

Internal mobility of immigrants in Italy: a network analysis

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Draft version

Introduction

The presence of foreign residents in Italy is now a consolidated phenomenon that continues to increase annually both in absolute and relative terms. The distribution of foreign nationals across the country, however, is uneven. As is known, most immigrants are concentrated in central and northern Italy. The various area-specific contexts not only exert different levels of attraction on immigrants in numerical terms but also in close relation to aspects such as citizenship, sex, age etc. Differences not only exist between the central and northern parts of the country on the one hand and the southern part on the other or between metropolitan areas and small towns that traditionally characterise other demographic phenomena, rather the appeal of a given area to migrants depends on numerous, complex factors. Clearly, the pull effect of the various areas of the country on foreign nationals differs according to whether they are still abroad or have already moved to Italy. In the first case, the larger cities exert a stronger force of attraction, although once the migration process is underway, migrant movements are mainly conditioned by chain, or better, network effects. In the second case, a migrant has probably already acquired more information on the opportunities offered by the different areas and opts for one or the other according to individual needs and assessment. An analysis of the local labour market areas¹ (LLMAs) makes it possible to determine the force of attraction exerted by different economic and production areas and identify the distinctive elements of the more attractive areas and the different characteristics of the migrants they attract.

The present study is organized into three parts. Firstly changes of residence of foreign citizens to Italy are examined. The countries of citizenship are defined as *sending nodes* whereas the local labour market areas are defined as *receiving nodes*. The purpose of this analysis is primarily to investigate the existence of migration networks in order to understand whether local labour market

¹ Local labour market areas (LLMAs) are aggregations of contiguous municipalities (not necessarily belonging to the same region or province), formulated according to an analysis of the daily journeys of the population to reach and return from their place of work. These movements are surveyed by population Censuses. This study is based on the 686 local labour market areas identified from data recorded in the Census of 2001. A local labour market area is a functional region that is defined as a “self-containing” commuter flow area and indicates a set of municipalities linked by a high level of interdependence. This territorial reference grid makes it possible to analyze the economic and social geography in greater detail than that allowed by traditional administrative subdivisions (regions and provinces) and also to use a subdivision of the territory that derives from the self-organization of relationship dynamics with particular reference to residence and place of work (Istat, 2006).

areas with similar characteristics within Italy (population size, geographical location etc.) exert a similar appeal in terms of type and number of migrants.

Secondly the focus is instead on internal migration flows, namely the change of residence by foreign nationals from one local labour market area to another. This investigation aims at establishing whether foreign nationals already resident in Italy ultimately move towards the same poles of attraction following the same migration network as those who initially emigrate from their countries of origin or whether they follow different paths. Migration networks of foreign nationals within Italy will thus be identified together with the geographical areas where networks are most articulated. The analysis will be conducted separately on various immigrant communities in order to define the different types of networks foreign nationals follow within Italy.

For this first two steps the analysis is based on Municipal Registers changes of residence records which constitute an essential information base for all analyses on international and internal migration flows to and within the country providing knowledge on migrant numbers and flow directions as well as the main demographic characteristics of migrants such as age, sex, citizenship, place of birth and civil status.

In the last part, using the results of the record linkage between different archives, it is possible to compare the place where the permit was granted in 2004 with the place of renewal in 2007, in order to verify whether a transfer has occurred or not. In addition, the use of a logistic model makes it possible to determine the relationship between certain characteristics of foreigners and their propensity to relocate within the country.

For all the analysis here presented the techniques of *network analysis* and graphical *network* representation allow to provide a summary indication of migration networks in Italy and overcome the “two-by-two” perspective of the origin-destination matrix. Such techniques, therefore, are a particularly useful tool where the objective of the analysis is to identify, by graphic representation, the existence of specific types of networks correlated in part with socio-economic conditions in different geographical areas.

1. General framework

Italy has had a positive international migration balance since 1972, a date which marked the start of a new era and its transformation from a country of outbound to inbound population flows.

With regard to foreign immigration, it should be remembered that it is unlikely that changes of residence statistics accurately reflect temporary movements and migration paths that have only recently been initiated. The trend in residence registrations by foreign immigrants to Italy has been greatly affected by the progressive introduction of new regularization measures. Regularization has

always been followed by a peak in the number of official residence registrations. If one analyses the recent trend in changes by country of origin, it can be seen that the general increase in inflows to Italy is mainly from European countries outside the EU15. The last regularization campaign, it should be noted, mainly concerned immigrants from Ukraine and Romania.

Municipal Registers enrolment is considered a sign of immigration stability: such stability, however, only relates to that within the Italian borders given that from the point of view of internal migration foreign nationals show a much higher propensity to relocate than Italian citizens. Between 1996 and 2006, changes of residence within the borders of Italy increased by over 25 per cent. This increase in internal mobility is due in part, and to an increasing extent, precisely to the number of foreign residents and their greater propensity to relocate. The quota of foreign citizens who move within the national borders in relation to total flows has increased significantly over the considered period: from 4% percent in 1996 to nearly 15% in 2006. Furthermore, in 2006 some 64 foreigners per thousand moved within the national borders (compared to 21 Italians per thousand). A breakdown of the figures on foreign citizen mobility indicates that they relocate on a distinctly more limited geographical scale, remaining within the confines of local labour market areas.

Between 1996 and 2006, relocation within individual LLMAAs rose from 37 to 46% of total changes of residence. This increase mostly impacted on longer-range mobility, namely relocation between different areas of the country, which dropped from nearly 25% of total movements in 1996 to 18% in 2006. There are various explanations for this change. Firstly, it is likely that, after years of migration history in Italy, foreigners are able to make an immediate, better informed and conscious choice as to their destination of migration. This theory seems to be substantiated by the fact that migration of foreigners from the South towards the Central and Northern areas of the country has decreased in relative terms from 9.1% of total domestic relocation of foreign citizens in 1996 to 5.7% in 2006. During the same period the proportion of foreigners from abroad who enrolled at Municipal Registers in the South has almost halved: in 1996 22.2 percent of registries occurred this area while in 2006 only 12.5 percent of foreigners moved from abroad to a municipality in the South. It can be assumed, therefore, that, at least as regards stable migration projects, the force of attraction of the South and the Islands has significantly diminished compared to that of the Central and Northern Italy – probably in part due to the migration network effect or at least as a result of ‘word of mouth’ among foreigners who attract other immigrants to areas with greater job opportunities and a better quality of life.

It is also necessary to consider that part of the foreign population has been resident in Italy for a considerable length of time and that, probably, as the process of territorial stabilization evolves,

these foreign citizens are assuming internal mobility behaviour patterns similar to those of the native population among which short-distance commuting is more common.

2. The changes of residence from abroad

As stated previously, information on enrolments at Italian Municipal Registers by foreigners is not suitable for reconstructing the geography of arrivals of foreigners in Italy. This type of archive, in fact, is not capable of recording temporary movements or movements which have only recently occurred. This limitation, however, in other respects provides the advantage of enabling analysis of a specific sub-set of people: those who have decided to stabilize their presence in Italy. Areas with a significant inflow of foreign nationals who register as officially resident can thus be considered highly attractive in terms of migration movements and not simply as “landing” areas or points of transit towards other destinations. Naturally, this does not exclude the possibility that foreigners will subsequently relocate in Italy in pursuit of the best opportunities for employment and social inclusion leading to brisk internal mobility as they become sensitive to changes in the labour market and aspire to better living standards. Considering the absolute values of data on LLMAs, a pattern emerges indicating that the most appealing destinations are the large cities or, more generally, the chief towns of the provinces, with the exception of Chiari (in the Province of Brescia) for Albanian immigrants.

In relative terms, it should be noted that residence registrations by immigrants from most countries of citizenship are spread throughout Italy. In particular, only 5.0% of Albanians are enrolled in Milan (the main local labour market area destination per total number of changes of residence from abroad); Turin, whose LLMA is the main destination for Moroccans, takes in only 6% of the immigration flow from Morocco.

