Received: 12 September 2022 | Revised: 1 February 2023 | Accepted: 31 March 2023

DOI: 10.1111/imig.13144

INTERNATIONAL MIGRATION IOM UN MIGRATION

ORIGINAL ARTICLE

Traces in the shadow: Occupational outcomes of previously undocumented migrants in Italy

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Abstract

Using a representative sample of currently legal third-country immigrants in Italy, obtained from the Social Condition and Integration of Foreign Citizens survey, this article examines the long-term labour market consequences of previous undocumented spells. First, formerly undocumented immigrants are identified using retrospective information on respondents' legal status. Second, immigrants are classified according to the duration of irregular spells before the achievement of the first residence permit. Third, current labour market outcomes are investigated to account for the endogeneity underlying the previous undocumented history. Results show that even though formerly undocumented immigrants are more likely to participate in the labour market, they are more likely to be employed in underqualified occupations than continuously legal immigrants. The duration of the irregular experience affects occupational qualification negatively, among both men and women. The lack of legal entry channels and policies to plan and regulate migration to Italy may reinforce labour market segmentation, exposing migrants to long-term occupational downgrade.

INTRODUCTION

In the summer of 2020, Italy launched a new regularisation campaign to promote the legalisation of undocumented migrants.[1] Motivated by the necessity to secure irregular migrants' health needs during the Covid-19 pandemic and to address labour shortages in the agricultural sector, this regularisation programme actually represents the umpteenth "one-off" weak policy response to long-standing unaddressed, unresolved issues.

On the one hand, Italy, over the last decades, has offered broad opportunities to the spontaneous, unauthorised flows of migrants occurring in response to several pull factors, including a shortage of low-skilled labour in its dualistic and segmented labour market (Colombo & Dalla-Zuanna, 2019), a well-established informal economy[2] (Reyneri, 2003) and the commodification of welfare due to the rising burden of elder-care (Degiuli, 2010). On the other hand, historically a country of emigration, Italy has suffered a structural delay in the definition of systematic immigration law (Einaudi, 2007; EMN, 2005). Ex-post regularisation campaigns have been recurrently used to reduce irregular migration stocks. The first campaign to address the entire undocumented immigrant population took place in 1982. Forty years later, the country still struggles with its historical immigration policy[3] vacuum (Colombo & Dalla-Zuanna, 2019) whose consequences on migrants' life trajectories are not well known.

As migrants have become essential to the Italian market, questions arise about how their legal status trajectories and especially the time spent as undocumented contribute to their well-documented occupational penalty. Considering the trade-off between unemployment and job quality that characterises the incorporation of migrants in Europe (Ballarino & Panichella, 2015; Reyneri & Fullin, 2011), immigrants' risk of unemployment is hardly any greater than for natives in Italy (Fullin, 2011; Fullin & Reyneri, 2011). However, immigrants do suffer a severe penalty in terms of wages and occupational qualification, facing high risks of being trapped in low-quality jobs throughout their careers (Fellini & Guetto, 2019; Panichella et al., 2021; Venturini & Villosio, 2008). In this framework, among the factors affecting the immigrant occupational penalty in Italy, the role of legal status has largely remained unexplored. Nationally representative studies are generally targeted at legal immigrant residents. Furthermore, the justifiably strong focus on the lack of relapse into irregular status and the labour market participation of regularised migrants as indicators of success in evaluating regularisation policies (Carfagna, 2002; Kraler, 2009; Levinson, 2005) may overlook crucial issues related to long-term integration and economic penalisation of migrants even after their regularisation.

So far, most evidence on the occupational penalty of undocumented migrants (as concerns wages and other job-quality aspects) has been collected in the USA and relies on immigrants' currently observed—or inferred—legal status (Borjas & Cassidy, 2019; Hall & Greenman, 2015; Hall et al., 2019). However, despite its relevance, this approach usually overlooks the fact that a substantial proportion of the current immigrant workforce legally residing in Western societies has formerly experienced undocumented spells, for which the consequences remain largely understudied. This lacuna is particularly noticeable in European countries, especially in Southern Europe, because of the large accumulation of irregular migration flows and the recurrent implementation of ex-post legalisation programmes (Colombo & Dalla-Zuanna, 2019; King & DeBono, 2013; Vogel et al., 2011). Empirical evidence on the nexus between previous experience as undocumented migrants and labour market outcomes in European countries is almost non-existent, primarily due to substantive data limitations. Previous studies in the European context that examine the relationship between legal status and labour market outcomes have almost exclusively focussed on EU status (Fellini & Guetto, 2022; Ruhs, 2017) or refugee status acquisition (Cheung & Phillimore, 2014; Ortensi, 2015), largely ignoring the problem of the absence of a legal right to reside in the destination country.

This study aims at filling this knowledge gap and contributing to a better understanding of the mechanisms underlying immigrants' labour market disadvantages in the Italian context. To investigate the long-term effects of the undocumented experience, we utilise data from the *Social Condition and Integration of Foreign Citizens* (SCIF) survey, which provides an unprecedented opportunity to explore previously undocumented experiences among migrants during their initial settlement in Italy.

The remainder of the article is structured as follows. Section 2 reviews the main findings and scholarly approaches to the study of the relationship between legal status and immigrants' labour market outcomes. Section 3 describes the Italian context and develops our research hypotheses. Section 4 contains a description of data and methods used in the analysis. Section 5 presents the research findings and Section 6 concludes and discusses policy implications.

LEGAL STATUS AND IMMIGRANTS' LABOUR MARKET OUTCOMES

There are at least two main consequences on labour market outcomes for those lacking legal status. First, undocumented immigrants are often constrained to informal sectors of the labour market and overrepresented in low-paid, low-quality and unstable occupations (Triandafyllidou & Bartolini, 2020b). Lacking a formal contract and facing the need to stay "in the shadows," undocumented immigrants have little (or no) bargaining power (Rivera-Batiz, 1999) and are highly subject to abuse and exploitation. Moreover, hiring irregular immigrants often implies costs for employers, who can decide to pass these costs on to immigrant employees, further reducing their wages (Fasani, 2015). In short, undocumented migrants often face substantial occupational penalties. In such cases, attaining legal status may improve their labour market standing, providing them with higher job mobility and creating a new set of opportunities in previously inaccessible occupational sectors (Kossoudji & Cobb-Clark, 2000).

Second, lacking legal status may also affect employment and activity rates. Whereas undocumented immigrants tend to easily accept poor job conditions, mainly because of the expectations of subsequent legalisation tied to employment,[4] immigrants who enjoy legal status, and have access to welfare provision, can await better job opportunities. Legalised immigrants, enhancing their reservation wage, are thus likely to lower their participation in the labour market and to experience more extended periods of unemployment (Amuedo-Dorantes & Bansak, 2011).

The analysis of the impact of legal status on labour market outcomes entails significant methodological drawbacks relating to data availability and the identification of undocumented migrants. On the one hand, large nationally representative surveys collecting occupational data (e.g. Labour Force Surveys in Europe and the Current Population Survey in the USA) generally refer to currently documented immigrants or do not enquire about the (current and previous) legal status of respondents. On the other hand, surveys including information on legal status are relatively small, locally based and target-specific subgroups of the immigrant population (Bachmeier et al., 2014).

To deal with this data limitation, empirical research on the relationship between legal status and immigrant labour market outcomes—almost entirely conducted in the USA—has followed three main strategies. The first is based on the comparison between different groups of migrants classified according to their legal status at the time of the interview, given that this information is available. Hall and colleagues, for instance, find that undocumented Central American immigrants to the USA (identified through their visa status and participation in public welfare programmes) have lower rates of upward job mobility, are rewarded less for employment in hazardous settings and experience higher wage differentials than documented immigrants (Hall et al., 2010, 2019; Hall & Greenman, 2015). Similar effects emerge from the Spanish case (Amuedo-Dorantes et al., 2013). Following the same approach, long-term studies based on Mexican Migration Project data reveal that the post-1990 decline in wages earned by Mexican immigrants mainly concerned currently undocumented migrants identified in each survey year (Massey & Gentsch, 2014).

A second strategy involves inferring legal status through indirect imputation methods (Passel & Cohn, 2014; Warren, 2014). In the US context, "likely undocumented" immigrants—identified, for instance, through the year of arrival, combined with other observable characteristics—tend to have higher activity and employment rates than other groups in the population, although they do face a wage penalty over the life cycle (Borjas, 2017; Borjas & Cassidy, 2019; Ortega & Hsin, 2018).

A third strategic response observes the short-term effects of a change in legal status through regularisation programmes intended as exogenous policy experiments.[5] Empirical research based on this approach has found that legalisation improves wage profiles and mobility and reduces occupational concentration in underqualified occupations; at the same time, it reduces chances of employment (Amuedo-Dorantes et al., 2007; Kossoudji & Cobb-Clark, 2000, 2002; Rivera-Batiz, 1999; Sisk, 2012). Similarly, imputation approaches in large samples have been applied to observe over-time discontinuity in immigrant outcomes before and after amnesty, revealing a positive wage effect of legalisation (Barcellos, 2012; Lozano & Sorensen, 2011; Monras et al., 2020; Pan, 2012; Steigleder & Sparber, 2017). Broadly comparable results emerge from the evidence on labour market outcomes of the transition to other and, more likely observable, forms of legal status: naturalisation in the USA (Bratsberg et al., 2002), postenlargement citizenship achievement in Europe (Fellini & Guetto, 2022) and the transition from possessing a temporary to a permanent residence permit in Canada (Ci et al., 2018).

However, the long-term consequences of previous undocumented spells experienced by immigrants are underresearched, with few exceptions of studies aimed at identifying different types of illegality among formerly undocumented migrants to the USA newly admitted for lawful permanent residence (Cheong, 2021; Jasso et al., 2008), although this retrospective approach has not been applied to investigate labour market consequences.

