigrants in 2012.

4.2 Data

The survey data were collected as part of the European EQUAL project (Comito et al., 2008) designed to monitor the migrant integration process in the regional labour market. Data collection was conducted by eight partners, comprising a consortium of three universities (Mediterranean University of Reggio Calabria, University of Messina, and University of Calabria), professional training institutions, and Catholic and lay non-profit associations, chosen from among organizations actively operating with immigrants and most rooted in the area. This multiplicity of associations was intended to reduce possible bias in the sample-selection process.

Sampling was based on an intercept-point survey method suitable for reaching individuals not accounted for in official statistics, such as recently arrived and irregular immigrants (McKenzie & Mistiaen, 2009). During the 6 months of fieldwork (October 2007–April 2008), each partner institution collected questionnaires at intercept points scattered throughout the region for 1 month chosen at random. Enumerators were instructed to randomly approach subjects from among all the immigrants over 18 years of age who showed up at that location. The basic characteristics of the sample were cross-checked with those available on the documented population at the end of fieldwork.[10] Although the representativeness of a sample whose underlying population includes undocumented immigrants is difficult to assess, later cross-checks indicate that the survey data are a rather good match with the little available information on immigrants in Calabria.

[10] We thank Domenico Marino and Dario Musolino for providing us with information on the sampling procedure.

The initial sample consists of 911 individuals representing 51 different countries, although 66% hail from five nations: Morocco, Romania, Ukraine, Albania, and Poland.[11] We drop individuals from the EU and Schengen Area countries, since they are visa-exempt and legally entitled to enter and reside in Italy, as well as those individuals for whom information on legal status is missing. The final sample includes 632 respondents. An individual's legal status is denoted by the variable $Documented_i$, an indicator equal to 1 if immigrant *i* has a residence permit for work at the time of interview, and 0 otherwise. Note, however, that although the survey question "Do you hold a residence permit for work?" captures permits that allow employment, it does not identify mixed legal status. Nevertheless, in the Italian legal context, there is a major overlap between residence and work permits because most permit types allow employment, and all work permits are conditional on legal stay (Vickstrom & González-Ferrer, 2016).

Whereas immigrant employment status is self-declared and includes seasonal and irregular jobs, job characteristics are derived from two survey questions asked only of the 367 employed individuals. The first, "Could you indicate your actual working conditions?," has five possible responses—"open-ended," "fixed-term," "part-time," "seasonal," and "irregular"—based on which we construct a *Regular Job* indicator equal to 0 for the irregular option and 1 otherwise. The second question, "Do you have a job contract?," for which 12% of the employed are missing data, is the basis for an indicator equal to 1 if the worker has an employment contract and 0 otherwise. Although the item phrasing for these two indicators is

[11] The five main national groups are the same for the subsample of documented immigrants and coincide with those obtained from the official statistics on residence permits in Calabria in 2007 (Istat, 2016). The gender composition and age structure of the two samples are also roughly the same.

admittedly imprecise, both variables meet our key criterion: they capture the more-stable occupations that are likely to facilitate access to legalization programs.

We report summary statistics for the regression sample in Table 1: first for the full sample, and then for two subsamples split by legal status. As the table shows, the average age is 35 years, gender composition is roughly balanced, about half the sample are married, and 59% reported having a child at the time of interview. Forty-one percent of the sample have an upper secondary education or above. The primary motivation for migrating is economic (vs. political, religious, study, family, or other). More than half the sample had been in Italy for at least 3 years at time of interview (as measured by a *Years Since Migration* indicator of less than 1 year, between 1 and 3 years, or more than 3 years). As for irregularity, 38% of respondents are undocumented, a figure reassuringly close to the 38.9% share estimated by ISMU (2008) for the Calabrian province of Crotone. Seventy-three percent of the sample are employed but, as expected, the employment probability is lower for undocumented immigrants. The table also reveals that job characteristics differ greatly between documented and undocumented immigrants.

Table 1 about here

Our measure of personal contacts is obtained from the question "Did you know whom you could call on before leaving?" The possible, and mutually exclusive, answers—contacts with Italians, family members, or those in the same ethnic community—allow us to address two priorities in this research field: namely, empirically assessing network effects using data on *actual* (vs. impersonal) *contacts* and differentiating between *relationship types* (DiMaggio & Garip, 2012). Because this question leaves the definition of co-ethnic to respondents and we have no information on the strength of personal contacts, responses could include members of the ancestry group or people born in the origin country. Moreover, contacts may include friends or acquaintances made in the country of origin or in Italy during previous

migration experiences. They might even include people to whom direct contacts have referred the immigrant for help. Admittedly, because the survey provides no information on personal contacts at destination, we are forced to proxy for actual contacts using information on those already known pre migration. This proxy, however (in the spirit of Amuedo-Dorantes & Mundra, 2007; Goel & Lang, 2010; and Kalter & Kogan, 2014), has the major advantage of addressing any issues of reverse causality that could affect actual contacts at destination. The one possible shortcoming is that if pre-existing personal contacts imperfectly capture their availability after arrival,[12] our measure could induce an attenuation bias, which would make a finding of no association between personal contact and study outcome more likely. As reported in Table 1, roughly 77% reported having either a familial (33%) or an ethnic (35%) contact, with only a few (9%) stipulating a native contact. Although documented immigrants are more likely to have a native contact than undocumented immigrants (11% vs. 6% in Table 1), the difference is not statistically significant at a standard level. All other differences between covariates in the two samples go in the expected direction.

5 EMPIRICAL FRAMEWORK

We estimate variants of the following linear probability model (LPM):

$$Y_{i,j,p} = \alpha + \beta \mathrm{Contact}_i + \gamma X_i + \mu K_i + \delta Z_p + \theta J_i + \varepsilon_i \qquad (1)$$

where we account for the heteroskedasticity that this choice implies by using robust standard errors.[13] $Y_{i,j,p}$ is the generic binary outcome of interest of immigrant *i*, from area of origin *j*,

[12] For example, people might have no contact prior to migrating and then form contacts after arrival. Conversely, individuals might lose the contacts they had before migrating.