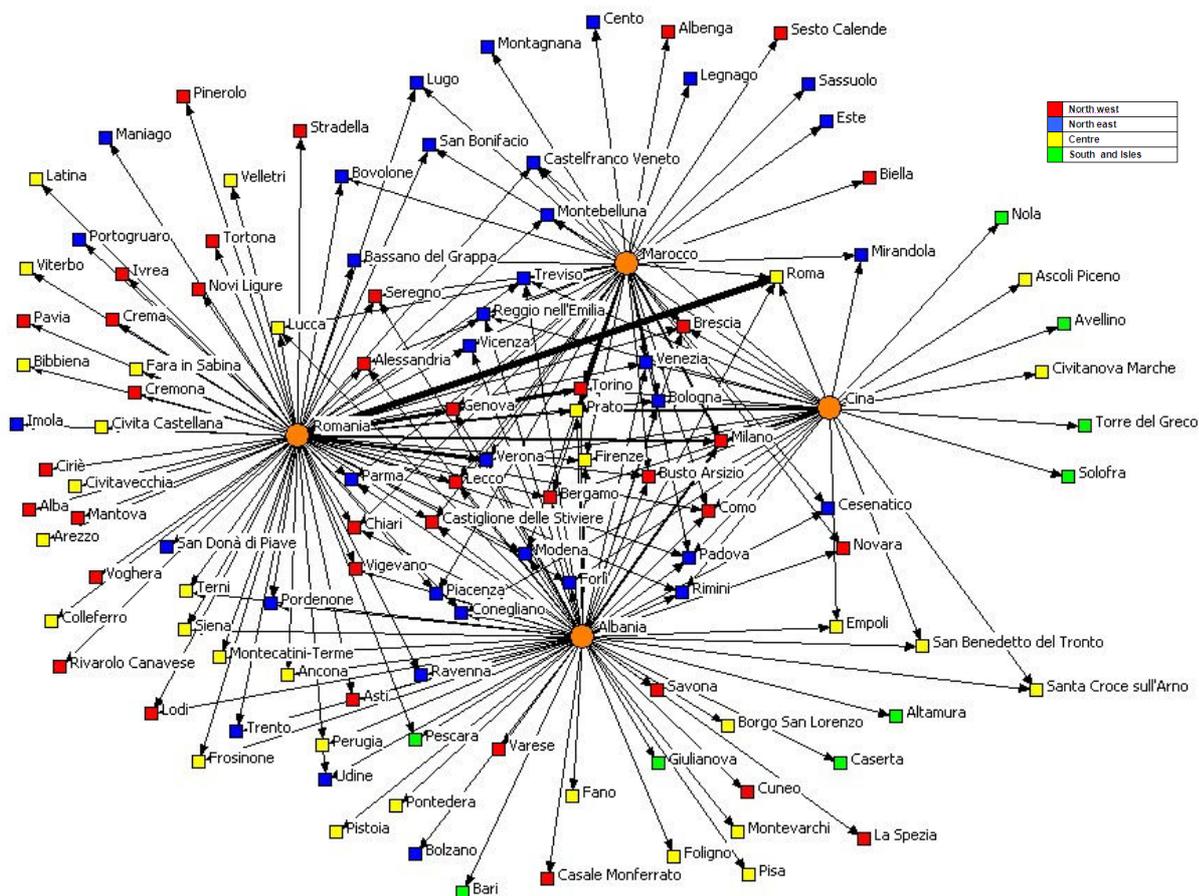
Filipinos represent the only major exception with 54% of immigrants enrolling for residence in the two main destinations of Milan and Turin. Romanians, Chinese and Ukrainians occupy an intermediate position although in none of their first five destinations of residence do enrolments exceed 36%.

These figures, as mentioned, do not make it possible to evaluate whether it is correct to assume that foreigners arrive in the large cities and only later move to small towns where they have found a house or a job. However, the information on changes of residence seems to clearly indicate that for most of the nationalities considered there exists a range of diverse migration destinations from abroad, at least, as previously stated, as far as relates to stable migration projects. Although the Rome, Milan and Turin LLMAs represent preferential destinations for the communities examined, alongside these other LLMAs emerge which are not centred on the large cities.

The *network analysis* graphs for the first four largest resident communities indicate (at the centre of the graph) the existence of several destinations common to all or most of the communities examined (Figure 1). As can be expected, these destinations are principally the major cities (Rome, Milan, Turin etc.); Rome continues to exert a particularly strong force of attraction for Romanians with an average of over 6600 Municipal Registers enrolments per year.

However, destinations common to several communities also include LLMA's that are not centred on large cities and which have smaller population size (under 200,000 inhabitants), such as Castiglione delle Stiviere where, on average, 196 Romanians a year enrol at the Municipal Registers.

Figure 1 - Networks of foreign population changes of residence from abroad towards Italian Local labour market areas by main citizenships, Albania, China, Morocco and Romania – Average 2005-2006 (*absolute values*) (a)



Source: Istat data
 (a) Flows above 120 changes of residence are considered.

Beyond these common destinations, each community develops a range of specific target locations where LLMA's consisting of smaller populations assume great importance: each nationality establishes a preferential relationship with specific LLMA's. This phenomenon is

certainly related to the different productive specializations of these areas and to the prevalent job opportunities they offer each community. However, it is important not to overlook two aspects that emerge from network analysis: the same community often targets a range of destinations whose LLMA have considerably different economic and productive characteristics; and LLMA that are similar as regards the type of job opportunities they offer are targeted by different specific communities on a kind of “territorial division” basis. These two elements make it possible to appreciate the action exerted by migration chains that link migrants with specific areas.

It is also clear that some towns with thriving economies, regardless of their main productive vocation, are able to offer different job opportunities and that foreign immigrants are not always employed in the main sectors of local economies but often occupy niches left vacant by Italians.

In 2005-2006 Romanians recorded more than 120 residence enrolments on average in several local labour market areas none of which, however, are located in the South.

Conversely, Albanians and Chinese immigrants demonstrate a preference for certain southern destinations. In particular, significantly high flows in absolute terms can be observed in Chinese nationals towards several LLMA in Campania: Nola, Torre del Greco, Avellino.

Apart from absolute flow figures, it is interesting to study migration movements as regards their demographic impact on the local host area.

Considering the rate of residence enrolments by foreigners per 10,000 thousand residents, in general impact is less on the resident population of the South whereas the rate is particularly high in many LLMA in Central and Northern Italy, especially in the area that extends from Lombardy towards Trentino-Alto Adige and Veneto.

In sixteen LLMA, enrolments by foreign nationals exceed a quota of 90 every 10,000 residents: Limone sul Garda (Lombardy), Castel del Piano (Tuscany), Fiera di Primiero (Trentino-Alto Adige), Santa Sofia (Emilia-Romagna), Prato (Tuscany), Malcesine (Veneto), Castiglione delle Stiviere (Lombardy), Gualdo Cattaneo (Umbria), Arzignano (Veneto), Montalcino (Tuscany), Orzinuovi (Lombardy), Pieve di Soligo (Veneto), Piandimeleto (Marche), Brescia (Lombardy), San Bonifacio (Veneto) and Chiari (Lombardy). These LLMA are all in Central and Northern Italy and only those of Prato and Brescia are centred on chief town of provinces.

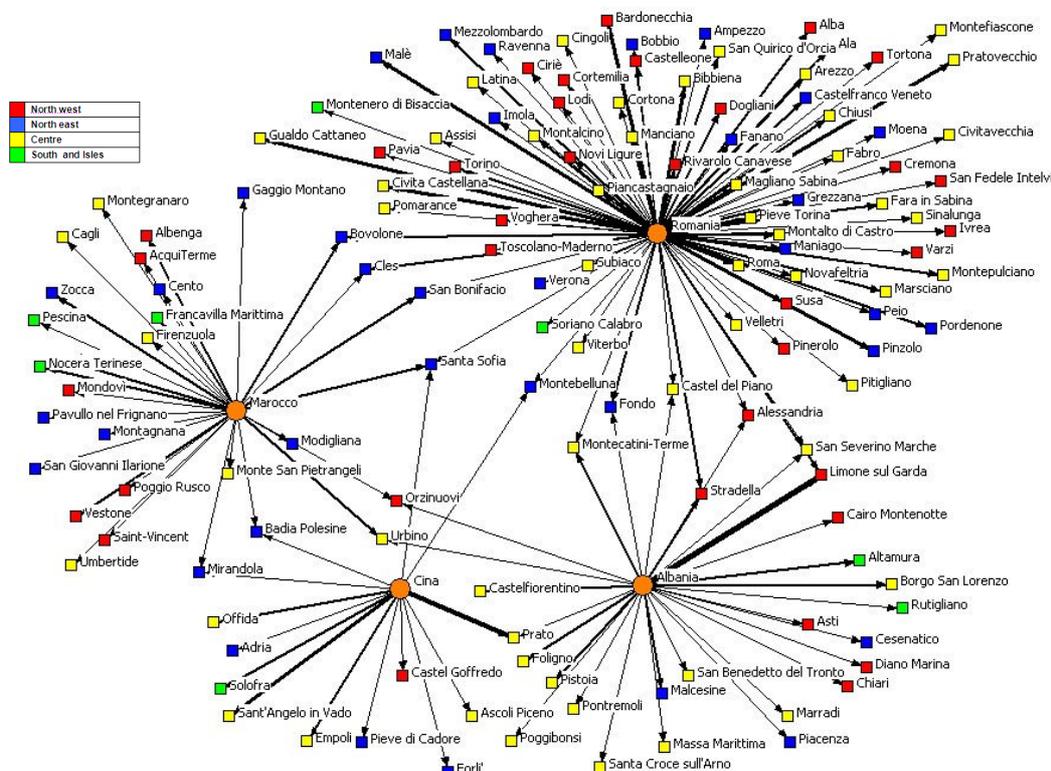
Using an indicator based on the ratio between the number of foreign enrolees of the same nationality and the total population (Italian and foreign) of a specific local labour market area, the importance of the less-extensive areas as migration destinations for each nationality can easily be ascertained. This not only better highlights the impact of migration flows from abroad on the populations of LLMA but provides a more detailed characterization of the specificity of the