In addition to data availability, a second major problem in studying the labour market penalty for undocumented migrants is the potential endogenous selection into legal status. Two arguments have been proposed by Massey (1987). First, undocumented migrants, facing more significant barriers to entry than authorised immigrants, tend to be selected primarily in terms of productivity-enhancing factors like motivation and risk-taking propensity (see also Triandafyllidou & Bartolini, 2020a). Overlooking motivational selectivity may lead to underestimating the occupational penalty for undocumented migrants. Second, cross-sectional analyses neglect the self-selection induced by secondary migration. Return migration may strictly depend on labour market success: migrants concentrated in low-quality and low-paid occupations are more likely to have temporary settlement projects than those succeeding in labour market outcomes (Abramitzky et al., 2019). This scenario is not neutral for legal status. Undocumented immigrants, facing additional costs, are more likely to re-migrate when accumulating labour market failures (Ortensi & Barbiano di Belgiojoso, 2018; Triandafyllidou & Bartolini, 2020a). Currently and formerly undocumented migrants identified in cross-sectional surveys are likely to be positively selected, especially if they have experienced long periods in an undocumented status. Furthermore, legalised immigrants are not free from self-selection bias (Fasani, 2015). Legalisation implies some effort to be undertaken by eligible applicants (obtaining information, filling in the application accurately, paying fees, etc.). Therefore, endogeneity issues should be considered to properly assess the consequences of lacking legal status, especially in studies based on cross-sectional and destination country-centred surveys.

UNDOCUMENTED MIGRATION IN ITALY

As of 1 January 2021, 519,000 undocumented migrants, 9 per cent of the entire foreign population, were estimated to reside in Italy (ISMU, 2022). Throughout the last decades, irregular migration has represented a structural component of the foreign-born population, with recurring fluctuation over time. Many factors are responsible for irregular migration flows to Italy, among them the large and flourishing underground economy, which operates as a pull factor, and the lack, for many years, of explicit immigration law followed by the gradual implementation of stricter immigration controls (Colombo & Dalla-Zuanna, 2019; Colucci, 2018; Einaudi, 2007; Reyneri, 1998).

To deal with its sizeable undocumented population, Italy has repeatedly implemented ex-post regularisation programmes (Table 1 offers an overview). After the first amnesty in the early 1980s, substantive legalisation programmes followed in 1986, 1990, 1995, 1998, 2002, 2009, 2012 and 2020, realised by governments with different political orientations (for a detailed description of the requirements of these programmes and other jointly developed immigration policies see, among others, Colombo, 2012; Paparusso et al., 2017; Zincone, 2006).

TABLE 1 Regularisation programmes in Italy.

Year	Proponent	Prime Minister	Applicants	Legalised immigrants
pre-1986	*various*	*various*	-	20,000
1986	Foschi	Craxi II	113,349	103,979
1990	Martelli	Andreotti VI	234,841	217,626
1995	Dini	Dini	258,761	244,492
1998	Turco-Napolitano	Prodi I	250,747	217,124
2002	Bossi-Fini	Berlusconi II	702,156	645,947
2009	Tremonti	Berlusconi IV	191,887	173,997
2012	Monti-Riccardi	Monti	134,775	106,524
2020	Bellanova	Conte II	207,542	-
	Total			1,729,689

Source: Authors' elaboration from various sources collected by Prof. Asher D. Colombo (University of Bologna).

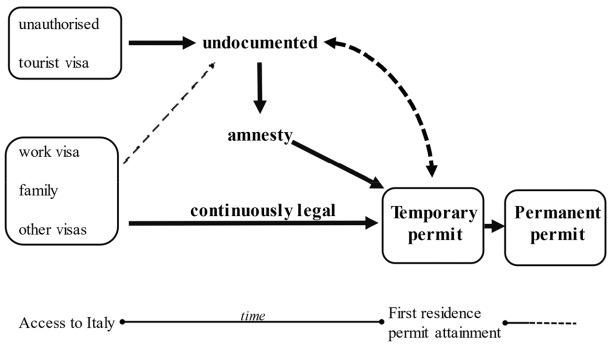

FIGURE 1 Patterns within the legal status achievement process in Italy since 1990.

Overall, legal status could be achieved by non-EU migrants to Italy through different patterns, as summarised in Figure 1. Notably, in most cases, a residence permit is temporary and must be renewed. Relapses into irregular status are, therefore, always possible during the first 5 years of legal residence.

Some immigrants have never experienced undocumented status. Among them, we can find those who entered Italy with a valid work visa (e.g. through quotas, employer sponsorship, etc.) and subsequently obtained a residence permit. However, legal entries through the quota system for labour recruitment (*decreto flussi*) have been widely used also as an a posteriori form of regularisation of migrants already living in Italy, therefore transforming standard admission into a functional equivalent for amnesties (Kraler, 2009; Zanfrini, 2019). A second way to access the country regularly is through family reunification (which also allows labour market access). As migration consolidates, family members have acted as one of the most important social networks to allow immigrants to enter the country regularly (Cvajner & Sciortino, 2010). Although less relevant to the Italian case, especially before 2015, authorised entry and legal status achievement have also been possible for education, asylum and humanitarian protection.

Conversely, other immigrants have entered Italy as unauthorised or overstayed their temporary visas (typically issued for tourism). A portion of this population has been subsequently legalised through regularisation programmes or has succeeded in acquiring legal status through other channels, for example, through marriage to an Italian citizen (Guetto & Azzolini, 2015). Others have remained in the shadows. Patterns characterised

by undocumented spells are particularly relevant in the Italian and Southern European framework (Cvajner & Sciortino, 2010). Between 1982 and 2012, due to amnesties, *decreti flussi* and EU enlargement, around 2.8 million migrants were estimated to have exited a previously irregular condition (Buonomo & Paparusso, 2018). An additional 220,000 applied for the most recent 2020 regularisation (Ministero dell'Interno, 2020).

Previous studies have analysed the relationships between legal status and a variety of outcomes in the Italian setting. Paparusso et al. (2017) have highlighted the strong negative impact of uncertainty linked to irregularity on migrants' lives, both economically and psychologically. Dustmann et al. (2017) have analysed the effect of legal status among migrants on their consumption behaviour, showing that those without documents consume about 40 per cent less than documented immigrants, conditional on background characteristics. A significant body of empirical research on Italian data has focussed on the relationship between legal status and crime, indicating that obtaining legal status significantly reduces the propensity to commit crimes (for a review, see Pinotti, 2017).

Focussing on labour market outcomes, Devillanova et al. (2018) find that among undocumented migrants, being potentially eligible for legal status just prior to an amnesty programme significantly increases the probability of being employed. Fasani (2015), using cross-sectional data collected in the Lombardy region before and after the 2002 amnesty, observes no effects of legalisation on migrant employment, earnings and occupational quality. These short-term results are closely related to the 2002 regularisation programme design, which strongly conditioned legalisation on employment (to be eligible, before the amnesty, migrants had accepted lower wages, longer working hours and less attractive occupations). Cremaschi et al. (2016) provide evidence concerning the augmented vulnerability of irregular migrants in their employment outcomes and housing conditions during the economic crisis that started in 2008.

In sum, existing empirical studies have addressed the consequences of legal status on migrant labour market outcomes by focussing on short-term and locally based effects of legalisation. However, the consequences of undocumented spells may persist over the immigrant life cycle, even after regularisation.

Research hypotheses

It can be assumed that migrants who have continuously enjoyed legal status since their entry and formerly undocumented immigrants exhibit different levels of labour market participation. Three main reasons underpin this assumption. First, a composition effect influences the two groups. Continuously legal immigrants, especially women, have likely entered Italy through family reunification and, as family dependants, they have relied on economic and social support from other household members (OECD, 2017). By contrast, migrants with previous undocumented experience are mainly "economic migrants" and primary breadwinners. Indeed, empirical evidence suggests that family migrants have lower labour market participation rates than labour migrants (Cangiano, 2014; Kanas & Steinmetz, 2021; Zwysen, 2019). Second, formerly undocumented migrants with fixed-term resident permits (obtained notably after regularisation) must prove that they are employed in order to renew the permit (Ferro & Fellini, 2009). Thus, those who have spent an initial irregular period are more likely to have (at a certain point in time, e.g. at the time of an interview in a cross-sectional survey) a temporary rather than a permanent residence permit, facing higher costs for remaining unemployed. Third, formerly irregular immigrants (since the beginning of their occupational experience) are strongly pulled toward migration by demand-intensive sectors of the labour market that characterise the informal economy in Italy (Triandafyllidou & Bartolini, 2020b). These considerations lead us to our first hypothesis:

> **H1.** Controlling for different socio-demographic and migratory background characteristics, formerly undocumented immigrants are more likely to currently participate in the labour market than immigrants who have maintained continuous legal status.

Further, extended undocumented spells may result in occupational consequences. Some entrapment mechanisms into low-quality jobs may hinder immigrants' occupational mobility in the long run. Immigrants forced into irregular work, for example, can develop informal social networks that provide them with a high circulation of job-relevant information (Barbiano di Belgiojoso & Ortensi, 2019; Sigona, 2012). These networks may subsequently be mobilised even when immigrants obtain legal status, increasing the risk of entrapment in irregular (and low-quality) employment (Bloch, 2013). Moreover, after a prolonged period of irregular employment, due to the lack of legal status, migrants may have developed specific skills in the type of work they performed irregularly. Changing one's employment sector might thus become relatively more costly and challenging, especially in Mediterranean countries with a well-developed underground economy and a labour market strongly segmented by ethnicity and gender. In these countries, migrants usually continue to work in irregular jobs despite having been legalised, facing the risk of re-entering the undocumented status (Reyneri, 2001, 2003). This vicious cycle can hinder their mobility patterns, and negative long-term occupational consequences may increase during longer undocumented spells. Therefore, we formulate our second set of hypotheses:

H2a. Ceteris paribus, formerly undocumented immigrants are more likely to hold low-quality occupations than immigrants who have maintained continuous legal status.