[13] We have checked the robustness of our findings to using probit or logit regression models. Results are available upon request.

residing in province p. $Contact_i$ is the indicator for the presence of personal contacts, as captured by pre-existing personal contacts, and β is the main parameter of interest. J_i is a set of origin-area fixed effects, and X_i is a vector of predetermined individual characteristics: basic demographics (gender, age, age squared, marital status, and having children), individual human capital (highest educational level),[14] and an indicator for economic migration, designed to control for different motivations to migrate that are potentially correlated with the outcomes variables. K_i then includes two possibly endogenous individual characteristics: employment status (in the documentation probability model) and time since migration. Z_p denotes two provincial controls: the first is a measure of the spatial concentration of migrants from each origin country given by the (log)total number of immigrants in province *p* from origin country *j* of individual *i* over the total number of immigrants in the province. The second is the provincial unemployment rate, included to control for labour market conditions in the reference province.[15]

Two typical concerns with this type of regression analysis are *reverse causality* and *non-random selection into contacts*. The former may occur, for example, when being documented provides individuals greater exposure to personal contacts, thereby increasing their probability of establishing personal relationships. Such interaction with new people can expose undocumented immigrants to a higher risk of detention and induce them to consistently restrict and select their personal contacts (Huschke, 2014; Völker & Flap, 2001). Similar considerations apply for employment probability and job characteristics. At the same time, individuals self-select into contacts by choosing whether and with whom to interact

[14] Unfortunately, our dataset provides no information on Italian-language proficiency.

[15] The provincial figures for the unemployment rate and foreign presence by nationality come from Istat (2008a and 2008b, respectively). Foreigner presence is derived from the official residential register and thus refers to documented immigrants only.

(Feld, 1981; Lazarsfeld & Merton, 1954; McPherson et al., 2001), which becomes problematic when those with different personal contacts differ on some unobservable characteristic that correlates with the outcome of interest. Even selection into the survey is possible if the personal contacts variable correlates with sampling probability and the outcomes of interest—for example, if having a familial contact of no use in getting legal status increases the probability of moving to another country. In our framework, reverse causality is not an issue because contact information refers to pre-migration knowledge (Amuedo-Dorantes & Mundra, 2007; Goel & Lang, 2010; Kalter & Kogan, 2014). Nonetheless, we acknowledge possible biases induced by self-selection.

6 RESULTS

Table 2 reports the results for documentation probability. The regressors in column 1 are personal contacts (with "no contact" as the excluded category) and origin-area fixed effect. Columns 2 and 3, respectively, add in predetermined individual characteristics and employment status. Column 2 shows a clear association between having a personal contact at the destination and higher documentation probability, which supports H1a. For native and familial contacts, respectively, point estimates imply 24.5 and 18.6 percentage-point increases in documentation probability, an increase that reduces only moderately in column 3 when we control for employment status. Although ethnic contacts also appear to be associated with a higher probability of legal status, the effect is smaller (8.2) and drops dramatically in column 3, after which the estimated coefficient becomes statistically no different from zero at the standard level of significance. As also expected, higher documentation probability is always significantly associated with being employed. These findings speak to H2 and H3 by suggesting that the indirect labour market effect of social contacts may play a different role across contact types.

Table 2 about here

As previously discussed, even though our personal-contact measure allows us to overcome the usual reverse-causality issues, our estimates could still be biased if immigrants with and without a personal contact differ systematically in a way that correlates with their regularization probability. Note that point estimates for native and familial contacts are reasonably stable across specifications, even when we control for the possibly endogenous variables years since migration and provincial characteristics (columns 4 and 5, respectively). Following Bertrand et al.'s (2000) argument, treating observable characteristics as unobservables should strongly impact effect estimates when at least some are correlated with individual unobservable characteristics, implying that selection on unobservables is unlikely to be driving our results.

As for the other controls, provincial variables are both statistically significant and signed as expected. Being documented is strongly associated with having migrated for economic reasons, a finding that, in conjunction with those for employment status and provincial-level unemployment rates, is easily explainable by the predominance in Italy of work-related schemes to access legal status. The estimated coefficient for age is also positive, whereas those for all other individual covariates are not statistically different from zero. As expected, the probability of being undocumented decreases with permanence in Italy, possibly because the Italian legal framework offers no specific mechanism by which undocumented immigrants can acquire legal status. They are thus forced to wait (often a substantial time) for erratic regularization programs through which to exit their unauthorized condition. Nonetheless, we cannot rule out the possibility that the observed correlation is shaped by the outmigration of individuals who, having failed to regularize their presence, decide to return home or move to a new destination, thereby exiting the sample.

Table 3 reports the results for employment probability, which are again derived from progressively saturated models.[16] All controls have the expected sign: economically motivated migration is strongly associated with employment outcome, education correlates positively with employment probability, the spatial concentration of same-origin-country immigrants has a positive and highly statistically significant coefficient, and female immigrants experience lower employment probability than males. Remarkably, however, whereas the estimated coefficients for ethnic contacts are positive and significant at the 1% level in all specifications, those for familial and native contacts are statistically no different from zero. Moreover, this effect of ethnic contacts is quantitatively large: having such a contact in Italy increases the employment probability by approximately 11.4 percentage points, although with minor differences across specifications. Taken together, the results in Table 2 (columns 3–5) and Table 3 are consistent with H2.

Table 3 about here

To test H3, we cautiously examine *Regular Job* and *Contract*, two variables designed to capture more-stable employment relationships. Table 4 thus reports the estimated coefficients for the probability of having a regular job (odd columns) or employment contract (even columns). The structure of the table mirrors that of the previous ones, with the last two columns including the full set of available controls.[17] These Table 4 results show that ethnic contacts are more likely to be associated with employment in less-stable occupations than

[16] We replicated all the results on employment probability and job-search characteristic on the full survey sample (including immigrants from European and Schengen countries) and obtained robust results.

[17] Given Durand et al.'s (2016) evidence of an association between being undocumented and the worst labour market outcomes, we also run a specification that includes individual legal status. Although the results are qualitatively similar, the number of undocumented immigrants with regular employment and/or an employment contract is very low, rendering the estimates less precise.

having no contacts. Point estimates for natives and relatives are closer to zero and significant at the 10% threshold in two specifications only. However, they suggest that native contacts are positively associated with the probability of working in occupations favouring regularization and that the opposite is true for familial ones.[18] One possible explanation is that familial contacts positively correlate with documentation probability mainly through other channels, such as family-reunification schemes or other forms of material assistance not analysable using our data set.