communities concerned. As regards the first four largest resident communities in Italy, the importance of the large cities is greatly reduced.

Moreover, this analysis indicates that the networks of the different communities have fewer common nodes and provides better focus on the networks of individual communities. The nodes are shared by a maximum of three of the observed communities (only in the case of Santa Sofia) and the nodes themselves are small to medium-size LLMA in North and Central Italy with non-homogeneous economic and productive characteristics (Figure 2). It points to the relative impact of the number of enrolments in certain LLMA in the South as regards both Moroccan and Chinese immigrants.

By grouping individual nationalities according to continent of origin, it can be observed that they develop very different territorial networks. Asian nationalities that exceed the threshold of ten enrolments every ten thousand residents of the LLMA exhibit differentiated pathways corresponding to different types of employment but which also probably depend on the establishment by the communities of specific networks between the countries of origin and the Italian territory.

Figure 2 – Networks of foreign population changes of residence from abroad towards Italian Local labour market areas by main citizenships, Albania, China, Morocco and Romania – Average 2005-2006 (percentages per 10 000 residents) (a)



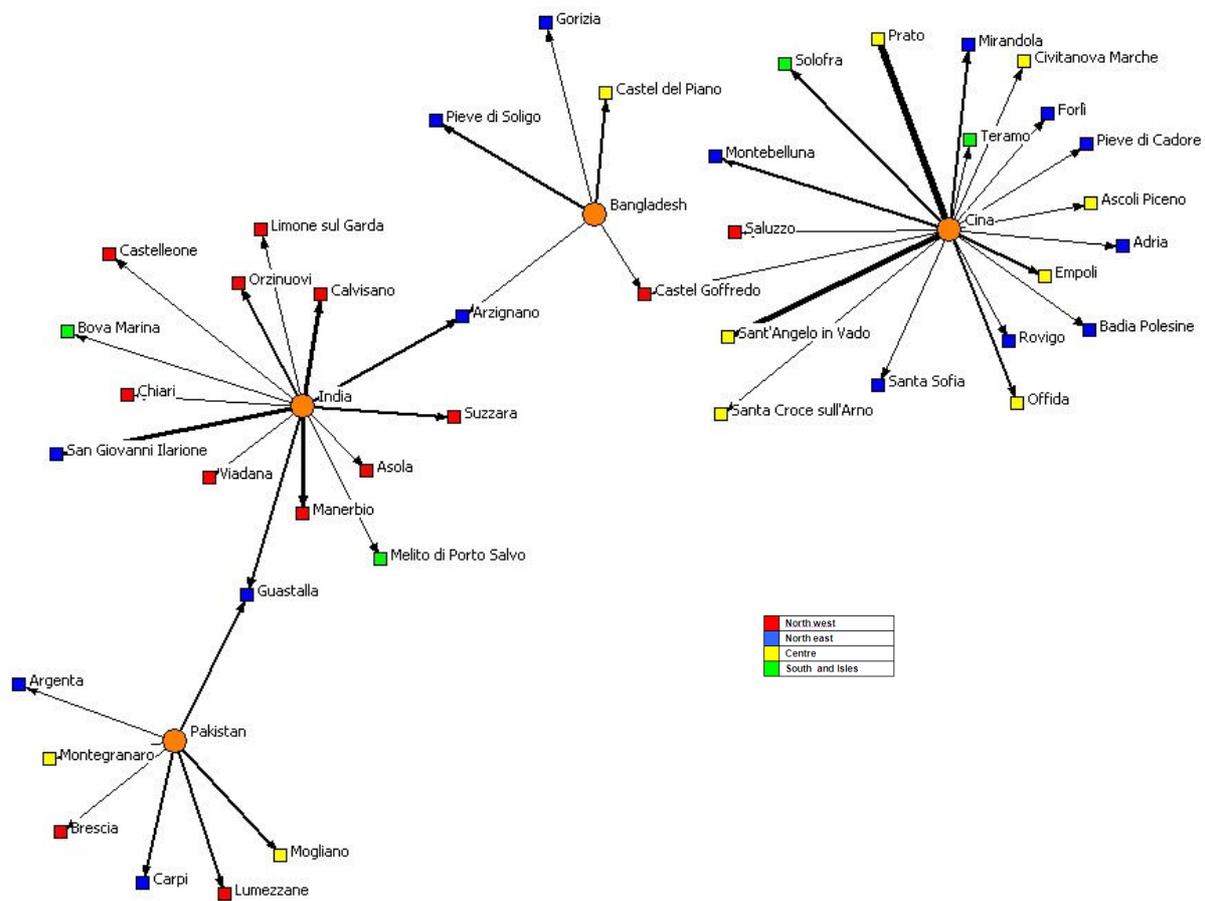
Source: Istat data

(a) Flows above 12 changes of residence per 10 000 residents are considered.

Apart from a few nodes of contact between the different nationalities, again in this case autonomous networks develop towards small-scale LLMAs. India and China register significant flows also towards nodes in the South. Moreover, in addition to the now well-established destination Prato, Chinese immigrants head towards other destinations both in Central Italy and the North-East.

In the period under study, the flow and number of residence enrolments of Pakistani nationals has had a strong impact on many industry-oriented LLMAs (Lumezzane and Carpi) (Figure 3).

Figure 3 - Networks of foreign population changes of residence from abroad towards Italian Local labour market areas by main citizenships, Pakistan, Bangladesh, India, China – Average 2005-2006 (percentages per 10 000 residents) (a)



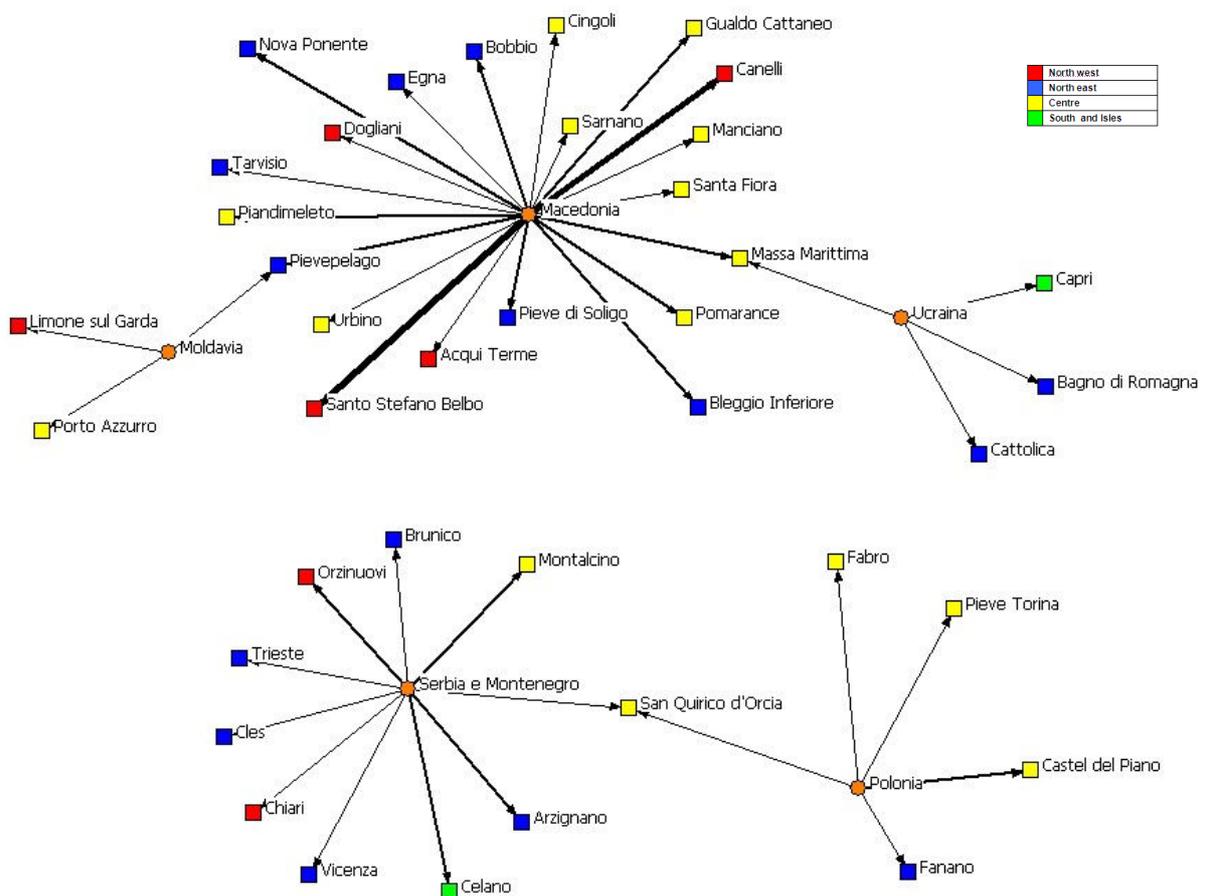
Source: Istat data
(a) Flows above 10 changes of residence per 10 000 residents are considered.

