

# Measuring integration of migrants: towards a longitudinal approach

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## Overview

Regulation (EC) No. 862/2007 of the European Parliament and of the Council on Community statistics on migration and international protection was approved in 2007. The legislation has brought substantial changes, leading towards a harmonisation of migration statistics in the context of the European Union, and has stimulated discussion within individual countries aimed at improving the collection and processing of data on the presence of foreigners and on migratory movements. The decisions made in Italy to adapt the statistical system to the requirements of the Regulations have been geared towards better use of available administrative records, also through the integration of micro-data from various sources. The process has occurred gradually, thanks to increasingly close exchanges and communication between the two main bodies of data holders and producers of statistics on immigration: the Ministry of the Interior and Istat. To a certain extent, this process anticipated the more stringent indications of the Zaragoza Declaration (2010) on indicators of integration, which identify the proportion of long-term residents to total residents and the number of acquisitions in a given year compared to the total foreign population among the indicators to be measured.

## Percentage of long term residents as measure of integration: cohort and cross sectional approach

With regard to the long term residents, it should be noted that Regulation 862/2007 requires the provision of statistical data on the number of long-term residents seeking citizenship (Article 6(1)(b)). However, this indicator, calculated on the basis of residence permits, has several limitations that need to be considered. In particular, the “cross-sectional” calculation can give rise to misleading results when nationalities with different average lengths of stay in the country are compared. In Table 1 we have attempted to present the situation for the main communities present in the country, calculating the share of long-term residents in relation to various possible reference populations.

The first and most direct way to calculate this share is to compare long-term permit holders to the total number of residence permits currently valid for the same period. The results of this calculation are given in the first column of the table and show that the Eastern European communities, which only began to establish themselves as a major presence in the country since 2004, have a lower than average share of long-term residents: Moldova, in fact, amounts to 39.3% and Ukraine 49.3%, whereas the overall figure is 54.6%. Communities such as Moroccans and Albanians, whose migratory process has been under way for a longer period, have higher than average values, amounting to 64.4 and 66.3% respectively. It would be mistaken, however, to attribute this difference entirely to migration patterns that involve a less-rooted presence; as is well known, the integration process unfolds over time and the most appropriate study approach to capture this aspect is a longitudinal one. If, in fact, we use the cohort of new permit holders from 2007 as the reference population, i.e. the total arrivals for that year or only those that are still living in Italy in 2013, the gap is noticeably reduced, particularly for Moldavians.

This simple example, beyond the specific aspect considered, shows that in the coming years it will be increasingly important to calculate this indicator using a longitudinal approach, identifying the potential beneficiaries in relation to whom the share of those who have actually applied for and obtained a long-term permit is to be calculated. At present, these calculation methods are applied to specific cohorts of permits granted in a given year, as was done for the previous calendar year. It would be desirable, however, for the length of stay to become a known and reliable variable for all permit holders in order to accurately identify the population actually “at risk” of qualifying for long-term residence permits.

The usefulness of having a more nuanced picture of these processes is also confirmed by the data in Table 2, in which the proportion of long-term residents was calculated in the same manner as in the previous example, though examining the reason for entry in 2007 and sex. In this case, the highest share of long-term residents is clearly seen to be comprised of women and those holding permits for family reasons.<sup>1</sup> The share of people that entered Italy in 2007 for other reasons, and had already acquired a permanent residence permit in 2013, is seen to be decisively lower. This situation also applies to permit holders for employment purposes, among whom males account for a share of 8.7%, whereas that for females amounts to 14.5%.

A problem that needs careful consideration for the calculation of this indicator in the future is that some foreigners who leave Italy are not deleted. This problem has always plagued registry data, but it now also risks having an increasing affect on long-term residence permits. There is at present no efficient cancellation system when people leave Italy, even for long periods. The solution might require both the use of more administrative records for monitoring presence in the country, and periodic applications, through the use of some type of administrative instrument, as confirmation of presence in the country.