Table 4 about here

We check the robustness of our results by playing with immigrant permanence in Italy, testing particularly for any survivorship bias induced when personal contacts correlate with outmigration, in which case the bias would vary with time spent in Italy. A similar concern is any possible correlation between the variables of interest (documented status, labour market outcomes, and personal contacts) and the probability of accessing the intercept points at which data were collected, because the latter may in turn correlate with observed permanence in the host country (Devillanova, 2008). As a sensitivity test, we restrict all analyses to recently arrived immigrants (<3 years) and to immigrants with Ysm>1, which latter also accounts for refugees not being allowed to work during the first 6 months after arrival. As Fig. 2 illustrates, the effect of personal contacts on all outcomes is stable across all the different sample specifications, although our inability to directly address this issue with the available data suggests a need for caution in any causal interpretation of the parameters of interest.

Fig. 2 about here

[18] As an additional test, we use monthly wages (four wage brackets) and obtain consistent results. Note, however, that the sample shows low wage variability: 80% of those employed earned less than €800 per month.

7 DISCUSSION AND CONCLUSIONS

In this assessment of the effect on legal status of different personal-contact types, rather than limiting the focus to specific transitions between legal statuses, we innovatively estimate the association between the personal contacts of immigrant and their documentation probability. We also analyse the indirect effects of personal contacts via employment probability and job characteristics. To this end, our empirical analysis, which employs a unique dataset of documented and undocumented immigrants in the southern Italian region of Calabria, tests three hypotheses on documentation and employment outcomes (H1–H3), the results of which are summarized in Fig. 2. First, we identify a marked positive association between personal contacts and documentation probability (H1a), with native (familial) contacts associated with a 20 (10) percentage-point increase in documentation probability even in the most saturated equation. For ethnic contacts, however, the effect is not only smaller but vanishes once employment is controlled for (panel a, Fig. 2). As predicted by H2, this result is seemingly driven by the heterogeneous association between different types of personal contacts and the employment probability. This study may thus be the first to document a differential labour market effect across personal-contact types for Italy. Indeed, we also find that whereas neither family nor native contacts exert any substantially significant employment effect, ethnic contacts clearly shape the probability of legal status via a positive effect on employment probability (panel b, Fig. 2).

Why do natives and, to a lesser extent, familial contacts correlate positively with the documentation probability once employment status is controlled for? One tentative explanation is advanced in H3, where we conjecture that these contacts are particularly effective at connecting immigrants with better-quality occupations, which in turn tend to facilitate access to legalization programs. The results for job attributes, reported in panel c of Fig. 2, do not provide conclusive evidence in this direction. They show that ethnic contacts

are associated with the worst job characteristics. Native contacts correlate with occupations that favour documentation, but the latter association is statistically significant only when we include all available controls. On the whole, these results are consistent with H3. However, we cannot exclude other complementary explanations: for example, the possibility that native contacts might offer better-quality information than co-ethnic contacts. It may also be the case that those who have native contacts also have a language-skills advantage. The existence of other mechanisms is also suggested by the evidence that familial contacts do not connect to better-quality occupations. In fact, as highlighted in our literature review, familial contacts are not only likely to provide access to family-reunification visa schemes but might also find other ways to intensely support the immigrants' documentation process and/or strengthen their belief in it. Unfortunately, as before, our data do not permit analysis of these other channels.

Our analysis focuses on a specific geographical context and on a period prior to both the 2008 economic crisis and the so-called European Refugee Crisis. These events dramatically affected the socioeconomic environment as well as the composition of the immigrant population. These changes are likely to have had an effect on the relationships under study. Our results do, however, shed interesting new light on the process of migrants' legal and economic integration into a host country. They imply, for example, that the interplay between immigration policies and personal contacts could give rise to cumulative inequality. That is, immigrants without contacts (or with only ethnic contacts) will be less likely to access opportunities for legalization and end up in poorer-quality jobs that lower their chances of acquiring or maintaining legal status. These negative personal-contact effects are likely to be exacerbated in legal contexts that give a prominent role to employers and workplace characteristics during legalization procedures, which again underscores the importance of considering institutional frameworks when addressing the outcomes of social

interaction. Our findings, for instance, point to unintended and even unforeseeable consequences of work-related visa schemes and regularization mechanisms that policymakers should take into account when designing effective immigration policies. In revealing such potential consequences, our study joins a body of scholarship that highlights how contacts within the same segregated group can limit immigrants' socioeconomic advancement (Portes & Sensenbrenner, 1993).

At the same time, we recognize that the functioning of personal contacts is likely to be context-specific, implying an urgent need to broaden the geographic scope of related research even in the face of serious data-availability constraints. By conducting a quantitative analysis of an economically poor southern European region burdened by high migratory pressures and pervasive immigrant irregularity, we take a first step in this direction. Not only is our study of legal status and personal contacts relevant for such environments, it lays a useful analytical foundation for future investigation.

REFERENCES

Abascal, M. (2017). Tu casa, mi casa: Naturalization and belonging among Latino immigrants. *The International Migration Review, 51*(2), 291–322. https://doi.org/10.1111/imre.12221

Aguilera, M. B., & Massey, D. S. (2003). Social capital and the wages of Mexican migrants: New hypotheses and tests. *Social Forces, 82*(2), 671–701. https://doi.org/10.1353/sof.2004.0001

Ambrosini, M. (2012). Surviving underground: Irregular migrants, Italian families, invisible welfare. *International Journal of Social Welfare, 21*(4), 361–371. https://doi.org/10.1111/j.1468-2397.2011.00837.x

Ambrosini, M., & Triandafyllidou, A. (2011). Irregular immigration control in Italy and Greece: Strong fencing and weak gate-keeping serving the labour market. *European Journal of Migration and Law, 13*(3), 251–273. https://doi.org/10.1163/157181611X587847

Amuedo-Dorantes, C., & Bansak, C. (2011). The impact of amnesty on labor market outcomes: A panel study using the legalized population survey. *Industrial Relations, 50*(3), 443–471. https://doi.org/10.1111/j.1468-232X.2011.00642.x

Amuedo-Dorantes, C., & Mazzolari, F. (2010). Remittances to Latin America from migrants in the United States: Assessing the impact of amnesty programs. *Journal of Development Economics, 91*(2), 323–335. https://doi.org/10.1016/j.jdeveco.2009.06.006

Amuedo-Dorantes, C., & Mundra, K. (2007). Social networks and their impact on the earnings of Mexican migrants. *Demography, 44*(4), 849–863. https://doi.org/10.1353/dem.2007.0039