Immigration of Indians has a significant bearing on locations with a marked agricultural and zootechnical orientation such as Asola, or manufacturing orientation like Viadana (carpentry and furniture) and Suzzara (agricultural machinery). It is worth reiterating, however, that foreign immigrants do not invariably find work in the main production sector of the areas in which they settle: in the locations mentioned above, for example, many Indians are employed in cattle breeding.

Moreover, many LLMA destinations specialize in the footwear, leather and skin sector such as Arzignano, Calvisano and San Giovanni Ilarione.

As regards Central and Eastern European immigrants, three communities appear to flow mainly towards local labour markets prevalently based on grapevine cultivation: Poles, Serbians, Montenegrins and Macedonians (Figure 4). Macedonians in particular register a high number of changes of residence to wine-producing areas throughout the country: Santo Stefano Belbo, Canelli, Dogliani, Pieve di Soligo and Gualdo Cattaneo.

Figure 4 - Networks of foreign population changes of residence from abroad towards Italian Local labour market areas by main citizenships, Macedonia, Moldavia, Poland, Serbia and Montenegro – Average 2005-2006 (percentages per 10 000 residents) (a)



Source: Istat data

(a) Flows above 10 changes of residence per 10 000 residents are considered.

This latter flow is particularly interesting not only in terms of the number of residence registrations in proportion to the official local population but also as regards the considerably high absolute number of changes of residence. Conegliano is the main destination in absolute terms for Macedonians with about 183 residence registrations a year. In Santo Stefano Belbo, Macedonians, despite recording only 27 residence registrations a year from 2005 to 2006, are the largest resident foreign community and as of 01 January 2008 amount to 6% of the population – an indication that

the vine-growing and wine-making sectors require not only a seasonal, locally based workforce but also longer-term immigrant workers.

Inflows are also high of Poles and Serbian and Montenegrin citizens to wine-producing LLMA: Pieve Torina (Poles only), San Quirico d'Orcia and Montalcino (Serbians and Montenegrins only). However, these LLMA are different from those to which significant numbers of Macedonians transfer. Flows of Moldovan and Ukrainian citizens mainly impact on tourism-oriented LLMA: Porto Azzurro and Limone sul Garda for Moldavians, Capri, Cattolica, Bagno di Romagna and Massa Marittima for Ukrainians. Focusing on this latter community and extending the period of observation back one year to 2004, it can be noted that while the same level of representation is maintained, the pattern of destinations of Ukrainians citizens takes in a large number of LLMA particularly in the South that act as nodes. This is evidently due to the effect of the large-scale regularization of this community (which registered the second highest number of regularizations) particularly in areas of southern Italy.

In conclusion, the study on the change of residence from abroad makes it possible to underline that the various communities develop specific and peculiar networks within the country which affect large and small towns alike; the impact of inflows from abroad is also significant on LLMA with lower populations.

Although in absolute terms some communities register non-negligible immigration flows towards nodes in the South, these movements, except in very few cases, are not of significant importance in relative terms.

While the study does not make it possible to directly analyze social and family ties and the reasons for choosing a particular destination, the volume of certain flows and specific routes suggests that the recorded movements are the result of the establishment of migration networks in the strict sense. In fact, even those communities with similar “specializations” do not often head towards the same destinations but instead migrate towards different LLMA. This type of behaviour clearly emerges using *network analysis*, which also makes it possible to examine what is happening outside LLMA centred on large cities.

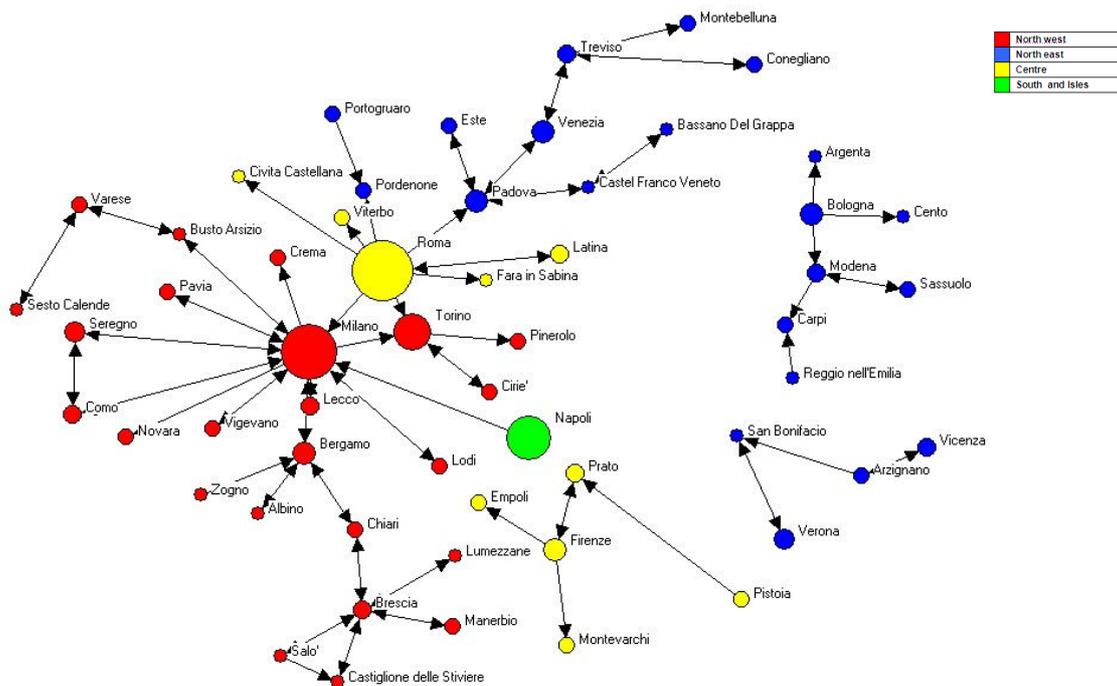
Migration chain mechanisms appear to work particularly well in the case of smaller LLMA that are highly specialized and thus create demand for equally “specialized”.

3. The changes of residence between Local Labour Market Areas

It seems natural at this point to pose the question of whether the poles of attraction from abroad are also the nodes that most attract foreigners who relocate once inside the country.

If one examines the network of changes of residence, as well as some large areas, many medium and small areas are affected by intense foreign migration flows. Rome has become established as the node of redistribution for the foreign population inside the country with connections both towards the North-East and the North-West as well as with other LLMAs in Central Italy (Figure 5). Milan acts as a major interchange with other areas of the North-West as well as with Naples and Rome. In the same area of the country Brescia has also developed an exchange network of its own. Another interesting network is that in the region of Emilia which comprises LLMAs of varying size. The networks in Veneto and Tuscany consist of few, but not insignificant, nodes. It should be stressed that, with the exception of Naples, there is an absence of nodes in the South. The population size of LLMAs does not play an important role in flow numbers.