### **Acquisition of citizenships: towards a cohort approach (first results)**

As regards the acquisition of citizenship, however, the European Regulation has already required information on “persons having their usual residence in the territory of the Member State and having acquired during the reference year the citizenship of the Member State and having formerly held the citizenship of another Member State or a third country or having formerly been stateless, disaggregated by age and sex, and by the former citizenship of the persons concerned and by whether the person was formerly stateless.”

At the time the Regulation came into force, the sources on the acquisition of citizenship in our country (Fig. 1) did not allow the required data to be directly produced with the necessary breakdowns. The Ministry’s microdata, while providing all the necessary variables of detail, does not cover acquisitions of citizenship by transmission from parents or those by foreigners born in Italy who choose to acquire citizenship at the age of 18. In the case of the aggregate survey conducted by Istat based on municipal registers, while the data available showed all the acquisitions of citizenship by residents in Italy, it did not provide the necessary breakdowns. During the first years in which the Regulation was in force, therefore, steps were taken to provide estimated figures based on the integration of the two sources. It should also be noted that microdata was not available in the case of the Istat survey.

In early 2011, a series of activities were launched to improve the information produced and make it more responsive to the needs of the country. In particular, the set of sources used and the variables considered were increased and the estimating methods were changed.

Regarding the sources, the following became available for use:

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<sup>1</sup> It should be noted that applications can also be made for spouses that are not legally separated and not below eighteen years of age; minor children, including those of the spouse or born out of wedlock; dependent adult children permanently unable to provide for their own basic needs due to health conditions involving total disability and dependent parents.

- 1) two municipal registry lists (LAC – *liste anagrafiche comunali*): one extracted on 31 December 2010 and one updated to 8 October 2011;
- 2) individual Ministry of the Interior data sets, complete with tax identification numbers;
- 3) data from surveys and calculations regarding the foreign resident population and its movements.

The various data sets were linked together using record linkage techniques. At an initial stage, tax identification numbers were used as a key. Deterministic linkages were subsequently created using different sets of variables. Ministry of the Interior data was linked to municipal registers to recover the reason for acquisition in the greatest possible number of cases. In this case, the naturalisations were only for reasons of “marriage” or “residence”. The record linkage between the two subsequent municipal population lists allowed to include also the acquisitions of adults that were not registered in the Ministry dataset, acquisitions of children granted citizenship by transmission and acquisitions of persons born in Italy to foreign parents who chose Italian citizenship at eighteen years of age. The estimation process was concluded through the use of probabilistic techniques to complete the missing information. The relationship between Istat and the Ministry has been of fundamental importance in this improvement process, with both bodies seeing the importance of working together to improve the quality of information regarding an aspect that has become important for the monitoring of active citizenship.

The calculation of the citizenship acquisition indicator with a longitudinal perspective envisaged by the Zaragoza Declaration could provide a further step forward in this direction. The indicator is currently calculated as: “The ratio between the number of residents who acquired citizenship in a country during a calendar year and the total number of resident foreigners in that country at the beginning of the year.” However, as highlighted in the same document, the term ‘naturalisation rate’ in this case “may be misleading since the acquisitions considered are all modes of acquisitions in force in each country, and not only naturalisations (residence-based acquisitions requiring an application by the person concerned). The indicator can be computed for specific groups of foreigners (for example third country nationals), for specific age groups and/or for men and women separately.”

In fact, even in this case the longitudinal approach may be of particular interest, especially for acquisitions that are confirmed through residence.<sup>2</sup> The need for a cohort approach has been emphasised for some time in regard to naturalisations in the strict sense (Perrin, 2006). This perspective has recently been proposed once more by Reichel (2011), who stressed that: “To do so, it would be necessary to base the rate on the foreign population actually eligible for naturalisation, or as statisticians call it, the population at risk of experiencing an event. As pointed out by Nicolas Perrin (2006) a cohort approach towards measuring rates of citizenship acquisition would allow the calculation of the likelihood of obtaining citizenship for individual cohorts of immigrants which would provide a much better measure of the impact of policy measures on patterns of citizenship acquisition.” The same author also points out that the lack of appropriate data makes it difficult to calculate longitudinal naturalisation rates, which require the availability of information on the year of immigration. This is, however, the direction in which several countries are moving, also due to the availability of statistical sources based on registers that allow the extraction of longitudinal data (*ibid.*).