Avola, M. (2015). The ethnic penalty in the Italian labour market: A comparison between the Center-North and South. *Journal of Ethnic and Migration Studies, 41*(11), 1746–1768. https://doi.org/10.1080/1369183X.2014.973841

Ballarino, G., & Panichella, N. (2015). The occupational integration of male migrants in Western European countries: Assimilation or persistent disadvantage? *International Migration (Geneva, Switzerland), 53*(2), 338–352. https://doi.org/10.1111/imig.12105

Bertrand, M., Luttmer, E. F. P., & Mullainathan, S. (2000). Network effect and welfare cultures. *The Quarterly Journal of Economics, 115*(3), 1019–1055. https://doi.org/10.1162/003355300554971

Borjas, G. J., & Tienda, M. (1993). The employment and wages of legalized immigrants. *The International Migration Review, 27*(4), 712–747. https://doi.org/10.1177/019791839302700401

Blume, L. E., Brock, W. A., Durlauf, S. N., & Ioannides, Y. M. (2011). Identification of social interactions. In J. Benhabib, A. Bisin, & M. O. Jackson (Eds.), *Handbook of social economics* (Vol. I, pp. 853–964). Amsterdam, Netherlands: North Holland. https://doi.org/10.1016/B978-0-444-53707-2.00001-3

Boyd, M. (1989). Family and personal networks in international migration: Recent developments and new agendas. *The International Migration Review, 23*(3), 638–670. https://doi.org/10.1177/019791838902300313

Bourdieu, P. (1980). Le capital social: Notes provisoires. *Actes de la Recherche en Sciences Sociales, 31*(1), 2–3.

Brick, K. (2011). *Regularizations in the European Union: The contentious policy tool* [Policy Brief]. Washington, DC: Migration Policy Institute.

Burt, R. S. (2001). Structural holes versus network closure as social capital. In N. Lin, K. S. Cook, & R. S. Burt (Eds.), *Social capital: Theory and research* (pp. 31–56). New York: Aldine de Gruyter.

Calvó-Armengol, A., & Jackson, M. O. (2004). The effects of social networks on employment and inequality. *The American Economic Review, 94*(3), 426–454. https://doi.org/10.1257/0002828041464542

Casarico, A., Facchini, G., & Frattini, T. (2015). Illegal immigration: Policy perspectives and challenges. *CESifo Economic Studies, 61*(3-4), 673–700. https://doi.org/10.1093/cesifo/ifv004

Chauvin, S., Garcés-Mascareñas, B., & Kraler, A. (2013). Working for legality: Employment and migrant regularization in Europe. *International Migration (Geneva, Switzerland), 51*(6), 118–131. https://doi.org/10.1111/imig.12109

Chiswick, B. R., & Miller, P. W. (2005). Do enclaves matter in immigrant adjustment? *City & Community, 4*(1), 5–35. https://doi.org/10.1111/j.1535-6841.2005.00101.x

Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology, 94*, S95–S120. https://doi.org/10.1086/228943

Comito, G., Critelli, G., Cuomo, C., D'Angelillo E., & Musolino, D. (2008). *Gli immigrati in Calabria: Quale integrazione nella società e nel mercato del lavoro. Analisi e riflessioni nella prospettiva della costituzione di un osservatorio regionale sulle discriminazioni e il razzismo* (Final research report: Project EQUAL/ODR). Reggio Calabria, Italy: Labtegnos Consortium.

Cranford, C. J. (2005). Networks of exploitation: Immigrant labor and the restructuring of the Los Angeles janitorial industry. *Social Problems, 52*(3), 379–397. https://doi.org/10.1525/sp.2005.52.3.379

Cvajner, M., & Sciortino, G. (2010). Theorizing irregular migration: The control of spatial mobility in differentiated societies. *European Journal of Social Theory, 13*(3), 389–404. https://doi.org/10.1177/1368431010371764

De Genova, N. (2004). The legal production of Mexican/migrant "illegality". *Latino Studies, 2*(2), 160–185. https://doi.org/10.1057/palgrave.lst.8600085

De Genova, N. (2013). Spectacles of migrant "illegality": The scene of exclusion, the obscene of inclusion. *Ethnic and Racial Studies, 36*(7), 1180–1198. https://doi.org/10.1080/01419870.2013.783710

Damm, A. P. (2014). Neighborhood quality and labor market outcomes: Evidence from quasi-random neighborhood assignment of immigrants. *Journal of Urban Economics, 79*, 139–166. https://doi.org/10.1016/j.jue.2013.08.004

Devillanova, C. (2008). Social networks, information and health care utilization: Evidence from undocumented immigrants in Milan. *Journal of Health Economics, 27*(2), 265–286. https://doi.org/10.1016/j.jhealeco.2007.08.006

DiMaggio, P., & Garip, F. (2012). Network effects and social inequality. *Annual Review of Sociology, 38*(1), 93–118. https://doi.org/10.1146/annurev.soc.012809.102545

Durand, J., Massey, D. S., & Pren, K. A. (2016). Double disadvantage: Unauthorized Mexicans in the U.S. labor market. *The Annals of the American Academy of Political and Social Science, 666*(1), 78–90. https://doi.org/10.1177/0002716216643507

Durlauf, S. N., & Ioannides, Y. M. (2010). Social interactions. *Annual Review of Economics, 2*(1), 451–478. https://doi.org/10.1146/annurev.economics.050708.143312

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. https://doi.org/10.1093/jeea/jvw017

Elliott, J. R. (2001). Referral hiring and ethnically homogeneous jobs: How prevalent is the connection and for whom? *Social Science Research, 30*(3), 401–425. https://doi.org/10.1006/ssre.2001.0704

Enchautegui, M. E. (2002). Household members and employment outcomes of recent immigrants: A network approach. *Social Science Quarterly, 83*(2), 594–611. https://doi.org/10.1111/1540-6237.00103

Eurostat. 2016. *Regional yearbook*. Luxembourg: Publications Office of the European Union.

Fasani, F. (2010). The quest for "la dolce vita"? Undocumented migration in Italy. In A. Triandaffyllidou (Ed.), *Irregular migration in Europe: Myths and realities* (pp. 161–187). Farnham, UK: Ashgate.