H2b. The longer the irregular spells, the higher the risk for immigrants to become entrapped in less prestigious jobs.

DATA, METHODS AND SAMPLE DESCRIPTION

The data used in this analysis come from the *Social Condition and Integration of Foreign Citizens* (SCIF), a nationally representative survey of individuals living in families with immigrant backgrounds conducted in Italy by Istat in 2011 and 2012. The survey collected retrospective information on first and current residence permits among legally resident foreigners at the time of the interview, including the dates the permits were obtained. This information allows for the exploration of respondents' previous undocumented histories.[6] Although it is not possible to ascertain whether the migrant relapses into irregular status after the expiration of the first residence permit, undocumented spells between entry into Italy and obtaining the first permit can be investigated. The survey also contains extensive information on the migratory pathways and working conditions of respondents.

The subsample used for this study includes foreign-born, non-EU immigrants from European or developing countries who entered Italy between 18 and 60 years of age, between 1989 and 2012. It thus consists of first-generation immigrants required to have a visa or a residence permit when they first entered Italy.[7]

Our variable of interest is *time spent as an undocumented migrant* (*undoc*), recoded into three categories. The first one is labelled *continuously legal* and refers to respondents for whom the three following conditions are met simultaneously: (1) the individual has never held irregular status (determined by answering a direct question); (2) the individual had not obtained the first or current residence permit through a regularisation programme; and (3) the year of obtaining the first permit is the same or, at most, 1 year later than arrival. The other categories—*0-1 years; 2+ years*—identify previous undocumented experience based on the length of time from entry to the first residence permit.

Table 2 shows the distribution of cases based on this variable, distinguished by sex, for the selected subsample, and only for those employed at the time of the interview.[8] Having experienced an irregular spell is widespread among non-EU immigrants in Italy. Only one out of three migrants has continuously enjoyed legal status, whereas 20 per cent have spent a short period as an undocumented migrant (less than 2 years) and nearly 40 per cent a medium- or long-range period (more than 2 years). Among migrants employed at the time of the interview, the occurrence of a continuously legal condition is even lower, with 74 per cent reporting a previous undocumented status. The number of previously undocumented immigrant women is lower as compared to men (55 vs. 65 per cent), although differences by sex are reduced when we consider only employed immigrants.

TABLE 2 Time spent as undocumented migrant by sex for the whole subsample and for the currently employed.

	Whole sample			Currently employed		
	M	F	Tot	M	F	Tot
Continuously legal	26.1	37.9	32.5	24.3	28.9	26.3
0–1 year	23.4	17.6	20.2	23.7	19.7	22.0
2+ years	41.1	36.9	38.9	42.8	44.7	42.6
Missing	9.4	7.6	8.4	9.2	6.8	8.1
Total	100	100	100	100	100	100
N	3872	4640	8512	3269	2471	5740

Note: weighted cases.
Source: SCIF 2011–12.

TABLE 3 Labour market outcomes according to time spent as an undocumented migrant and sex (%).

	Labour market participation		Elementary and care/ domestic		ISEI (average among employed)	
	M	F	M	F	M	F
Continuously legal	91.3	50.4	26.0	53.6	31.9	28.5
0–1 year	95.9	69.6	24.6	66.2	30.8	25.2
2+ years	96.1	72.6	27.2	70.0	31.0	25.7
Missing	94.2	53.7	29.1	61.1	31.2	25.9
Total	94.6	62.2	26.4	63.9	31.2	26.4

Note: weighted cases.
Source: SCIF 2011–12.

As dependent variables (y_i), we considered three labour market outcomes: (1) *labour market participation* at the interview (employed or unemployed vs. inactive), for the whole sample; (2) *being employed in elementary and care occupations*[9] (yes/no), for currently employed respondents; and (3) *occupational qualification* measured through the standard international socio-economic index (ISEI), as proposed by Ganzeboom et al. (1992), Ganzeboom and Treiman (1996), for currently employed respondents.

Table 3 shows these three outcomes according to time spent as an undocumented migrant. For one, the longer the irregular spell, the higher the labour market participation at the time of the interview, both for men and, particularly, for women. Further, the length of irregular spell tends to be linked with lower occupational status, even though this association holds clearly only among women.

We aim at ascertaining whether these relationships hold in a multivariate approach. Given the $i = 1,2,3$ labour market outcomes, we considered two Logit (for $i = 1,2$) and one OLS (for $i = 3$) regression models (for both men and women) where the i-th occupational outcome is modelled as a function of our variable of interest (*undoc*) and a set X of control variables, including *type of first permit* (employment, family, other/do not know); *Italian citizenship* at the interview (yes/no); *years since migration*; *years since migration squared; place of birth* (Albania, Ukraine, Other Eastern Europe, China, Other South/East Asia, Morocco, Other Middle East and North Africa, Sub-Saharan Africa, Latin America); *age*; *level of education* (no education, lower secondary, upper secondary, tertiary); *language proficiency* (defined using the information on four language competencies—reading, writing, speaking and listening—ordered on a rating scale from 1 to 4 and then added to define a unique scale); *area of residence* (North-West, North-East, Centre, South and Islands);

Formally, the model equation is

$$_{(i)}y^{*} = {}_{(i)}\alpha_0 + {}_{(i)}\alpha_1 \cdot \text{undoc} + {}_{(i)}\beta' \cdot X + {}_{(i)}\varepsilon \qquad \text{for } i = 1, 2, 3 \tag{a}$$

where *undoc* is consdered an exogenous explanatory variable, that is, it is not correlated with the residuals. However, as highlighted above, having experienced previous undocumented spells is not a random process and individual (observed and unobserved) characteristics can underlie both labour market position and legal status (in our case, accessing as authorised/unauthorised and the speed of obtaining legal status among those that have entered illegally). For instance, focussing on observed factors, descriptive analyses (see Table A1 and A2 in the Appendix 1) reveal that previous irregular experience is more common among male immigrants, those who arrived before 2005, Eastern Europeans and immigrants residing in Southern Italy upon arrival. Furthermore, family migrants experience fewer irregular spells than humanitarian/forced migrants and, above all, labour migrants, largely characterised by their previous undocumented spells. Ignoring the potential endogenous selection into legal status among immigrants observed at a certain point in time may lead to biased estimates of the occupational penalty due to undocumented immigration (Massey, 1987).

To check the robustness of our analysis, we extended the model by developing a multiprocess approach to account for the potential endogeneity of previous undocumented experience. In detail, for each of the two occupational outcomes (elementary and care/domestic professions; ISEI), we developed the simultaneous estimation of two equations: one Probit/OLS as defined in the first step (equation (a)); and a second equation in which the three-level categorical variable *undoc* is modelled through an Ordered Probit[10] as follows:

$$_{(i)}y = {}_{(i)}\alpha_0 + {}_{(i)}\alpha_1 \cdot \text{undoc} + {}_{(i)}\beta' \cdot X + {}_{(i)}\varepsilon \qquad \text{for } i = 2, 3$$

$$\textit{undoc}^{*} = \gamma_1' Z + \lambda \qquad \text{where } \textit{undoc} = \begin{cases} \text{"always legal" if } \textit{undoc}^{*} < \tau_1 \\ \text{"0–1 years" if } \tau_1 \le \textit{undoc}^{*} < \tau_2 \\ \text{"2+ years" if } \tau_2 \le \textit{undoc}^{*} \end{cases} \tag{b}$$

The set Z includes variables related to the individual characteristics already observed in the first equation: *place of birth* and *level of education*. Furthermore, it includes other variables retrospectively observed at arrival in Italy: *age at arrival*; *year of arrival* (1989–94; 1995–99; 2000–04; 2005–12); *language proficiency at arrival* (based on the self-declared knowledge of Italian at the arrival and coded as a dummy variable: no knowledge of Italian/sufficient knowledge of Italian); *area of residence at arrival* (the macro-area where the migrant stayed after entering Italy); and *reason for migration* (employment, family, humanitarian/forced, other).

By allowing a potential correlation between each pair of normally distributed residuals ($_{(i)}\varepsilon$ and λ), the endogeneity of the time spent as an undocumented migrant can be taken into account. In other words, we can control for omitted confounding factors correlated with both dependent variables for each pair of equations considered. Accordingly, a strong correlation between pairs of residuals means that some common unobserved factors (at the individual level) simultaneously influence the time spent as an undocumented migrant and the *i*-th labour market outcome.[11]

All the analyses are distinguished by sex, given the different roles and positions of men and women in the Italian labour market. For example, men are primarily employed in private companies in the construction and manufacturing sectors, whereas women are employed mainly in the care and domestic professions (Fullin & Reyneri, 2011).

FINDINGS

Table 4 shows, for immigrant men and women, independent equation estimates from multivariate models on each of the three outcomes considered (labour market participation, being employed in elementary and care occupations, ISEI). Ceteris paribus, migrants with a mid-long irregular spell after arrival (2+ years) are more likely to participate in the labour market compared with continuously legal migrants but, at the same time, they face higher risks of being currently employed in elementary and care professions and are penalised in accessing high-level positions on the occupational ladder.

Among immigrant men, those with previous undocumented experience of 2+ years face a relative risk of participating in the labour market that is 50 per cent higher than their continuously legal counterparts. At the same time, they are about 25 per cent more likely to be employed in elementary occupations. Among women, previously undocumented migrants (2+ years) are about 25 per cent more likely to be active instead of inactive, but they face an approximately 70 per cent higher risk of being employed in elementary and care professions compared with continuously legal migrants. Smaller effects, statistically significant only on the ISEI, are also found for having a short irregular spell (0–1 year). Coefficient estimates, in this case, are larger for women, suggesting a more substantial negative occupational impact of previous experience as an irregular migrant.