Figure 5 – Networks of foreign population changes of residence between Italian Local labour market areas – Average 2005-2006 (*absolute values*) (a)



Source: Istat data

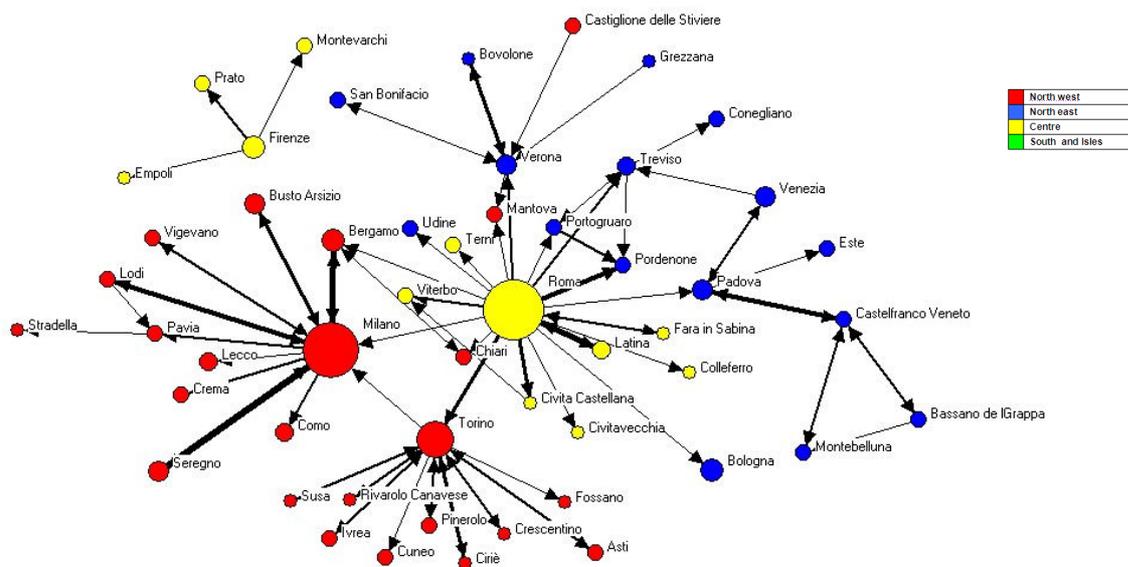
(a) Flows above 120 changes of residence are considered.

The major migration routes in terms of absolute volume of flows by foreign nationals are also significant as regards the proportion of such flows in relation to total (at least in many cases). Foreigners account for more than 40 percent of flow on many routes that exceed an average of 100 movements per year: Arzignano-Vicenza (average of 554 movements, roughly 44% of which by foreigners), Guastalla-Suzzara (about 300 movements a year, 48% of which by foreigners), Arzignano-San Bonifacio (230 movements, 60% of which by foreigners), Rome-Pordenone (151

movements, 71% by foreigners) and Rome-Padova (122 movements, 46% by foreigners). This clearly substantiates the importance of LLMAs which are not centred on major cities both in relation to the absolute number of movements and to the proportion of movements by foreigners referred to total.

Again in this case, it is appropriate to study migration flows separately for each of the main communities, bearing in mind the results of the research described earlier on foreigners' flows from abroad. For example, with regard to Romanian immigrants, it can first be noted that many of the LLMAs that are destinations for immigrants from abroad are also internal migration destinations: Colleferro, Civita Castellana, Bovolone, to name only several (Figure 6). The network, as emerges for residence enrolments from abroad, does not involve LLMAs in the South and the Islands. Rome occupies a position at the centre of the graph as the point of departure of a large number of flows towards two loosely interconnected fronts: the North-East and the North-West. Moreover, while Rome is linked by outflows to LLMAs in all other areas of the country, Milan and Turin are the main hubs for relocation within the same region. While movements of the Romanian community in Central and North-West Italy revolve around the local labour market areas of the major cities (in most cases, outflows), no LLMA in the North-East appears to be a main centre of inward or outward-bound relocation, however a more complex network emerges consisting of connections between LLMAs of different sizes.

Figure 6 - Networks of Romanian citizens changes of residence between Italian Local labour market areas – Average 2005-2006 (absolute values) (a)

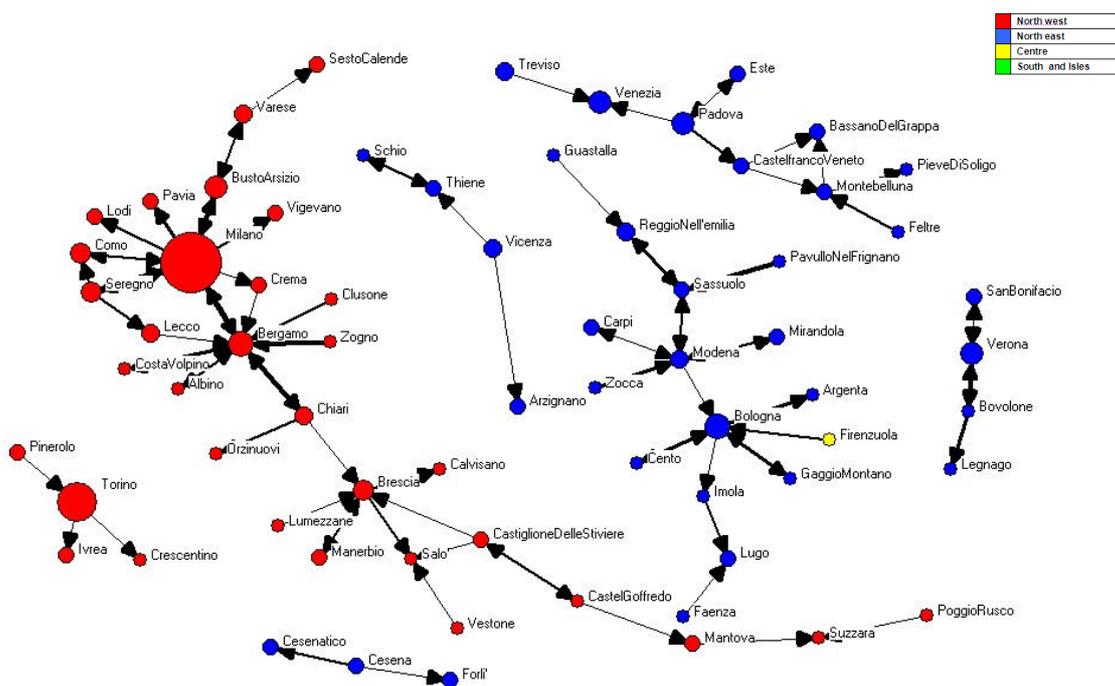


Source: Istat data

(a) Flows above 15 changes of residence are considered.

As regards Moroccan immigrants, the graph indicates that two major separate networks exist. One connects a large number of towns in the North-West with Milan, Bergamo and Brescia at the heart of a network with a high rate of interchange (Figure 7). The second network connects towns in Emilia-Romagna (with the exception of Fiorenzuola). A third network can be mapped in the North-East that comprises LLMA in the Veneto region.

Figure 7 – Networks of Moroccan citizens changes of residence between Italian Local labour market areas – Average 2005-2006 (absolute values) (a)

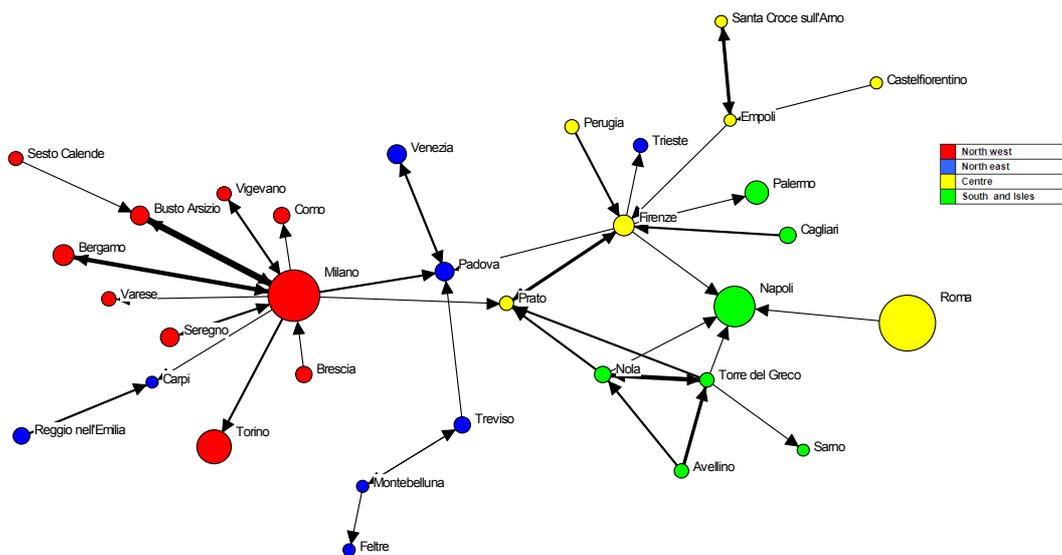


Source: Istat data
(a) Flows above 15 changes of residence are considered.