Feld, S. L. (1981). The focused organization of social ties. *American Journal of Sociology, 86*(5), 1015–1035. https://doi.org/10.1086/227352

Fullin, G., & Reyneri, E. (2011). Low unemployment and bad jobs for new immigrants in Italy. *International Migration (Geneva, Switzerland), 49*(1), 118–147. https://doi.org/10.1111/j.1468-2435.2009.00594.x

Goel, D., & Lang, K. (2010). *Social ties and the job search of recent immigrants* (CReAM Discussion Paper No. 22/10). London: Centre for Research and Analysis of Migration.

Granovetter, M. S. (1973). The strength of weak ties. *American Journal of Sociology, 78*(6), 1360–1380. https://doi.org/10.1086/225469

Green, G. P., Tigges, L. M., & Diaz, D. (1999). Racial and ethnic differences in job search strategies in Atlanta, Boston, and Los Angeles. *Social Science Quarterly, 80*(2), 263–278.

Hagan, J. (1994). *Deciding to be legal: A maya community in houston*. Philadelphia: Temple University Press.

Hagan, J. M. (1998). Social networks, gender, and immigrant incorporation: Resources and constraints. *American Sociological Review, 63*(1), 55–67. https://doi.org/10.2307/2657477

Hedström, P. (2005). *Dissecting the social: On the principles of analytical sociology*. Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9780511488801

Hritzuk, N., & Park, D. K. (2000). The question of Latino participation: From an SES to a social structural explanation. *Social Science Quarterly, 81*(1), 151–166.

Hoefer, M., Rytina, N., & Baker, B. C. (2011). *Estimates of the unauthorized immigrant population residing in the United States: January 2010*. Washington, DC: Department of Homeland Security, Office of Immigration Statistics.

Hondagneu-Sotelo, P. (2001). *Domestica: Immigrant workers cleaning and caring in the shadows affluence*. Berkeley: University of California Press.

Huschke, S. (2014). Fragile fabric: Illegality knowledge, social capital and health-seeking of undocumented Latin American migrants in Berlin. *Journal of Ethnic and Migration Studies, 40*(12), 2010–2029. https://doi.org/10.1080/1369183X.2014.907740

ISMU Initiative and Study on Multiethnicity. (2008). *Quattordicesimo rapporto sulle migrazioni*. Milan, Italy: Franco Angeli.

ISMU Initiative and Study on Multiethnicity. (2013). *Diciannovesimo rapporto sulle migrazioni*. Milan, Italy: Franco Angeli.

Istat. (2005). *Gli stranieri in Italia: Gli effetti dell'ultima regolarizzazione*. Rome, Italy: National Institute of Statistics.

Istat. (2008a). *La popolazione straniera residente in Italia al 1 Gennaio 2007*. Rome, Italy: National Institute of Statistics.

Istat. (2008b). *Rilevazione Forze Lavoro: Medie 2007*. Rome, Italy: National Institute of Statistics.

Istat. (2015). *La povertà in Italia*. Rome, Italy: National Institute of Statistics.

Istat. (2016). *Cittadini non comunitari regolarmente presenti in Italia*. Retrieved October 2016 from http://demo.istat.it/altridati/noncomunitari/index.html

Jandl, M. (2004). The estimation of illegal migration in Europe. *Migration Studies, 153*, 141–155.

Jasso, G. (2011). Migration and stratification. *Social Science Research, 40*(5), 1292–1336. https://doi.org/10.1016/j.ssresearch.2011.03.007

Kalter, F., & Kogan, I. (2014). Migrant networks and labor market integration of immigrants from the Former Soviet Union in Germany. *Social Forces, 92*(4), 1435–1456. https://doi.org/10.1093/sf/sot155

Kanas, A., Chiswick, B. R., van der Lippe, T., & van Tubergen, F. (2012). Social contacts and the economic performance of immigrants: A panel study of immigrants in Germany. *The International Migration Review, 46*(3), 680–709. https://doi.org/10.1111/j.1747-7379.2012.00901.x

Kanas, A., van Tubergen, F., & van der Lippe, T. (2011). The role of social contacts in the employment status of immigrants: A panel study of immigrants in Germany. *International Sociology, 26*(1), 95–122. https://doi.org/10.1177/0268580910380977

Kaushal, N. (2006). Amnesty programs and the labor market outcomes of undocumented workers. *The Journal of Human Resources, 41*(3), 631–647. https://doi.org/10.3368/jhr.XLI.3.631

King, R. (2000). Southern Europe in the changing global map of migration. In R. King, G. Lazardis, & C. Tsardanidi (Eds.), *Eldorado or fortress? Migration in Southern*

Europe (pp. 3–26). Basingstoke: Macmillan. https://doi.org/10.1057/9780333982525_1

Kraler, A. 2009. Regularisation—A misguided option or part and parcel of a comprehensive policy response to irregular migration (IMISCOE Working Paper No. 24). Rotterdam: International Migration, Integration and Social Cohesion.

Lancee, B. (2010). The economic returns of immigrants' bonding and bridging social capital: The case of the Netherlands. *The International Migration Review, 44*(1), 202–226. https://doi.org/10.1111/j.1747-7379.2009.00803.x

Lazarsfeld, P. F., & Merton, R. K. (1954). Friendship as social process. In M. Berger, T. Abel, & C. Page (Eds.), *Freedom and control in modern society* (pp. 18–66). New York: Octagon.

Lin, N. (1999). Social networks and status attainment. *Annual Review of Sociology, 25*(1), 467–487. https://doi.org/10.1146/annurev.soc.25.1.467

Lin, N. (2001). *Social capital: A theory of structure and action*. Cambridge, MA: Cambridge University Press. https://doi.org/10.1017/CBO9780511815447

Liu, M.-M. (2015). *Becoming a man: Legal status, networks and male migration between Senegal and Europe* (MAFE Working Paper No. 38). Paris, France: INED.

Mahler, S. J. (1995). *American dreamings: Immigrant life on the margins*. Princeton, NJ: Princeton University Press.

Martén, L., Hainmueller, J., & Hangartner, D. (2019). Ethnic networks can foster the economic integration of refugees. *Proceedings of the National Academy of Sciences of the United States of America, 116*(33), 16280–16285. https://doi.org/10.1073/pnas.1820345116

Massey, D., Rafael, A., Jorge, D., & Gonzalez, H. (1987). *Return to Aztlan: The social process of migration from Western Mexico*. Berkeley, CA: University of California Press.