Considering the other variables included in the model, we find that migrants from China, other South/East Asian countries and Ukraine (women in particular) participate in the labour market to a greater extent than those from other countries, especially Morocco. However, when employed, immigrants from South/East Asia are generally more likely to have elementary or care and domestic in-home occupations, whereas Chinese women show the lowest chances. For men, these occupations are more widespread among African and South/East Asian migrants than among Eastern Europeans, which are mostly employed as craft or manual workers in construction and manufacturing. Education and language proficiency are positively associated with both labour market participation (for women only) and a higher occupational position.

The type of first residence permit, which can be considered a proxy for the migratory channel, substantially matters. On the one hand, family migrants are much less likely to be active than labour migrants, especially among women. On the other hand, labour migrants are less likely to access qualified occupations compared with family migrants and other categories (study, humanitarian protection, etc.).[12]

Although women are slightly more penalised in accessing qualified professions, results do not suggest a specific gendered relationship with the time spent as undocumented migrants. Additional analyses (not shown here) including an interaction term between sex and time spent as undocumented (developed on a pooled dataset for both men and women) reveal that estimates by sex tend to overlap, without showing significant differences.

Figure 2 compares the estimates obtained in the independent and simultaneous equation modelling. Overall, joint estimation clearly confirms results on the occupational qualification outcomes by highlighting and strengthening the role of time spent as undocumented for both immigrant men and women. Indeed, in the simultaneous model, short irregular spells (0–1 years) are also negatively (and significantly) associated with ISEI and positively (and significantly) associated with the probability of working in elementary and care occupations.

Residual correlation in multiprocess models is negative for the probability of having an elementary/care occupation and positive for ISEI (see Tables A3 and A4 in the Appendix 1, which also report the complete set of estimates). This finding implies that some unobserved characteristics are positively associated with either occupational qualification outcomes, for example, higher ISEI levels, and the probability of having previous irregular experience (especially longer undocumented spells).

Formerly undocumented migrants, facing barriers that hinder their access to and settlement in Italy to a greater extent than continuously legal immigrants, might be highly selected with respect to (unobservable) factors that are likely to improve their occupational conditions. Even more importantly, given our data's cross-sectional and retrospective structure, only "successful" immigrants can be observed, that is, those who regularly reside in Italy at the time of the interview. Indeed, we assume that immigrants accumulating failures in both labour market

TABLE 4 Model estimates (1) on the probability to participate in the labour market (logistic regression); (2) on the probability to be employed in elementary, domestic and care professions (logistic regression); and (3) on the ISEI (linear regression) by sex.

	(1) Labour market participation		(2) Elementary and care/ domestic		(3) ISEI	
	Odds Ratios		*Odds Ratios*		*Coefficients*	
	M	F	M	F	M	F
Time spent as undoc. (ref. Cont. legal)						
0–1 years	1.40*	1.08	1.08	1.09	−0.78*	−1.29**
2+ years	1.49**	1.24**	1.26**	1.68***	−1.08**	−1.93***
First residence permit (ref. Work)						
Family	0.26***	0.11***	0.66***	0.59***	1.11**	0.73
Other/do not know	0.29***	0.16***	1.01	0.56***	1.42*	4.38***
Italian citizenship (ref. No)						
Yes	1.19	0.75	0.46**	0.77	2.63**	0.78
Years since migration	1.14**	1.03	0.90***	0.87***	0.42***	0.34**
Years since migration (squared)	1.00*	1.00	1.00***	1.00	−0.01**	−0.01*
Place of birth (ref. Albania)						
Ukraine	1.74	2.23***	0.80	1.29	2.15**	2.64***
Other Eastern Europe	1.07	0.98	0.77	0.76	1.42**	4.29***
China	2.53**	3.01***	0.12***	0.01***	4.36***	12.40***
Other South/East Asia	1.81**	1.32*	2.84***	2.71***	−3.80***	−0.29
Morocco	0.80	0.58***	2.49***	1.13	−1.30**	2.41***
Other MENA	1.48	0.77	1.74***	0.99	−1.46**	3.57***
Sub-Saharian Africa	1.73*	1.31	2.60***	0.90	−0.77	3.03***
Latin America	1.67	1.12	2.03***	1.00	0.16	3.07***
Age	0.94***	1.00	1.01	1.07***	−0.04*	−0.09***
Education (ref. Lower secondary or less)						
Upper secondary	1.09	1.29***	0.87	0.64***	1.47***	2.13***
Tertiary	1.45	1.27*	0.65**	0.37***	7.23***	7.29***
Language proficiency	1.15	1.48***	0.80***	0.80***	1.08***	1.08***
Area of residence (ref. North-West)						
North-East	0.95	1.10	0.73**	0.85	−0.32	−1.28*
Centre	1.36	1.13	1.06	0.71**	−1.20**	−0.41
South and Islands	0.83	0.81**	2.75***	1.21	−4.06***	−2.21***
Observations	3437	4217	2901	2267	2901	2267
Pseudo-R2	0.152	0.248	0.148	0.201		
R2					0.176	0.181

Source: SCIF 2011–12.

*$p<0.1$; **$p<0.05$; ***$p<0.01$; Exponentiated coefficients for models (1) and (2); p-values computed through robust standard errors.

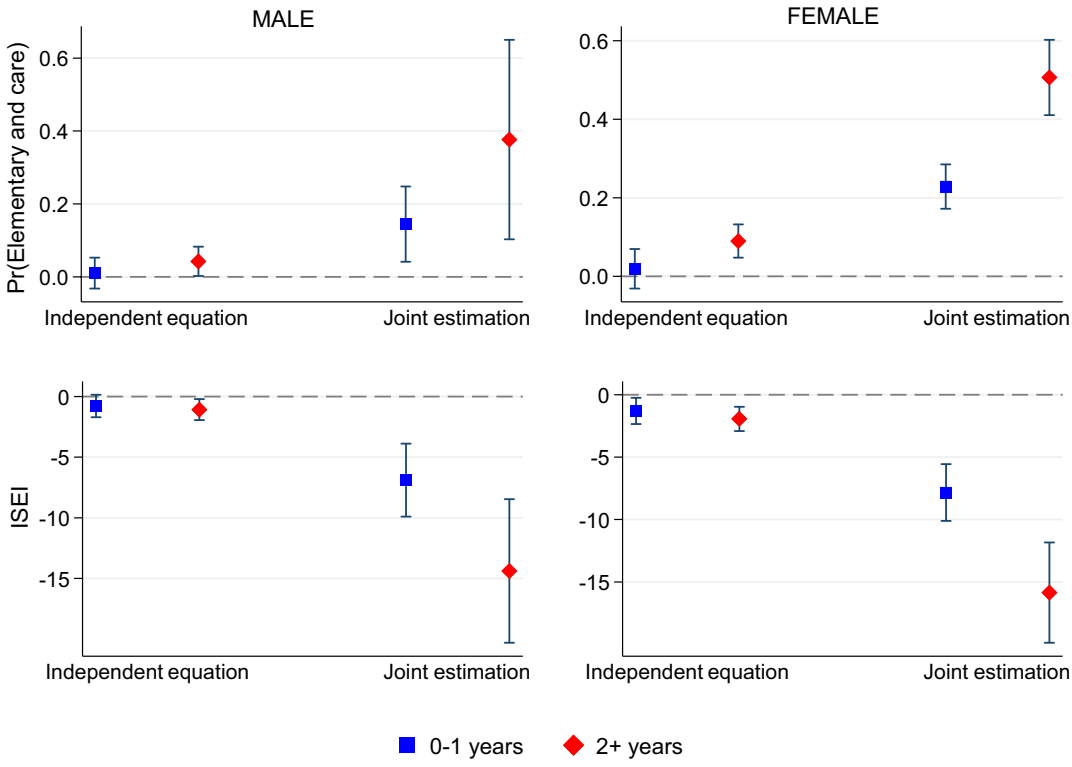

FIGURE 2 Average marginal effects on the probability of being employed in elementary and care professions (top figures) and variation on the ISEI scale (bottom figures) according to time spent as an undocumented migrant (reference category: continuously legal) for male and female immigrants. Independent and simultaneous model estimates.

and legal status transitions are more likely to out-migrate and exit the reference population in our sampling design. This occurrence supposedly affects formerly undocumented immigrants to a greater extent as the duration of irregular status grows, improving their positive self-selection in our sample. Therefore, once this self-selection is taken into account through multiprocess models, we obtain larger estimates of the negative effect of previous undocumented experience on occupational qualification.

CONCLUSIONS AND POLICY IMPLICATIONS

Undocumented migration represents a significant phenomenon throughout migrant populations in European countries, especially in the context of Southern Europe. While a sizable proportion of undocumented migrants has achieved legal status, little or no empirical research exists about the possible long-term impact of such experiences on their labour market outcomes after legalisation.

In this article, we focussed on Italy, a country that has historically relied upon ex-post regularisation programmes. As a result, many currently regular immigrants had experienced previous irregular spells before obtaining a residence permit. Often, time spent undocumented has been prolonged, lasting several years. Building on the Istat SCIF national representative sample of legal immigrants, we evaluated the relationship between their current labour market outcomes and their previous experience as undocumented.