Worthy of note is the network of internal movements by Chinese citizens - the only network among those examined that comprises towns in Southern Italy (Figure 8). This aspect had already come to light during analysis of movements from abroad to some of the same LLMA (Avellino, Nola, Torre del Greco). As regards internal movements, Naples exerts the main force of attraction on the Chinese population from nodes in Central Italy. At the centre of the network is a quadrangle with Milan, Prato, Padua and Florence at the vertices which gives rise to a substantial interchange of the Chinese population. Movements radiate out from each vertex of the quadrangle to and from other locations. The areas around Florence and Prato are peculiar in that they are also connected by migration flows to towns in the South and the Islands. It should be noted that of all the communities studied, the Chinese are the only population with such an articulated network of nodes in the South and the Islands.

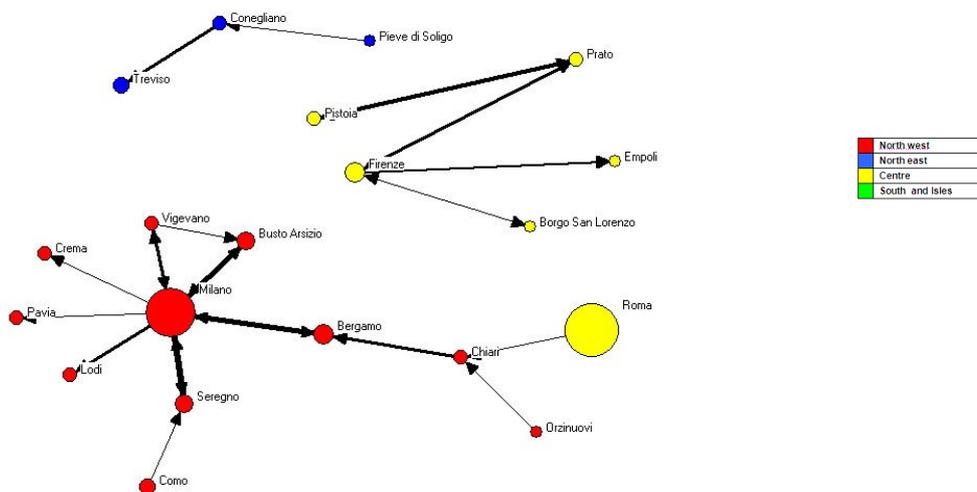
The main interchange network for Albanians is located entirely within Lombardy, with the exception of Rome which is connected by movements towards Chiari, and it should be remembered that this latter area was found to be particularly important also as regards inflows from abroad. Equally interesting is the Tuscan network. As regards the rest of the country, exchanges emerge between two or three areas and do not constitute authentic networks (Figure 9).

Figure 8 – Networks of Chinese citizens changes of residence between Italian Local labour market areas – Average 2005-2006 (absolute values) (a)



Source: Istat data
(a) Flows above 15 changes of residence are considered.

Figure 9 – Networks of Albanian citizens changes of residence between Italian Local labour market areas – Average 2005-2006 (absolute values) (a)



Source: Istat data
(a) Flows above 15 changes of residence are considered.

In conclusion, networks assume peculiar characteristics for each individual community including few locations in the South and the Islands. Areas that attract flows from abroad are equally attractive as regards internal movements. In many cases the large cities act as poles of redistribution of the population towards smaller neighbouring LLMA. It is certain that LLMA with a specific productive specialization are particularly attractive to foreigners who again in this case appear to follow routes determined both by demand for specialised labour and, probably, by the pull effect of migration chains or networks.

4. The paths of regularized foreigners

In 2007 more than 500 thousand foreigners renewed the permit to stay that was previously granted according to the regularization law of 2004. Using the results of the record linkage between these two archives, it is possible to compare the place where the permit was granted in 2004 with the place of renewal in 2007, in order to verify whether a transfer has occurred or not. These data also allow considering the changes in other aspects of the characteristics of the individual such as the marital status and the reason of stay.

The mobility among regularized foreigners is very high: 60% of those who regularized their position have relocated inside Italy and in most cases (42% percent) changed area of the country. As expected, relocation to other areas of the country by immigrants who regularized their position while living in the North-West and North-East is lower, and 68% and 62% respectively chose to remain within these areas (Table 1). Those who regularized their position while living in the South have instead shown a greater tendency to relocate and renew their permit to stay in another area of the country, mainly in the North-West and North-East.

Table 1 – Foreigners regularized by geographical area of regularization and geographical area of permit renewal (absolute values and percentages)

Geographical area of regularization	Geographical area of permit renewal					Total
	North-west	North-east	Centre	South	Islands	
Absolute values						
North-west	116526	23288	22498	7338	1346	170996
North-east	19139	63530	13427	5990	951	103037
Centre	30434	23647	76370	8695	1376	140522
South	16366	15935	11885	32221	1021	77428
Islands	3289	2689	1902	868	4727	13475
Italy	185.754	129.089	126.082	55.112	9.421	505.458
Percentages						
North-west	68.1	13.6	13.2	4.3	0.8	100.0
North-east	18.6	61.7	13.0	5.8	0.9	100.0
Centre	21.7	16.8	54.3	6.2	1.0	100.0
South	21.1	20.6	15.3	41.6	1.3	100.0
Islands	24.4	20.0	14.1	6.4	35.1	100.0
Italy	36.7	25.5	24.9	10.9	1.9	100.0

Source: Istat elaboration on Ministry of the Interior data

In general, however, while immigrant stability is lower in the South and the Islands, the tendency to relocate varies according to citizenship. Considering large citizenship groups, it can be seen that the Central and South-American groups have a much lower tendency to move again compared to the other nationality groups which show instead a similar propensity to move. The citizenship groups which have relocated the most towards other areas of the country are Africans (72%) and Asians (69%) who regularized their position in the South. American communities regularized in the North-West are those who have moved least (less than 11% of cases). Moreover, from an analysis of the main nationalities, Moroccans register the highest internal mobility rate (77.2%), particularly when compared with Ukrainians who are those who relocate least (66.3%). The Moroccan community also relocates the most within the same given area of the country. The nationalities considered above exhibit particularly high internal mobility given that, overall, more than half of the foreigners belonging to the other remaining nationalities have not relocated once over the studied time period.

Graphs were again used to investigate routes taken by regularized immigrants. In this case however, as already explained, the level of minimal territorial detail is provincial. Cases are illustrated of several communities which in proportional terms took most advantage of the regularization campaign.

4.1. The networks of regularized foreigners

The network of regularized Moroccans has as its central node the province of Milan which, in most cases, is the point of origin of migration flows (Figure 10). At the same time, however, Milan attracts Moroccan nationals from, for example, Rome, Modena and Verona. The network, therefore, consists of provinces in Central and, primarily, Northern Italy, with the exception of Naples and Salerno.