Massey, D. S., Durand, J., & Pren, K. A. (2014). Explaining undocumented migration to the U.S. *The International Migration Review, 48*(4), 1028–1061. https://doi.org/10.1111/imre.12151

Massey, D. S., & Espinosa, K. E. (1997). What's driving Mexico-U.S. migration? A theoretical, empirical and policy analysis. *American Journal of Sociology, 102*(4), 939–999. https://doi.org/10.1086/231037

McKenzie, D. J., & Mistiaen, J. (2009). Surveying migrant households: A comparison of census-based, snowball and intercept point surveys. *Journal of the Royal Statistical Society. Series A, (Statistics in Society), 172*(2), 339–360. https://doi.org/10.1111/j.1467-985X.2009.00584.x

McPherson, M., Smith-Lovin, L., & Cook, J. M. (2001). Birds of a feather: Homophily in social networks. *Annual Review of Sociology, 27*(1), 415–444. https://doi.org/10.1146/annurev.soc.27.1.415

Menjívar, C. (2000). *Fragmented ties: Salvadoran immigrant networks in America*. Berkeley and Los Angeles, CA: University of California Press.

Menjívar, C. (2002). The ties that heal: Guatemalan immigrant women's networks and medical treatment. *The International Migration Review, 36*(2), 437–466. https://doi.org/10.1111/j.1747-7379.2002.tb00088.x

Menjívar, C. (2006). Liminal legality: Salvadoran and Guatemalan immigrants' lives in the United States. *American Journal of Sociology, 111*(4), 999–1037. https://doi.org/10.1086/499509

Montgomery, J. D. (1994). Weak ties, employment, and inequality: An equilibrium analysis. *American Journal of Sociology, 99*(5), 1212–1236. https://doi.org/10.1086/230410

Moroşanu, L. (2016). Professional bridges: Migrants' ties with natives and occupational advancement. *Sociology, 50*(2), 349–365. https://doi.org/10.1177/0038038514568234

Mouw, T. (2006). Estimating the causal effect of social capital: A review of recent research. *Annual Review of Sociology, 32*(1), 79–102. https://doi.org/10.1146/annurev.soc.32.061604.123150

Munshi, K. (2003). Networks in the modern economy: Mexican migrants in the U.S. labor market. *The Quarterly Journal of Economics, 118*(2), 549–599. https://doi.org/10.1162/003355303321675455

Pan, Y. (2012). The impact of legal status on immigrants' earnings and human capital: Evidence from the IRCA 1986. *Journal of Labor Research, 33*(2), 119–142. https://doi.org/10.1007/s12122-012-9134-0

Poeze, M. (2010). *In search of greener pastures? Boat-migrants from Senegal to the Canary Islands*. Leiden, Netherlands: African Studies Centre.

Portes, A. (1998). Social capital: Its origins and applications in modern sociology. *Annual Review of Sociology, 24*(1), 1–24. https://doi.org/10.1146/annurev.soc.24.1.1

Portes, A., & Sensenbrenner, J. (1993). Embeddedness and immigration: Notes on the social determinants of economic action. *American Journal of Sociology, 98*(6), 1320–1350. https://doi.org/10.1086/230191

Pugliese, E. (2002). *L'Italia tra migrazioni internazionali e migrazioni interne*. Bologna, Italy: Il Mulino.

Ramirez, H., & Hondagneu-Sotelo, P. (2009). Mexican immigrant gardeners: Entrepreneurs or exploited workers? *Social Problems, 56*(1), 70–88. https://doi.org/10.1525/sp.2009.56.1.70

Reyneri, E. (2001). *Migrants' involvement in irregular employment in the Mediterranean Countries of the European Union*. Geneva, Switzerland: ILO International Labour Organization.

Reyneri, E., & Fullin, G. (2011). Labour market penalties of new immigrants in new and old receiving West European countries. *International Migration (Geneva, Switzerland), 49*(1), 31–57. https://doi.org/10.1111/j.1468-2435.2009.00593.x

Riccio, B. (2001). From "ethnic group" to "transnational community"? Senegalese migrants' ambivalent experiences and multiple trajectories. *Journal of Ethnic and Migration Studies, 27*(4), 583–599. https://doi.org/10.1080/13691830120090395

Rosales, R. (2013). Survival, economic mobility and community among Los Angeles fruit vendors. *Journal of Ethnic and Migration Studies, 39*(5), 697–717. https://doi.org/10.1080/1369183X.2013.756659

Rosales, R. (2014). Stagnant immigrant social networks and cycles of exploitation. *Ethnic and Racial Studies, 37*(14), 2564–2579. https://doi.org/10.1080/01419870.2013.848290

Singer, A., & Massey, D. S. (1998). The social process of undocumented border crossing among Mexican migrants. *The International Migration Review, 32*(3), 561–592. https://doi.org/10.1177/019791839803200301

Triandafyllidou, A. (2010). *Irregular migration in Europe: Myths and realities*. Farnham, UK: Ashgate.

UNDESA. (2016). *International migration report 2015*. New York: United Nations, Department of Economic and Social Affairs, Population Division.

Vickstrom, E. (2014). Pathways into irregular status among Senegalese migrants in Europe. *The International Migration Review, 48*(4), 1062–1099. https://doi.org/10.1111/imre.12154

Vickstrom, E. R., & González-Ferrer, A. (2016). Legal status, gender, and labor market participation of Senegalese migrants in France, Italy, and Spain. *The Annals of the American Academy of Political and Social Science, 666*(1), 164–202. https://doi.org/10.1177/0002716216643555

Vogel, D., Kovacheva, V., & Prescott, H. (2011). The size of the irregular migrant population in the European Union: Counting the uncountable? *International Migration (Geneva, Switzerland), 49*(5), 78–96. https://doi.org/10.1111/j.1468-2435.2011.00700.x

Völker, B., & Flap, H. (2001). Weak ties as liability: The case of East Germany. *Rationality and Society, 13*(4), 397–428. https://doi.org/10.1177/104346301013004001

Vollmer, B. A. (2011). Policy discourses on irregular migration in the EU: "Number games" and "political games." *European Journal of Migration and Law, 13*(3), 317–339. https://doi.org/10.1163/157181611X587874