Our findings reveal that formerly undocumented immigrants, compared with continuously legal immigrants, are more likely to participate in the labour market, even after legalisation (*H1*). However, they are significantly

penalised in terms of professional qualifications compared with migrants that have never been undocumented (*H2a*), suggesting a greater risk of becoming trapped on the lower rungs of the occupational ladder. Moreover, and consistent with a pattern of persistent postlegalisation penalisation of former undocumented migrants, the risk is higher for migrants who have experienced longer undocumented spells (*H2b*). Accordingly, we estimate that former undocumented immigrants in Italy, compared with continuously legal ones, are subjected to a loss in terms of ISEI scale that lies between 0.8 and 1.3 for males and females when the undocumented spell is shorter (less than 2 years), and between 1.1 and 1.9 when the undocumented spell is longer (more than 2 year).

These effects are significant and substantive for both men and women. Although female immigrants in Italy are highly concentrated within in-home care and domestic occupations, suffer a greater penalty than men in accessing qualified professions and do not reduce their gap with Italian women over time (Ballarino & Panichella, 2018; Fullin & Reyneri, 2011), continuously legal pathways can help avoid this pattern. By contrast, undocumented women are highly pulled by the demand for workers in such services, primarily regulated informally, by households (Catanzaro & Colombo, 2009; Sciortino, 2004). We argue that, for both men and women, being forced to enter labour market sectors characterised by a large share of irregular workers has a lasting effect, even after legalisation. While working in low-skilled irregular job positions as undocumented, migrants develop, over time, specific skills, knowledge and networks. They can use these assets to avoid unemployment and even develop "a horizontal career" within those same sectors, hardly affected by the shortage of a native workforce (Barbiano di Belgiojoso & Ortensi, 2019).

Results are also complementary and consistent with the literature on asylum seekers' integration into the labour market. First, irregular migrants are often forced to rely on their own resources, therefore showing higher employment rates, even after regularisation. This mechanism echoes findings observed in studies on the employment gaps between refugees and other migrants: receptions system support refugees and asylum seekers but often paradoxically build "mechanisms of exclusion" that negatively impact their integration and agency compared with other migrants (Ambrosini, 2014; Korac, 2003; Ortensi & Ambrosetti, 2022). Second, previous undocumented experience also results in a persistently higher risk of entrapment in low-quality jobs compared with other migrants. The long-term effects of temporary conditions experienced at some point of migration have also been documented in the literature on asylum seekers. For example, previous studies have shown that the experience of temporary employment bans on asylum seekers has considerable negative consequences on their labour market integration for up to 10 years (Fasani et al., 2021).

Our comparative analysis is not without limitations. First, the data do not allow the observation of the entire path of regularity/irregularity, but only the duration of the initial irregularity, from entry into Italy to obtaining the first residence permit. Data (currently unavailable) tracking the entire legal histories of immigrants would be of crucial importance in assessing the comprehensive impact of irregular spells, as well as for the prospect of policy evaluation of regularisation programmes. Second, as discussed above, due to the structural design of our retrospective data, previously undocumented migrants are likely to be selected in terms of unobservable characteristics and risk of re-migrating. Our findings reveal a strong correlation between legal status and the entry cohort of migrants, suggesting that selection processes linked to return migration, which affect regular and irregular migrants differently, might be at work. The difficulty of finding strong and reliable instruments (i.e. variables correlated with legal status, but not with occupational outcomes) restricts the potential benefits of our attempt to address causality through a multiprocess modelling approach. Therefore, we must acknowledge that our analysis only partially accounts for the endogeneity of legal status. To address these aspects, further research is needed in order to disentangle the multiple factors responsible for the selectivity of undocumented migration. In particular, further longitudinal studies, matching information on regular and irregular migrants, are needed to follow job market and return migration trajectories by legalisation patterns, possibly including migrants who never legalise.

Despite these limitations, our research provides substantial advancements to the existing scholarly literature. Our results show that both the occurrence and duration of irregular spells negatively affect the job market

integration of migrants, underlining how irregular spells correlate with entrapment in low-quality jobs, hindering immigrants' occupational mobility in the long run, even after legalisation. The occurrence of higher employment and less prestigious jobs among formerly undocumented compared with continuously legal migrants draws a parallel to the trade-off between employability and access to more prestigious job market sectors observed for migrants at the European level (Reyneri & Fullin, 2011). Previous studies on the Italian case, for instance, have estimated that immigrants from high-emigration countries compared with natives are subjected to a loss of approximately 10 points on the ISEI scale (Avola & Piccitto, 2020). Although experience as an irregular migrant does not fully explain the occupational penalisation suffered by immigrants compared with natives, it does contribute to the "ethnic penalty" observed in the Italian labour market.

Our study also has substantial implications for policymaking. Despite being the consequence of a policy vacuum, and a dysfunctional, self-contradictory system that heavily relies on the capacity of the market to self-regulate, also eliminating labour supply–demand imbalances (Colombo & Dalla-Zuanna, 2019; Reyneri, 1998), regularisation programmes in Italy have been positively evaluated for many years. Research has generally agreed on the role of legalisation as a significant stabilisation channel for foreign populations, fostering stable integration into the labour market and society (EMN, 2005; Finotelli & Arango, 2011), with overall benefits outweighing the costs (Baldwin-Edwards & Kraler, 2009). Our study adds further complexity to this evaluation by stressing how the shortage of legal migration flows in Italy represents a long-term burden for migrants, sometimes long after legalisation. While the literature has repeatedly stressed the adverse outcomes associated with being undocumented, our study points out that the medium- and long-term consequences of undocumented spells on individual migration patterns of migrants who have achieved and maintained a legal status are also significant. The lack of legal entry channels and policies to plan and regulate migration to Italy may have more long-term negative consequences than so far envisaged, thus reinforcing labour market segmentation.

ACKNOWLEDGEMENTS

We thank Professor Emilio Reyneri, for his valuable comments on an earlier version of the paper, and Professor Asher D. Colombo, for discussing the original idea and making available data on regularisation programmes in Italy. We thank the Italian National Institute of Statistics (Istat) for having granted access to the microdata used in the making of this paper. The ideas and the views expressed in this paper should not under any circumstances be regarded as stating an official position of Istat. The results and any errors are entirely the responsibility of the authors alone.

CONFLICT OF INTEREST STATEMENT

The authors have no competing interests to declare.

PEER REVIEW

The peer review history for this article is available at https://www.webofscience.com/api/gateway/wos/peer-review/10.1111/imig.13144.

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ENDNOTES

[1] In this article, we use the terms "undocumented", "irregular", and "unauthorised" as synonyms aimed at identifying immigrants currently living in the country of arrival without the required permission. For the specific case of Italy, we refer to foreign-born, third-country nationals (non-EU migrants) currently living in the country without a residence permit.

[2] According to the World Bank's Informal Economy Database (Elgin et al., 2021), in the period 1993–2012, the size of the informal economy output as a percentage of the Gross Domestic Product in Italy was 28 per cent, compared to 23 per cent for Spain and 16 per cent for France and Germany.

[3] Following the classification proposed by Hammar (1985), we consider *immigration* policy the set of measures aimed at controlling and selecting or deterring migration flows (border enforcement, carrier sanctions, international and bilateral agreements, visa regimes/entry policies, and actions aimed at reducing push factors), whereas *immigrant* policy includes measures targeting migrants in the country of arrival, such as identification, detention and expulsion, employer sanctions, actions directed at the regularisation of irregular migrants (see also Echeverría, 2020).

[4] This is particularly the case for immigration policies limiting the acquisition of a resident permit (for employment reasons) to the availability of a registered working contract, like those implemented in Italy since the "Bossi-Fini" law in 2002 (see more in the next section).

[5] This perspective is primarily based on ad hoc surveys of applicants to regularisation programmes introduced in the US, most notably, the 1986 Immigration Reform and Control Act (IRCA) and, to a lesser extent, the 1997 Nicaragua Adjustment and Central American Relief Act (NACARA). In Europe, studies exist on the amnesties introduced in Italy by the 2002 "Bossi-Fini" law and in Spain by the 2005 Normalisation Programme.

[6] The sample design for the survey includes all members of households in which at least one individual, that has been identified through the civil registry (and thus has currently the legal right to stay in Italy), is a foreign national. Therefore, it also includes a few cases of currently undocumented migrants (about 1.2 per cent of the total sample).

[7] The survey collected information on the first residence permit only for currently non-EU national respondents at the time of the interview (2011–2012).

[8] The time spent as an undocumented migrant could not be identified for 858 migrants in our sub-sample, because of the lack of information on the year of the first residence permit ("does not know" or "no answer"). These missing cases were excluded from the multivariate analyses.

[9] These occupations include elementary jobs and in-home caregiving, coded, respectively, as 8 and 5.4.4 in the Istat CP2011 classification.

[10] The ordered probit assumes the presence of a latent continuous metric (*undoc**) underlying the ordinal responses observed (*undoc*) and specific thresholds $\tau_1, \tau_2, \ldots \tau_{k-1}$ that partition the real line into a series of regions corresponding to the *k* ordinal categories. Given that undoc assumes $k = 3$ possible categories (in the multivariate models, we excluded the "missing" level), we need to estimate two thresholds.

[11] The identification of the multi-process model is strengthened by the fact that, in the second equation, we included additional regressors referring to the time of arrival in Italy (*age at arrival*, *reason for migration*, *year of arrival*, *language proficiency at arrival*, *area of residence at arrival*). Moreover, *year of arrival* is strongly correlated with the time spent as an undocumented migrant but poorly correlated with employment position at the time of the interview, suggesting that it can be considered a (weak) instrumental variable inducing a change in the labour market position only through its direct effect on the propensity to obtain a residence permit rapidly.

[12] Due to the potential collinearity between legal status and type of first permit, we also run separate models including each of these two variables independently (results not shown here). For both men and women, when excluding the type of first permit from the analysis, the positive effect of previous undocumented experience (0–1 years) on the probability of labour market participation becomes statistically significant; for women, the coefficient size of undocumented (2+ years) also grows substantially. Furthermore, the effect of undocumented (2+ years) on the probability of elementary occupation also increases (up to an odds ratio of 1.78), but only for women.