With regard to the Italian situation, efforts have been made to illustrate the usefulness of a longitudinal approach by using the situation of the ten largest communities in terms of the number of oath takings for acquisition of citizenship in 2011 as a reference (Table 3). The shortage of some information prevents the calculation of effective longitudinal measures, but even by considering approximations, the greater accuracy of this type of measurement compared to the cross-sectional approach can be clearly seen. Firstly, it should be noted that the oaths taken in any given year are the result of applications submitted over a wider period of time. Secondly, it seems clear that

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<sup>2</sup>For weddings, for example, a linkage could be envisaged between the archives that register this type of event (marital status and registrar’s office) and the data on acquisitions.

attempting to relate acquisitions more accurately to the actual population at risk leads to significantly higher values than those obtained by simply dividing them by those valid during the year of oath taking; and this occurs despite the fact that the denominators considered in the two other proposed calculation hypotheses are, by force of circumstances, even larger than the actual reference community.

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Table 1 - Long-term residents according to citizenship (percentages)

Citizenship	Share of long-term residents 2013 stock (total)	Share of long-term residents 2013 stock (holders only*)	2007 entries (holders only*)		
			% still present in 2013	% long-term residents from the total flows for 2007 present in 2013	% long-term residents of total flows for 2007
Morocco	64.4	59.1	66.8	27.2	18.2
Albania	66.3	63.8	69.9	29.6	20.7
Ukraine	49.3	49.3	75.4	20.5	15.4
Moldova	39.3	38.6	76.2	20.8	15.9
China	39.0	34.4	74.9	5.9	4.4
India	52.1	45.4	60.9	25.5	15.5
Bangladesh	53.7	46.5	70.5	18.9	13.3
Philippines	49.5	47.5	55.2	8.9	4.9
Sri Lanka	52.3	47.2	72.2	13.7	9.9
Peru	50.5	48.5	68.8	17.5	12.0
Tunisia	66.2	59.4	52.3	28.9	15.1
<b>Total</b>	<b>54.6</b>	<b>50.4</b>	<b>63.2</b>	<b>22.5</b>	<b>14.2</b>

Source: Istat processing of Ministry of the Interior data.

Note: (\*) The figure refers only to residence permit holders and does not count those included on the permit of another person; in particular, children under 14 years are excluded. At present, no tax identification number is listed in the Ministry of Interior archives for accompanied minors below 14 years of age, and it is therefore not possible to implement the record linkage procedures used for residence permit holders.

Table 2 - Long-term residents according to sex and reason (percentages)

Reason for entry in 2007	% of 2007 flows present in 2013			% of long-term residents from total flows for 2007 present in 2013			% of long-term residents out of total flows for 2007		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
Work	60.6	73.5	66.1	8.7	14.5	11.4	5.3	10.6	7.6
Family	63.8	67.4	66.3	44.4	56.2	52.8	28.3	37.9	35.0
Study	26.5	29.1	27.8	9.9	11.5	10.7	2.6	3.3	3.0
Asylum/humanitarian	50.3	50.7	50.4	1.9	1.8	1.9	0.9	0.9	0.9
Other reasons	33.8	32.4	33.1	9.5	14.2	11.8	3.2	4.6	3.9
Total	58.5	68.1	63.2	14.5	29.6	22.5	8.5	20.1	14.2

Source: Istat processing of Ministry of the Interior data.