TABLES

Table 1 Descriptive statistics

	Total	Documented	Undocumented	
Variables	M [SD]	M [SD]	M [SD]	Δ
Legal Status				
Documented	0.62			
Labour Market Condition				
Employed	0.73	0.88	0.48	†
Regular Job (if Employee)	0.72	0.93	0.23	†
Contract (if Employee)	0.71	0.88	0.20	†
Personal Contacts				
Native	0.09	0.11	0.06	
Familial	0.33	0.33	0.32	
Ethnic	0.35	0.35	0.33	
Individual Characteristics				
Age	35 [9.84]	38 [9.39]	30 [8.54]	†
Female	0.45	0.43	0.49	
Married	0.50	0.58	0.38	†
Child	0.59	0.68	0.44	†
High Education	0.41	0.44	0.37	
Economic Motivation	0.66	0.75	0.51	†
Years since Migration				
Ysm < 1	0.12	0.03	0.26	†
1 < Ysm < 3	0.24	0.12	0.43	†
Ysm > 3	0.64	0.85	0.31	†
Areas of Origin				
Southern America	0.03	0.02	0.04	
Africa	0.42	0.42	0.42	
Eastern Europe	0.40	0.40	0.40	
Asia	0.15	0.16	0.14	
N	632	390	242	
Employees	367	257	110	
Regular Job, if Employee	367	257	110	
Contract, if Employee	324	243	81	

Notes: †denotes a difference between documented and undocumented immigrants that is significant at least at 5%.

Table 2 Documentation probability

Variables	(1)	(2)	(3)	(4)	(5)
Personal Contacts (*Ref: No Contact*)					
Native	0.204***	0.245***	0.232***	0.227***	0.208***
	[0.072]	[0.068]	[0.063]	[0.057]	[0.058]
Familial	0.088*	0.186***	0.163***	0.116***	0.096**
	[0.053]	[0.046]	[0.043]	[0.038]	[0.038]
Ethnic	0.095*	0.082*	0.025	-0.005	-0.027
	[0.053]	[0.047]	[0.045]	[0.040]	[0.039]
Female		-0.083**	-0.046	-0.049	-0.042
		[0.040]	[0.037]	[0.035]	[0.035]
Age		0.061***	0.040***	0.026**	0.023**
		[0.011]	[0.011]	[0.010]	[0.010]
Age-squared		-0.001***	-0.000**	-0.000*	-0.000
		[0.000]	[0.000]	[0.000]	[0.000]
High Education		0.084**	0.051	0.011	0.012
		[0.038]	[0.035]	[0.032]	[0.032]
Married		0.014	0.010	-0.024	-0.030
		[0.048]	[0.044]	[0.039]	[0.039]
Child		-0.003	0.007	-0.040	-0.040
		[0.053]	[0.050]	[0.045]	[0.044]
Economic Motivation		0.176***	0.138***	0.130***	0.130***
		[0.042]	[0.039]	[0.035]	[0.035]
Employment			0.353***	0.266***	0.243***
			[0.044]	[0.044]	[0.045]
Years since Migration (*Ref: Ysm > 3*)					
Ysm < 1				-0.466***	-0.440***
				[0.054]	[0.055]
1 < Ysm < 3				-0.395***	-0.387***
				[0.046]	[0.046]
Impersonal Contacts					0.057**
					[0.023]
Unemployment Rate					-0.289*
					[0.153]
Area Dummies	Yes	Yes	Yes	Yes	Yes
R-squared	0.013	0.234	0.322	0.450	0.458
N	632	632	632	632	632

Notes: Robust standard errors are in parentheses; ***p<0.01, **p<0.05, and *p<0.1.

Table 3 Employment probability

Variables	(1)	(2)	(3)	(4)
Personal Contacts (*Ref: No Contact*)				
Native	0.015	0.038	0.036	0.021
	[0.073]	[0.071]	[0.068]	[0.070]
Familial	0.001	0.064	0.049	0.020
	[0.051]	[0.049]	[0.047]	[0.046]
Ethnic	0.172***	0.163***	0.154***	0.114***
	[0.046]	[0.043]	[0.042]	[0.042]
Female		-0.105**	-0.116***	-0.113***
		[0.041]	[0.040]	[0.039]
Age		0.057***	0.048***	0.046***
		[0.012]	[0.012]	[0.012]
Age-squared		-0.001***	-0.001***	-0.001***
		[0.000]	[0.000]	[0.000]
High Education		0.092**	0.066*	0.071**
		[0.037]	[0.036]	[0.035]
Married		0.014	-0.003	-0.014
		[0.045]	[0.044]	[0.045]
Child		-0.029	-0.054	-0.048
		[0.050]	[0.049]	[0.049]
Economic Motivation		0.106**	0.081**	0.068*
		[0.042]	[0.040]	[0.039]
Years since Migration (*Ref: Ysm > 3*)				
Ysm < 1			-0.401***	-0.337***
			[0.062]	[0.063]
1 < Ysm < 3			-0.066	-0.044
			[0.044]	[0.043]
Impersonal Contacts				0.130***
				[0.025]
Unemployment Rate				-0.127
				[0.171]
Area Dummies	Yes	Yes	Yes	Yes
R-squared	0.042	0.161	0.229	0.267
N	632	632	632	632

Notes: Robust standard errors are in parentheses; ***p<0.01, **p<0.05, and *p<0.1.

Table 4 Job characteristics

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Variables	Regular Job	Contract	Regular Job	Contract	Regular Job	Contract	Regular Job	Contract
Personal Contacts (*Ref: No Contact*)								
Native	0.093	0.089	0.105	0.099	0.111	0.101	0.124*	0.104
	[0.073]	[0.077]	[0.074]	[0.070]	[0.068]	[0.069]	[0.069]	[0.070]
Familial	-0.092	-0.149**	-0.045	-0.106	-0.053	-0.115	-0.056	-0.121*
	[0.066]	[0.070]	[0.066]	[0.071]	[0.064]	[0.070]	[0.064]	[0.071]
Ethnic	-0.132**	-0.122*	-0.145**	-0.133**	-0.162***	-0.151**	-0.160***	-0.155**
	[0.061]	[0.066]	[0.060]	[0.062]	[0.058]	[0.062]	[0.058]	[0.063]
Female			0.060	-0.012	0.074	-0.002	0.052	-0.007
			[0.053]	[0.058]	[0.054]	[0.058]	[0.057]	[0.061]
Age			0.053***	0.044**	0.045***	0.038**	0.049***	0.040**
			[0.017]	[0.018]	[0.016]	[0.017]	[0.016]	[0.018]
Age-squared			-0.001**	-0.000*	-0.000**	-0.000	-0.001***	-0.000*
			[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
High Education			0.065	0.032	0.049	0.026	0.050	0.027
			[0.048]	[0.053]	[0.046]	[0.053]	[0.046]	[0.053]
Married			-0.074	-0.039	-0.068	-0.035	-0.068	-0.037
			[0.053]	[0.061]	[0.052]	[0.061]	[0.051]	[0.061]
Child			-0.006	-0.115*	-0.044	-0.135**	-0.040	-0.133**
			[0.058]	[0.065]	[0.057]	[0.065]	[0.056]	[0.065]
Economic Motivation			0.008	-0.018	0.011	-0.026	-0.003	-0.032
			[0.058]	[0.063]	[0.058]	[0.062]	[0.058]	[0.064]
Years since Migration (*Ref: Ysm > 3*)								
Ysm < 1					-0.344***	-0.186*	-0.345***	-0.185*
					[0.097]	[0.110]	[0.096]	[0.110]
1 < Ysm < 3					-0.253***	-0.172***	-0.252***	-0.172***
					[0.059]	[0.066]	[0.058]	[0.066]
Impersonal Contacts							0.032	0.027
							[0.036]	[0.043]
Unemployment Rate							0.318	0.018
							[0.260]	[0.274]
Area Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.036	0.047	0.112	0.114	0.184	0.140	0.189	0.141
N	367	324	367	324	367	324	367	324