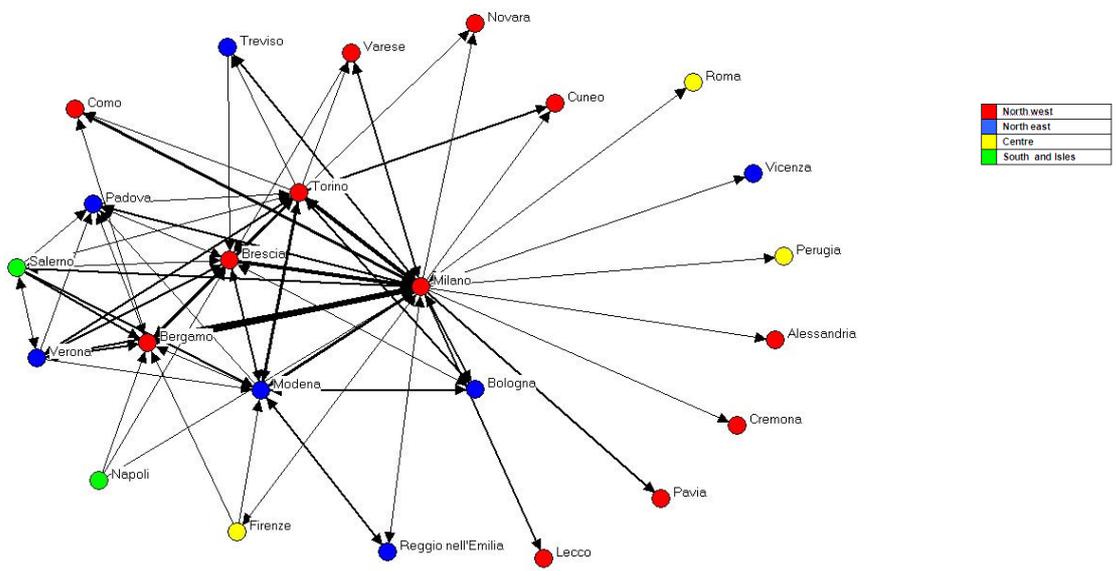
Rome occupies a position at the centre of the network of Romanian citizens and has a primary role both as a destination and origin of migration flows. The capital has very strong links with Milan and Turin (Figure 11).

As regards Ukrainians, the graph has a peculiar configuration (Figure 12). The central node of the network is represented by Naples – a very dynamic province that simultaneously assumes the role of area of destination and origin of flows. Distribution, however, does not have a perfect star pattern. On the bottom left of the graph, in fact, the network is more complex and the links are interlaced, with Rome and Milan emerging as two other significant poles. In general, the Ukrainian network is particularly complex and comprises a large number of provinces – a fact that suggests that the Ukrainian community, which only recently and very rapidly increased to significant

numbers, has undergone extensive redistribution within the country. It should be remembered that the Ukrainians arrived just prior to the start of the regularization campaign. Probably, after initially concentrating in the Naples area, where a large number of applications for regularization were recorded, the community spread throughout the country, giving rise to population movements at once less intense and less focused on the regional capital of Naples.

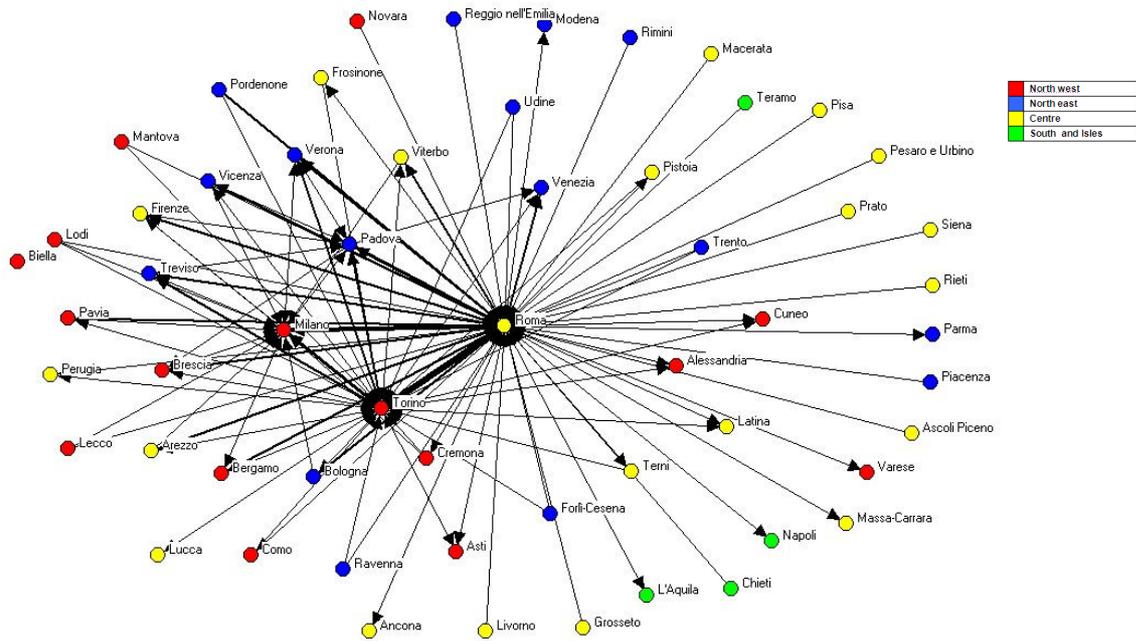
Milan is also central to the Albanian and Moroccan community networks, although the Albanian network is more complex and comprises various Southern provinces which are mainly as areas of origin of flows (Figure 13). In addition to Milan and Rome, Brescia also emerges as a pole of attraction. As can be seen, therefore, mobility tracked using record linkage indicates differences in the networks of the various communities, albeit with some common elements. In general, however, as regards the Moroccan, Chinese and Albanian communities - bearing in mind the different levels of detail for the areas of reference - trends can be observed in line with those that emerged from analysis of Municipal Registers data on changes of residence. Referring instead to the regularization process data, a node can be more clearly identified at the centre of the graphs from which these communities spread out inside the country.

Figure 10 – Network of the inter-provincial flows of regularized Moroccan citizens between 2004 and 2007 (absolute values) (a)



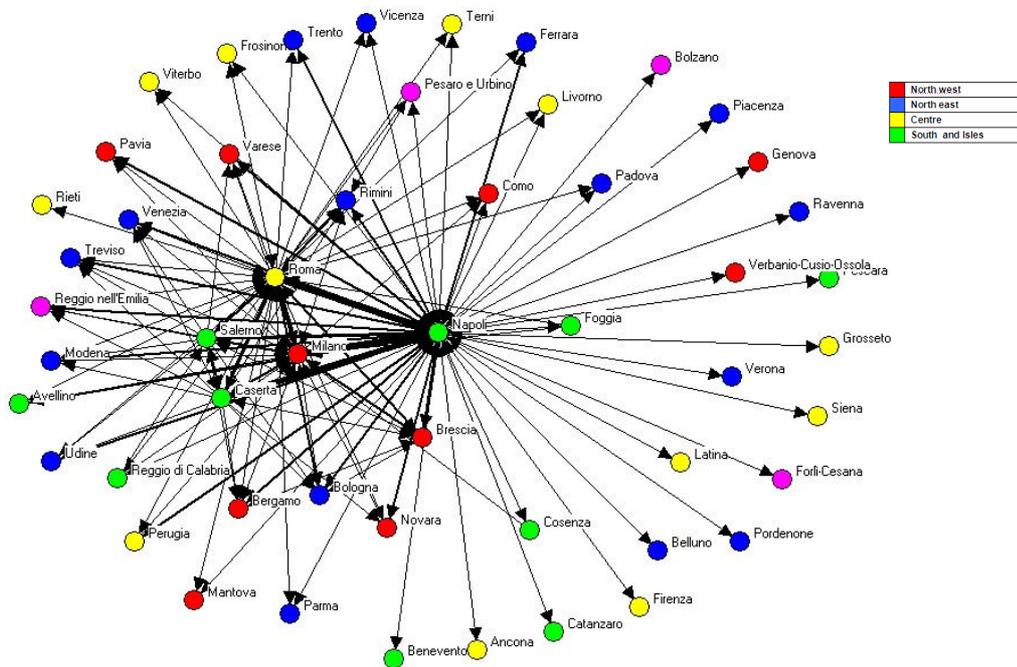
Source: Istat elaboration on Ministry of the Interior data
(a) Flows above 40 are considered.