Table 3 - Oaths taken in 2011 for the acquisition of citizenship for residence by year of application for the top 10 nationalities. Different methods for calculating naturalisation rates (a) (per 1,000 residence permits)

Citizenship	Total 2011	% of applications per year						Naturalisation rates (x 1,000)		
		2009	2008	2007	2006	2005	Before 2005	Raw b)	Corr. 1 (c)	Corr. 2 (d)
Morocco	3,840	7.5	43.9	31.9	10.5	4.4	1.9	7.7	14.1	13.5
Albania	3,424	13.5	48.9	26.0	9.0	1.1	1.5	7.1	11.3	10.8
Tunisia	624	7.9	36.5	34.3	15.1	4.3	1.9	5.3	9.3	9.2
Peru	601	11.3	49.3	28.3	9.3	1.2	0.7	5.9	10.6	10.0
Serbia/Kosovo/Montenegro	449	14.0	51.0	22.5	9.4	2.2	0.9	4.5	7.5	7.2
Egypt	446	5.4	24.0	33.2	30.0	5.4	2.0	4.0	8.8	8.7
Macedonia, Republic of	444	19.8	54.7	18.9	4.7	1.6	0.2	5.7	9.3	8.7
India	439	5.7	33.9	29.6	23.9	6.2	0.7	3.1	7.4	7.2
Bangladesh	362	6.4	40.9	31.5	17.7	3.6	0.0	3.5	8.1	7.7
Bosnia and Herzegovina	296	10.1	54.1	25.7	6.4	3.0	0.7	10.0	14.3	13.0

Notes: (a) From 2005 to 2009 the calculations only considered permit holders, excluding other persons listed on the permit; (b) calculated for the permits in early 2011; (c) correction 1: sum of the rates obtained by comparing the applications in each year to the number of residence permits at the beginning of the corresponding year; (d) correction 2: oath takings related to a weighted average of valid residence permits in previous years with weights given by the share of applications for each year.

Source: Istat processing of Ministry of the Interior data.

Figure 1 - Method for surveying acquisitions of citizenship until 2010

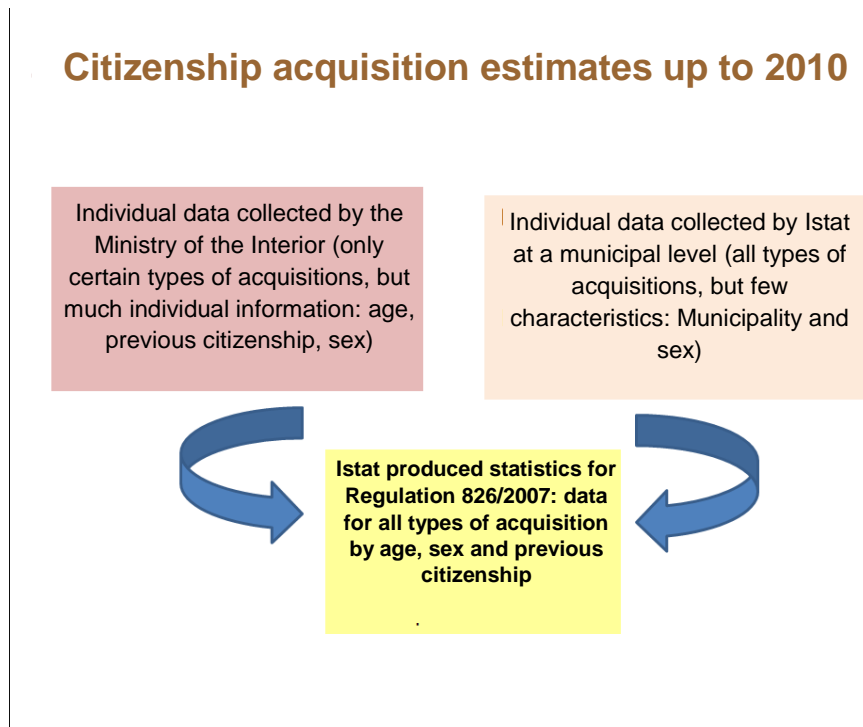


Figure 2 - Method for surveying acquisition of citizenship since 2011