REFERENCES

Abramitzky, R., Boustan, L. & Eriksson, K. (2019) To the New World and Back again: return migrants in the age of mass migration. *ILR Review*, 72(2), 300–322.

Ambrosini, M. (2014) Better than our fears? Refugees in Italy: between Rhetorics of exclusion and local projects of inclusion. In: Kneebone, S., Stevens, D. & Baldassar, L. (Eds.) *Refugee protection and the role of law: conflicting identities*. Oxon: Routledge, pp. 235–250.

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.

Amuedo-Dorantes, C., Bansak, C. & Raphael, S. (2007) Gender differences in the labor market: impact of IRCA's amnesty provisions. *American Economic Review*, 97(2), 412–416.

Amuedo-Dorantes, C., Malo, M.A. & Muñoz-Bullón, F. (2013) New evidence on the impact of legal status on immigrant labor market performance: the Spanish case. *Labour*, 27(1), 93–113.
Avola, M. & Piccitto, G. (2020) Ethnic penalty and occupational mobility in the Italian labour market. *Ethnicities*, 20(6), 1093–1116.
Bachmeier, J.D., Van Hook, J. & Bean, F.D. (2014) Can we measure Immigrants' legal status? Lessons from two U.S. surveys. *International Migration Review*, 48(2), 538–566.
Baldwin-Edwards, M. & Kraler, A. (2009) *REGINE – Regularisations in Europe*. Vienna: International Centre for Migration Policy Development. January.
Ballarino, G. & Panichella, N. (2015) The occupational integration of male migrants in Western European countries: assimilation or persistent disadvantage? *International Migration*, 53(2), 338–352.
Ballarino, G. & Panichella, N. (2018) The occupational integration of migrant women in Western European labour markets. *Acta Sociologica*, 61(2), 126–142.
Barbiano di Belgiojoso, E. & Ortensi, L.E. (2019) Satisfied after all? Working trajectories and job satisfaction of foreign-born female domestic and Care Workers in Italy. *Journal of Ethnic and Migration Studies*, 45(13), 2527–2550.
Barcellos, S.H. (2012) *Legalisation and the economic status of immigrants*, Vol. 754. Santa Monica, CA: RAND Corporation. March.
Bloch, A. (2013) The labour market experiences and strategies of young undocumented migrants. *Work, Employment and Society*, 27(2), 272–287.
Borjas, G.J. (2017) The labor supply of undocumented immigrants. *Labour Economics*, 46, 1–13.
Borjas, G.J. & Cassidy, H. (2019) The wage penalty to undocumented immigration. *Labour Economics*, 61, 101757.
Bratsberg, B., Ragan, J.F. & Nasir, Z.M. (2002) The effect of naturalization on wage growth: a panel study of young male immigrants. *Journal of Labor Economics*, 20(3), 568–597.
Buonomo, A. & Paparusso, A. (2018) *Irregolari, Sanatorie e Rimpatri: Qualche Numero di Sfondo*. Neodemos. July 27.
Cangiano, A. (2014) Migration policies and migrant employment outcomes conceptual analysis and comparative evidence for Europe. *Comparative Migration Studies*, 2(4), 417–443.
Carfagna, M. (2002) I Sommersi e i Sanati. Le Regolarizzazioni degli Immigrati in Italia. In: Colombo, A.D. & Sciortino, G. (Eds.) *Stranieri in Italia. Assimilati Ed Esclusi*. Bologna: Il Mulino, pp. 53–87.
Catanzaro, R. & Colombo, A.D. (2009) *Badanti & Co. Il Lavoro Domestico Straniero in Italia*. Bologna: il Mulino.
Cheong, A.R. (2021) Legal histories as determinants of incorporation: previous undocumented experience and naturalization propensities among immigrants in the United States. *International Migration Review*, 55(2), 482–513.
Cheung, S.Y. & Phillimore, J. (2014) Refugees, social capital, and labour market integration in the UK. *Sociology*, 48(3), 518–536.
Ci, W., Hou, F. & Morissette, R. (2018) Acquisition of Permanent Residence by temporary foreign Workers in Canada: a panel study of labour market outcomes before and after the status transition. *IZA Journal of Development and Migration*, 8(1), 1–24.
Colombo, A.D. (2012) *Fuori Controllo? Miti e Realtà dell'Immigrazione in Italia*. Bologna: Il Mulino.
Colombo, A.D. & Dalla-Zuanna, G. (2019) Immigration Italian style, 1977–2018. *Population and Development Review*, 45(3), 585–615.
Colucci, M. (2018) *Storia dell'Immigrazione Straniera in Italia. Dal 1945 Ai Nostri Giorni*. Roma: Carocci.
Cremaschi, S., Devillanova, C., Fasani, F. & Frattini, T. (2016) L'immigrazione Irregolare in Tempo di Crisi. *Economia & Lavoro*, 50(3), 115–132.
Cvajner, M. & Sciortino, G. (2010) A tale of networks and policies: prolegomena to an analysis of irregular migration careers and their developmental paths. *Population, Space and Place*, 16(3), 213–225.
Degiuli, F. (2010) The burden of long-term care: how Italian family care-givers become employers. *Ageing and Society*, 30(5), 755–777.
Devillanova, C., Fasani, F. & Frattini, T. (2018) Employment of undocumented immigrants and the Prospect of legal status: evidence from an amnesty program. *ILR Review*, 71(4), 853–881.
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.
Echeverría, G. (2020) *Toward a systemic theory of irregular migration. Explaining Ecuadorian migration in Amsterdam and Madrid*. Cham: Springer.
Einaudi, L. (2007) *Le Politiche dell'Immigrazione in Italia dall'Unità a Oggi*. Bari: Laterza.
Elgin, C., Kose, M.A., Ohnsorge, F. & Yu, S. (2021) *Understanding informality*. CERP Discussion Paper 16497.
EMN. (2005) *L'approccio Nazionale nei Confronti dei Cittadini Stranieri Illegalmente Soggiornanti: Caratteristiche e Condizioni Sociali*. Roma: EMN. December.
Fasani, F. (2015) Understanding the role of Immigrants' legal status: evidence from policy experiments. *CESifo Economic Studies*, 61(3–4), 722–763.
Fasani, F., Frattini, T. & Minale, L. (2021) *Lift the ban? Initial employment restrictions and refugee labour market outcomes*. IZA Discussion Paper 13149.

Fellini, I. & Guetto, R. (2019) A 'U-shaped' pattern of Immigrants' occupational careers? A comparative analysis of Italy, Spain, and France. *International Migration Review*, 53(1), 26–58.
Fellini, I. & Guetto, R. (2022) Legal status and Immigrants' labour market outcomes: comparative evidence from a quasi-experiment in Western and southern Europe. *Journal of Ethnic and Migration Studies*, 48(11), 2740–2761.
Ferro, A. & Fellini, I. (2009) Il Lavoro. In: Ponzo, I. (Ed.) *Conoscere l'immigrazione. Una Cassetta degli Attrezzi*. Roma: Carocci.
Finotelli, C. & Arango, J. (2011) Regularisation of unauthorised immigrants in Italy and Spain: determinants and effects. *Documents d'Anàlisi Geogràfica*, 57(3), 495–515.
Fullin, G. (2011) Unemployment trap or high job turnover? Ethnic penalties and labour market transitions in Italy. *International Journal of Comparative Sociology*, 52(4), 284–305.
Fullin, G. & Reyneri, E. (2011) Low unemployment and bad jobs for new immigrants in Italy. *International Migration*, 49(1), 118–147.
Ganzeboom, H.B.G., De Graaf, P.M. & Treiman, D.J. (1992) A standard international socio-economic index of occupational status. *Social Science Research*, 21(1), 1–56.
Ganzeboom, H.B.G. & Treiman, D.J. (1996) Internationally comparable measures of occupational status for the 1988 international standard classification of occupations. *Social Science Research*, 25(3), 201–239.
Guetto, R. & Azzolini, D. (2015) An empirical study of status exchange through migrant/native marriages in Italy. *Journal of Ethnic and Migration Studies*, 41(13), 2149–2172.
Hall, M. & Greenman, E. (2015) The occupational cost of being illegal in the United States: legal status, job hazards, and compensating differentials. *International Migration Review*, 49(2), 406–442.
Hall, M., Greenman, E. & Farkas, G. (2010) Legal status and wage disparities for Mexican immigrants. *Social Forces*, 89(2), 491–513.
Hall, M., Greenman, E. & Yi, Y. (2019) Job mobility among unauthorised immigrant workers. *Social Forces*, 97(3), 999–1028.
Hammar, T. (1985) *European immigration policy*. Cambridge: Cambridge University Press.
ISMU. (2022) *The twenty-seventh Italian report on migrations 2021*. Milano: Fondazione ISMU.
Jasso, G., Massey, D.S., Rosenzweig, M.R. & Smith, J.P. (2008) From illegal to legal: estimating previous illegal experience among new legal immigrants to the United States. *International Migration Review*, 42(4), 803–843.
Kanas, A. & Steinmetz, S. (2021) Economic outcomes of immigrants with different migration motives: the role of labour market policies. *European Sociological Review*, 37(3), 449–464.
King, R. & DeBono, D. (2013) Irregular migration and the 'southern European model' of migration. *Journal of Mediterranean Studies*, 22(1), 1–31.
Korac, M. (2003) Integration and how we facilitate it. A comparative study of the settlement experiences of refugees in Italy and The Netherlands. *Sociology*, 37(1), 51–68.
Kossoudji, S.A. & Cobb-Clark, D.A. (2000) IRCA's impact on the occupational concentration and mobility of newly-legalized Mexican men. *Journal of Population Economics*, 13(1), 81–98.
Kossoudji, S.A. & Cobb-Clark, D.A. (2002) Coming out of the shadows: learning about legal status and wages from the legalized population. *Journal of Labor Economics*, 20(3), 598–628.
Kraler, A. (2009) Regularisation: a misguided option or part and parcel of a comprehensive policy response to irregular migration? *IMISCOE Working Paper*, 24, 1–40.
Levinson, A. (2005) *The regularisation of unauthorised migrants: literature survey and country case studies*. Oxford: Centre on Migration, Policy and Society.
Lozano, F. & Sorensen, T. (2011) *The labor market value to legal status*. IZA Discussion Paper 5492.
Massey, D.S. (1987) Do undocumented migrants earn lower wages than legal immigrants? New evidence from Mexico. *The International Migration Review*, 21(2), 236–274.
Massey, D.S. & Gentsch, K. (2014) Undocumented migration to the United States and the wages of Mexican immigrants. *International Migration Review*, 48(2), 482–499.
Ministero dell'Interno. (2020) *Emersione dei Rapporti di Lavoro 2020*. August 17.
Monras, J., Vázquez-Grenno, J. & Ferran, E. (2020) *Understanding the effects of granting work permits to undocumented immigrants. Barcelona GSE Working Paper Series* 1228.
OECD. (2017) A Portait of family migration in OECD countries. In: *International migration outlook 2017*. Paris: OECD Publishing, pp. 107–166.
Ortega, F. & Hsin, A. (2018) *Occupational Barriers and the Labor Market Penalty from Lack of Legal Status*. IZA Discussion Paper 11680.
Ortensi, L.E. (2015) The integration of forced migrants in the Italian labour market. *Journal of Immigrant and Refugee Studies*, 13(2), 179–199.
Ortensi, L.E. & Ambrosetti, E. (2022) Even worse than the undocumented? Assessing the Refugees' integration in the labour market of Lombardy (Italy) in 2001–2014. *International Migration*, 60(3), 20–37.