Figure 11 - Network of the inter-provincial flows of regularized Romanian citizens between 2004 and 2007 (absolute values) (a)



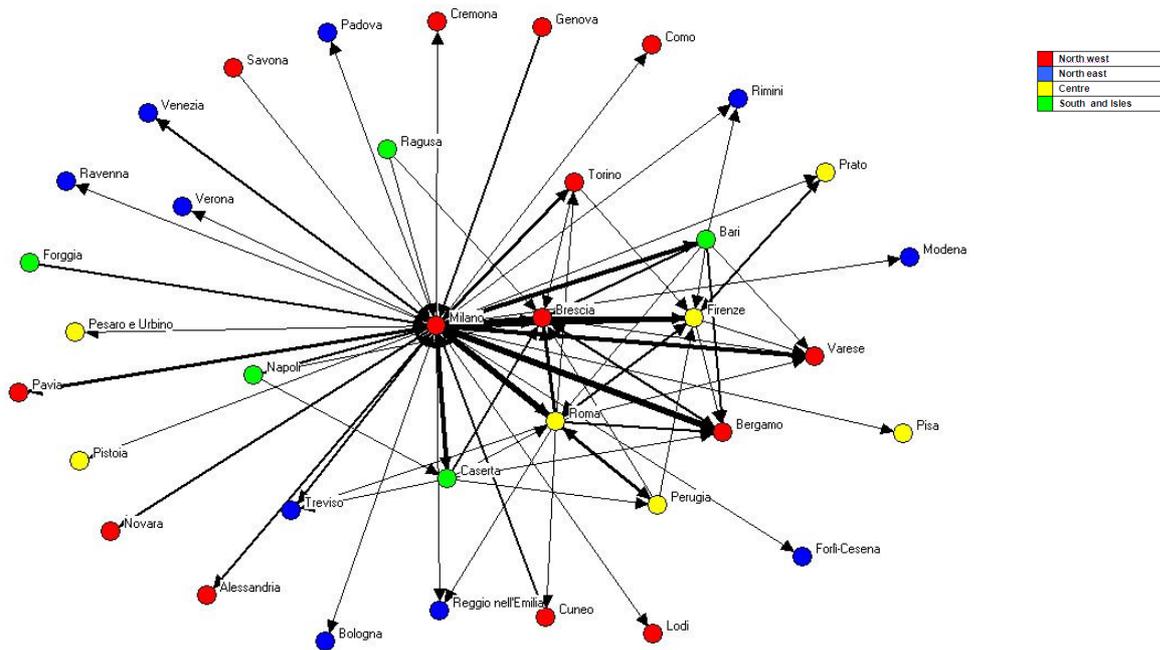
Source: Istat elaboration on Ministry of the Interior data
 (a) Flows above 80 are considered.

Figure 12 - Network of the inter-provincial flows of regularized Ukraine citizens between 2004 and 2007 (absolute values) (a)



Source: Istat elaboration on Ministry of the Interior data
 (a) Flows above 50 are considered.

Figure 13 - Network of the inter-provincial flows of regularized Albanian citizens between 2004 and 2007 (absolute values) (a)



Source: Istat elaboration on Ministry of the Interior data
 (a) Flows above 30 are considered.

4.2. Who moves? Who stays?

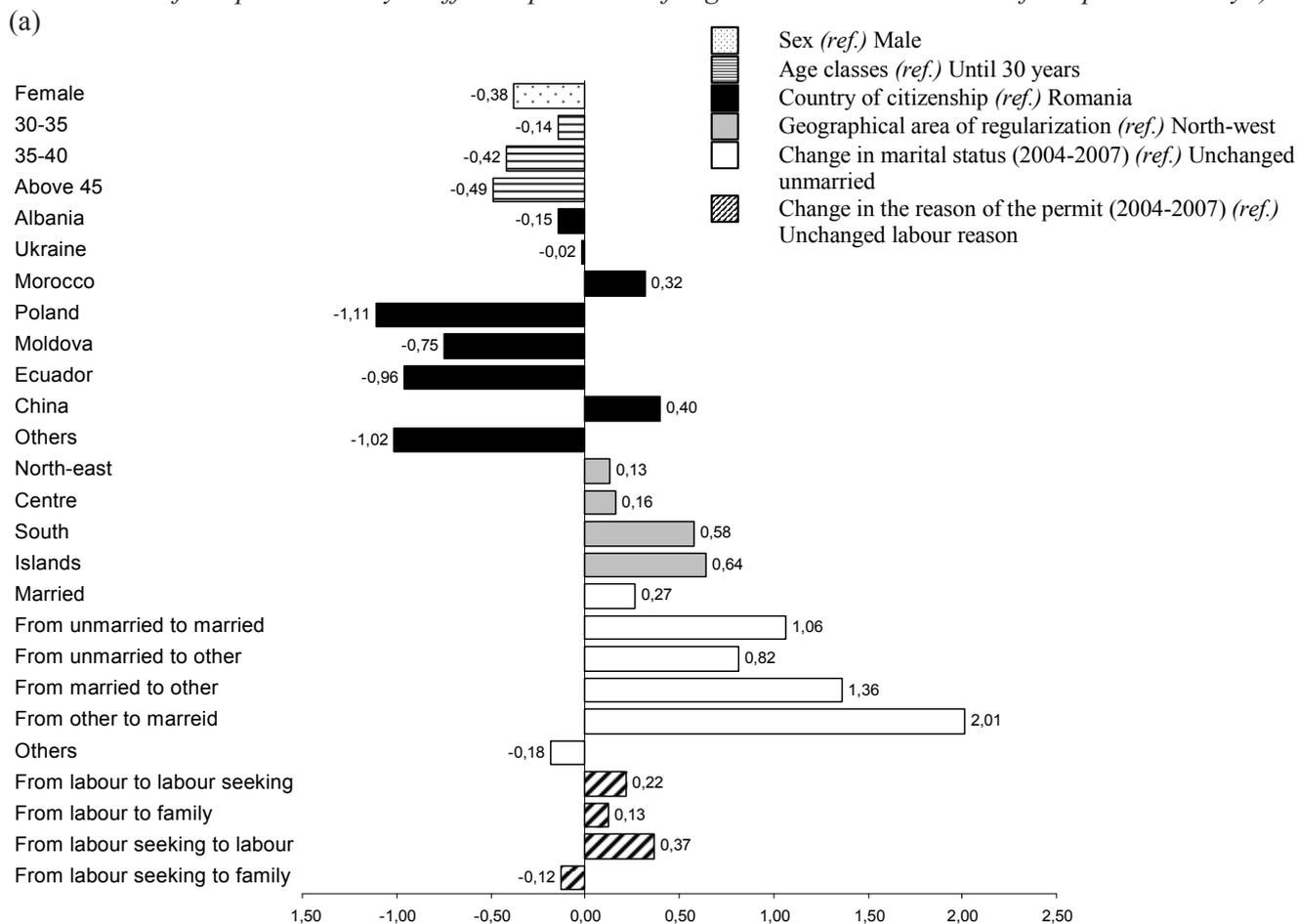
The use of a logistic model makes it possible to determine the relationship between certain characteristics of foreigners and their propensity to relocate within the country. The model takes into consideration all regularized immigrants with a permit to stay still valid in 2007 (Figure 14). It is mainly males and young people who relocate. A clear scale of values emerges related to age: the probability of relocating decreases as people get older. As regards nationality, Chinese and Moroccans, as already mentioned, have a greater propensity to transfer elsewhere in the country than Romanians; Moldavians and Ecuadorians exhibit an even lower inclination to relocate.

In relation to area of the country, other characteristics being equal, the highest propensity to move is shown by immigrants who regularized their position in areas of the country other than the North-West. In particular, propensity to relocate is high in the South and the Islands. This result seems to confirm the hypothesis that in the South a particularly high number of residence applications were submitted and granted to immigrants who subsequently moved inside the country in search of generally better working conditions.

Finally, two variables were included in the analysis in order to summarize the main changes in status that took place in the period 2004-2007: change in marital status and change in the reason of application for a permit to stay. An initial consideration concerns change in marital status: those who changed this status relocated more than those who retained their original status. In particular,

in the period in question, those who married and those whose marital relationship terminated (due to separation or death of a spouse) show a higher propensity to relocate than those who remained single.

Figure 14 – Logistic regression parameter estimates (dependent variable: “same province of regularization and renewal of the permit to stay / different provinces of regularization and renewal of the permit to stay”)



Source: Istat elaboration on Ministry of the Interior data

(a) Only significant items are represented.

By observing the change in the reason for permit to stay applications and taking as reference the category of immigrants who continued to have a permit to stay for labour reason, those who indicate a change in grounds from “labour seeking” to “labour” are more likely to have moved while those who change from “labour seeking” to “family reasons” exhibit a lower propensity for relocation.

The analysis of the relationship between mobility and other socio-demographic variables shows how changes in status (civil status and grounds for application for a permit to stay) are linked to varying degrees with relocation inside the country. In this connection it was again possible to understand the complexity of the “pathways” taken by immigrants in Italy, not only in the strictly geographical sense but also in terms of a sequence of events (such as a marriage or a permit

obtained for family as opposed to employment reasons) that strongly affect the life of individuals and which intersect in multiple configurations.

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