Notes: Robust standard errors are in parentheses; ***p<0.01, **p<0.05, and *p<0.1.

FIGURES

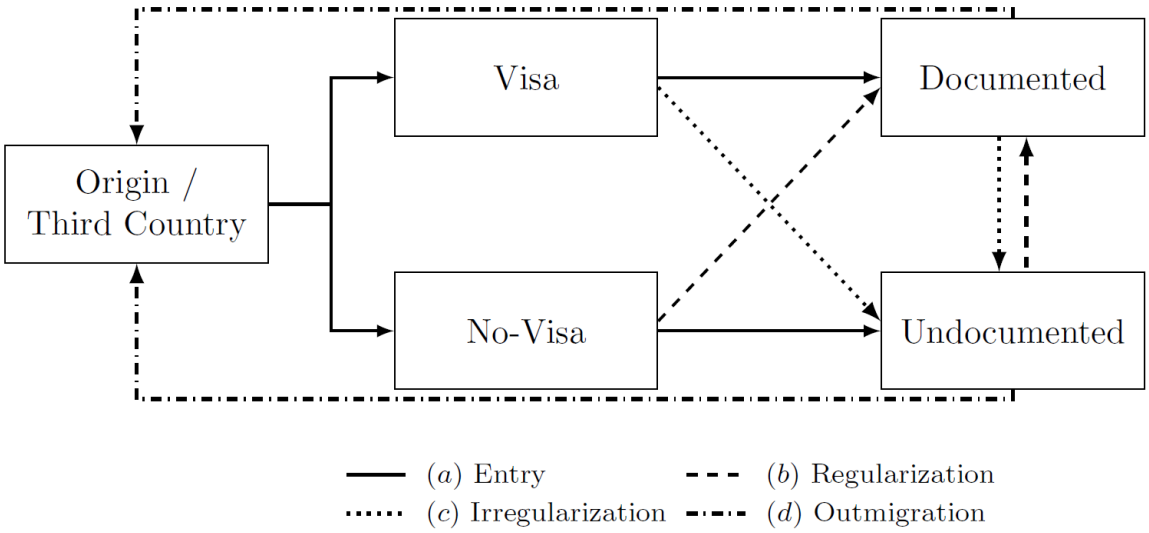

Fig. 1 Immigrant transitions across legal statuses.

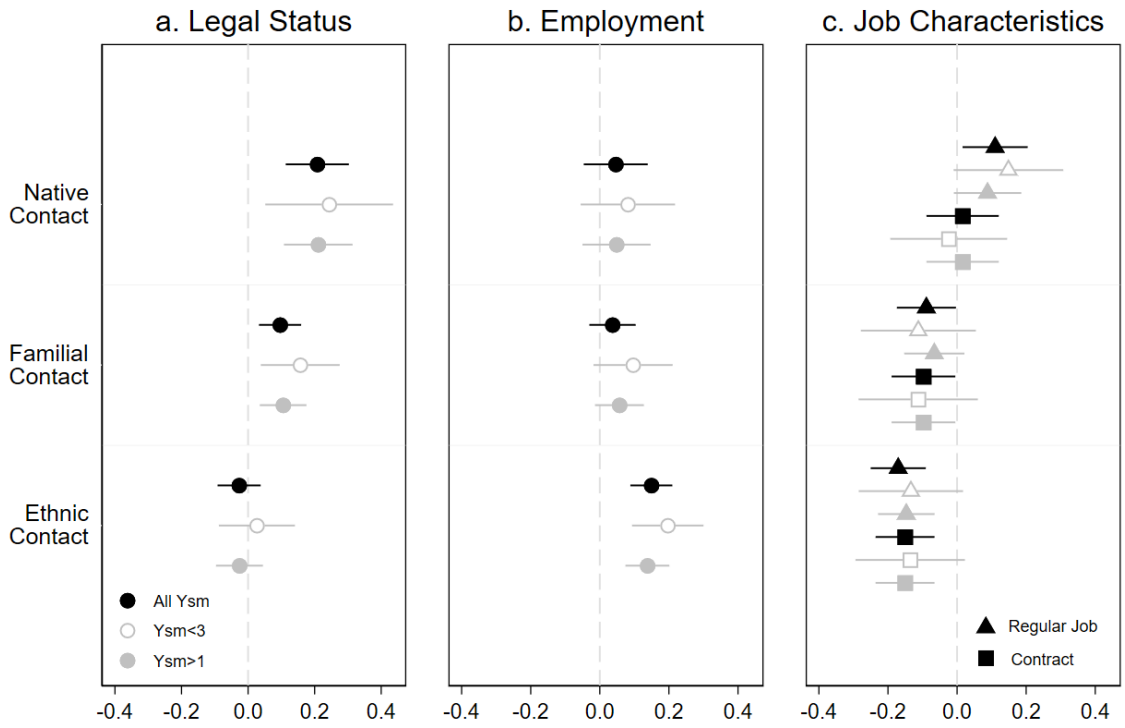

Fig. 2 Personal-contact effects by length of residence.

Notes: Symbols denotes estimated coefficients (LPM) and lines their relative 10% confidence interval. Sample specifications by years since migration (Ysm) are marked by different colours.