Ortensi, L.E. & Barbiano di Belgiojoso, E. (2018) Moving on? Gender, education, and citizenship as key factors among short-term onward migration planners. *Population, Space and Place*, 24(5), e2135.
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.
Panichella, N., Avola, M. & Piccitto, G. (2021) Migration, class attainment and social mobility: an analysis of Migrants' socio-economic integration in Italy. *European Sociological Review*, 37(6), 883–898.
Paparusso, A., Fokkema, T. & Ambrosetti, E. (2017) Immigration policies in Italy: their impact on the lives of first-generation Moroccan and Egyptian migrants. *Journal of International Migration and Integration*, 18(2), 499–546.
Passel, J.S. & Cohn, D. (2014) *Unauthorised immigrant totals rise in 7 states, fall in 14: decline in those from Mexico fuels Most states decreases*. Washington, DC: Pew Research Centre's Hispanic Trends Project. November.
Pinotti, P. (2017) Clicking on Heaven's door: the effect of immigrant legalization on crime. *American Economic Review*, 107(1), 138–168.
Reyneri, E. (1998) The role of the underground economy in irregular migration to Italy: cause or effect? *Journal of Ethnic and Migration Studies*, 24(2), 313–331.
Reyneri, E. (2001) *Migrants' Involvement in Irregular Employment in the Mediterranean Countries of the European Union. International Migration Papers*. ILO's International Migration Program. November.
Reyneri, E. (2003) Immigration and the underground economy in new receiving south European countries: manifold negative effects, manifold deep-rooted causes. *International Review of Sociology*, 13(1), 117–143.
Reyneri, E. & Fullin, G. (2011) Labour market penalties of new immigrants in new and old receiving west European countries. *International Migration*, 49(1), 31–57.
Rivera-Batiz, F.L. (1999) Undocumented Workers in the Labor Market: an analysis of the earnings of legal and illegal Mexican immigrants in the United States. *Journal of Population Economics*, 12(1), 91–116.
Ruhs, M. (2017) The impact of acquiring EU status on the earnings of east European migrants in the UK: evidence from a quasi-natural experiment. *British Journal of Industrial Relations*, 55(4), 716–750.
Sciortino, G. (2004) Immigration in a Mediterranean welfare state: the Italian experience in comparative perspective. *Journal of Comparative Policy Analysis: Research and Practice*, 6(2), 111–129.
Sigona, N. (2012) 'I have too much baggage': the impacts of legal status on the social worlds of irregular migrants. *Social Anthropology*, 20(1), 50–65.
Sisk, B. (2012) *Does legalization improve the occupational mobility trajectories of unauthorised Latin American immigrants?* . Tucson, AZ: National Center for Border Security and Immigration. December 31.
Steigleder, Q. & Sparber, C. (2017) The effect of legal status on immigrant wages and occupational skills. *Applied Economics Letters*, 24(2), 80–84.
Triandafyllidou, A. & Bartolini, L. (2020a) Understanding irregularity. In: Spencer, S. & Triandafyllidou, A. (Eds.) *Migrants with irregular status in Europe. Evolving conceptual and policy Challanges*. Cham: Springer, pp. 11–31.
Triandafyllidou, A. & Bartolini, L. (2020b) Irregular migration and irregular work: a chicken and egg dilemma. In: Spencer, S. & Triandafyllidou, A. (Eds.) *Migrants with irregular status in Europe. Evolving conceptual and policy challenges*. Cham: Springer, pp. 139–164.
Venturini, A. & Villosio, C. (2008) Labour-market assimilation of foreign Workers in Italy. *Oxford Review of Economic Policy*, 24(3), 518–542.
Vogel, D., Kovacheva, V. & Prescott, H. (2011) The size of the irregular migrant population in the European Union – counting the uncountable? *International Migration*, 49(5), 78–96.
Warren, R. (2014) Democratizing data about unauthorised residents in the United States: estimates and public-use data, 2010 to 2013. *Journal on Migration and Human Security*, 2(4), 305–328.
Zanfrini, L. (2019) *The challenge of migration in a Janus-faced Europe*. Basingstoke: Palgrave Pivot.
Zincone, G. (2006) The making of policies: immigration and immigrants in Italy. *Journal of Ethnic and Migration Studies*, 32(3), 347–375.
Zwysen, W. (2019) Different patterns of labor market integration by migration motivation in Europe: the role of host country human capital. *International Migration Review*, 53(1), 59–89.

How to cite this article: Molinari, R., Impicciatore, R. & Ortensi, L.E. (2023) Traces in the shadow: Occupational outcomes of previously undocumented migrants in Italy. *International Migration*, 00, 1–27. Available from: https://doi.org/10.1111/imig.13144

APPENDIX 1

TABLE A1 Sample description.

	N	%	Mean	Std. dev.	Min	Max
First residence permit						
Work	4469	52.5				
Family	3235	38.0				
Other/do not know	808	9.5				
Italian citizenship						
No	8101	95.2				
Yes	411	4.8				
Years since migration	8512		10.25	5.39	0	23
Place of Birth						
Albania	1214	14.3				
Ukraine	691	8.1				
Other Eastern Europe	1104	13.0				
China	448	5.3				
Other SE Asia	1330	15.6				
Morocco	1137	13.4				
Other MENA	722	8.5				
Sub-Saharan Africa	781	9.2				
Latin America	1086	12.8				
Age	8512		39.59	10.03	19	80
Sex						
Males	3868	45.4				
Females	4644	54.6				
Education						
Lower secondary or less	3962	46.5				
Upper secondary	3537	41.6				
Tertiary	1013	11.9				
Language proficiency	8512		−0.25	1.09	−2.92	0.89
Area of residence						
North-West	3176	37.3				
North-East	2499	29.4				
Centre	1760	20.7				
South and Islands	1078	12.7				
Reason for migration						
Employment	4801	56.4				
Family	2580	30.3				
Humanitarian/forced	688	8.1				
Other	444	5.2				

(Continues)

TABLE A1 (Continued)

	N	%	Mean	Std. dev.	Min	Max
Year of arrival						
1989–1994	1121	13.2				
1995–1999	1529	18.0				
2000–2004	3114	36.6				
2005–2012	2749	32.3				
Age at arrival	8512		29.49	9.03	18	60
Lang. proficiency at arrival						
No Italian	6285	73.8				
Sufficient Italian	2227	26.2				
Area of residence at arrival						
North-West	2818	33.1				
North-East	2151	25.3				
Centre	1734	20.4				
South and Islands	1809	21.3				

Note: weighted cases.

Source: SCIF 2011–12.

INTERNATIONAL MIGRATION IOM UN MIGRATION

TABLE A2 Percentage distribution of migrants with continuous legal status, previously undocumented and missing cases, according to specific individual characteristics upon arrival to Italy.

	Continuously legal	Previously undocumented	Missing	Tot
Sex				
Male	26.1	64.5	9.4	100
Female	37.9	54.5	7.6	100
Education				
No school & lower sec.	32.7	56.5	10.8	100
Upper secondary	31.6	61.9	6.5	100
Tertiary	34.9	59.3	5.8	100
Place of birth				
Albania	36.1	56.1	7.8	100
Ukraine	18.2	76.5	5.3	100
Other Eastern Europe	30.9	62.8	6.3	100
China	25.7	60.9	13.4	100
Other South/East Asia	37.6	55.2	7.2	100
Morocco	35.5	54.3	10.2	100
Other MENA	32.2	57.2	10.5	100
Sub-Saharan Africa	30.7	56.9	12.4	100
Latin America	34.3	59.0	6.7	100
First area of residence				
North-West	33.3	59.2	7.6	100
North-East	35.9	57.5	6.6	100
Centre	36.2	54.9	9.0	100
South and islands	23.9	64.8	11.4	100
Year at First Entry				
1989–94	22.2	67.2	10.6	100
1995–99	22.6	67.8	9.6	100
2000–04	27.2	65.3	7.5	100
2005–12	48.3	43.8	7.9	100
Reason for migration				
Employment	22.7	68.3	9.0	100
Family	50.8	42.0	7.2	100
Humanitarian/forced	32.0	59.4	8.6	100
Other	33.5	57.6	8.9	100
Type of first permit				
Work	24.4	69.1	6.5	100
Family	44.8	48.1	7.2	100
Other/do not know	28.5	47.2	24.2	100

Note: weighted cases.

Source: SCIF 2011–12.

INTERNATIONAL MIGRATION IOM UN MIGRATION

TABLE A3 Elementary and care/domestic professions. Simultaneous probit/ordered probit regression models (employed respondents only), male and female immigrants.

	Male				Female			
	Main equation		Second equation		Main equation		Second equation	
	Coeff.	Std. Err.	Coeff.	Std. Err.	Coeff.	Std. Err.	Coeff.	Std. Err.
Time spent as undoc. (ref. Cont. legal)								
0–1 years	0.58**	(0.25)			0.68***	(0.09)		
2+ years	1.28***	(0.49)			1.68***	(0.16)		
First residence permit (ref. Work)								
Family	−0.19**	(0.08)			−0.20***	(0.06)		
Other/do not know	0.02	(0.09)			−0.25**	(0.10)		
Italian citizenship (ref. No)								
Yes	−0.38**	(0.17)			−0.13	(0.14)		
Years since migration	−0.11***	(0.02)			−0.13***	(0.02)		
Years since migration (squared)	0.00***	(0.00)			0.00***	(0.00)		
Place of birth (ref. Albania)								
Ukraine	−0.03	(0.16)	−0.11	(0.13)	−0.09	(0.11)	0.33***	(0.09)
Other Eastern Europe	−0.04	(0.12)	−0.14	(0.09)	−0.34***	(0.10)	0.31***	(0.10)
China	−0.90***	(0.24)	−0.18*	(0.11)	−1.87***	(0.22)	−0.03	(0.13)
Other South/East Asia	0.60***	(0.10)	−0.12	(0.07)	0.49***	(0.12)	−0.09	(0.10)
Morocco	0.45***	(0.12)	0.06	(0.07)	0.21	(0.14)	−0.32**	(0.13)
Other MENA	0.28***	(0.10)	0.01	(0.08)	−0.06	(0.15)	0.07	(0.14)
Sub-Saharan Africa	0.48***	(0.12)	0.02	(0.09)	−0.06	(0.13)	−0.01	(0.12)
Latin America	0.36***	(0.12)	0.08	(0.11)	−0.12	(0.10)	0.19**	(0.10)
Age	0.01**	(0.00)			0.03***	(0.00)		

TABLE A3 (Continued)

	Male				Female			
	Main equation		Second equation		Main equation		Second equation	
	Coeff.	Std. Err.	Coeff.	Std. Err.	Coeff.	Std. Err.	Coeff.	Std. Err.
Education (ref. Lower sec. or less)								
Upper secondary	−0.05	(0.06)	−0.07	(0.05)	−0.22***	(0.07)	0.05	(0.06)
Tertiary	−0.19*	(0.11)	−0.07	(0.09)	−0.45***	(0.09)	0.02	(0.08)
Language proficiency	−0.11***	(0.03)			−0.09***	(0.04)		
Area of residence (ref. North-West)								
North-East	−0.10	(0.10)			−0.04	(0.08)		
Centre	0.11	(0.09)			−0.12	(0.09)		
South and Islands	0.55***	(0.08)			0.08	(0.07)		
Reason for migration (ref. Employment)								
Family			−0.25***	(0.09)			−0.31***	(0.06)
Humanitarian/forced			−0.09	(0.09)			−0.19**	(0.08)
Other			−0.10	(0.11)			−0.33***	(0.11)
Year of arrival (ref. 1989–1994)								
1995–1999			0.18**	(0.07)			−0.12	(0.10)
2000–2004			−0.16**	(0.06)			−0.35***	(0.09)
2005-2012			−0.52***	(0.07)			−0.82***	(0.09)
Age at arrival			−0.01*	(0.00)			0.00	(0.00)
Lang. proficiency at arrival (ref. No Ita)								
Sufficient Italian			−0.08	(0.05)			−0.14***	(0.05)
Area of res. at arrival (ref. North-West)								
North-East			−0.18**	(0.08)			−0.07	(0.08)

TABLE A3 (Continued)

	Male				Female			
	Main equation		Second equation		Main equation		Second equation	
	Coeff.	Std. Err.	Coeff.	Std. Err.	Coeff.	Std. Err.	Coeff.	Std. Err.
Centre			−0.30***	(0.07)			−0.15*	(0.08)
South and Islands			−0.09	(0.06)			−0.01	(0.07)
cut1			−1.18***	(0.12)			−0.96***	(0.15)
cut2			−0.46***	(0.12)			−0.31**	(0.15)
Constant	−1.22***	(0.19)			−0.41**	(0.19)		
Residual correlation	−0.56***	(0.18)			−0.70***	(0.08)		
N	2901				2267			

Source: SCIF 2011–12.

*$p < 0.1$; **$p < 0.05$; ***$p < 0.01$; Robust standard errors in parenthesis.

TABLE A4 ISEI. Simultaneous OLS/ordered probit regression models, male and female immigrants.

	Male				Female			
	Main equation		Second equation		Main equation		Second equation	
	Coeff.	Std. Err.	Coeff.	Std. Err.	Coeff.	Std. Err.	Coeff.	Std. Err.
Time spent as undoc. (ref. Cont. legal)								
0–1 years	−6.89***	(1.53)			−7.83***	(1.16)		
2+ years	−14.38***	(3.02)			−15.86***	(2.05)		
First residence permit (ref. Work)								
Family	1.04*	(0.53)			0.24	(0.44)		
Other/do not know	1.36*	(0.74)			4.08***	(1.07)		
Italian citizenship (ref. No)								
Yes	2.61**	(1.18)			0.59	(1.39)		
Years since migration	1.00***	(0.18)			0.87***	(0.18)		
Years since migration (squared)	−0.03***	(0.01)			−0.02***	(0.01)		
Place of birth (ref. Albania)								
Ukraine	1.50	(1.24)	−0.17	(0.13)	4.81***	(0.89)	0.34***	(0.09)
Other Eastern Europe	0.53	(0.86)	−0.16*	(0.09)	6.30***	(0.96)	0.31***	(0.10)
China	3.47***	(1.03)	−0.19*	(0.10)	12.50***	(1.17)	−0.05	(0.13)
Other South/East Asia	−4.39***	(0.69)	−0.15**	(0.07)	−0.38	(0.85)	−0.11	(0.10)
Morocco	−0.97	(0.64)	0.03	(0.08)	0.96	(1.05)	−0.31**	(0.12)
Other MENA	−1.44*	(0.76)	0.00	(0.08)	4.28***	(1.39)	0.05	(0.14)
Sub-Saharan Africa	−0.72	(0.80)	0.01	(0.09)	3.23***	(1.12)	−0.01	(0.12)
Latin America	0.31	(0.91)	0.05	(0.10)	4.28***	(0.92)	0.21**	(0.10)
Age	−0.06**	(0.03)			−0.06**	(0.03)		
Education (ref. Lower sec. or less)								

(Continues)

TABLE A4 (Continued)

	Male				Female			
	Main equation		Second equation		Main equation		Second equation	
	Coeff.	Std. Err.	Coeff.	Std. Err.	Coeff.	Std. Err.	Coeff.	Std. Err.
Upper secondary	1.12***	(0.42)	−0.06	(0.05)	2.33***	(0.48)	0.04	(0.06)
Tertiary	6.80***	(1.02)	−0.03	(0.09)	7.18***	(0.86)	0.03	(0.08)
Language proficiency	0.95***	(0.20)			0.99***	(0.24)		
Area of residence (ref. North-West)								
North-East	−0.61	(0.56)			−1.58**	(0.73)		
Centre	−2.21***	(0.65)			−0.97	(0.77)		
South and Islands	−4.23***	(0.52)			−2.08***	(0.61)		
Reason for migration (ref. Employment)								
Family			−0.17**	(0.08)			−0.25***	(0.06)
Humanitarian/forced			−0.06	(0.07)			−0.16**	(0.07)
Other			−0.26**	(0.11)			−0.48***	(0.13)
Year of arrival (ref. 1989–1994)								
1995–1999			0.15**	(0.07)			−0.14	(0.09)
2000–2004			−0.18***	(0.06)			−0.35***	(0.09)
2005-2012			−0.52***	(0.07)			−0.79***	(0.09)
Age at arrival			−0.01*	(0.00)			0.00	(0.00)
Lang. proficiency at arrival (ref. No Ita)								
Sufficient Italian			−0.10**	(0.04)			−0.16***	(0.05)
Area of res. at arrival (ref. North-West)								
North-East			−0.11	(0.07)			−0.05	(0.08)
Centre			−0.28***	(0.07)			−0.15*	(0.08)
South and Islands			−0.05	(0.06)			0.00	(0.07)

TABLE A4 (Continued)

	Male				Female			
	Main equation		Second equation		Main equation		Second equation	
	Coeff.	Std. Err.	Coeff.	Std. Err.	Coeff.	Std. Err.	Coeff.	Std. Err.
cut1			−1.17***	(0.12)			−0.95***	(0.15)
cut2			−0.45***	(0.12)			−0.31**	(0.15)
Constant	36.13***	(1.49)			26.57***	(1.53)		
Residual correlation	0.60***	(0.05)			0.64***	(0.04)		
N	2901				2267			

Source: SCIF 2011–12.

*$p < 0.1$; **$p < 0.05$; ***$p < 0.01$; Robust standard errors in parenthesis.