Abstract

The important role played by international migration in population changes and dynamics has led to increased awareness among policy makers, politicians, researchers and international organizations that the availability of reliable and good statistics on the phenomenon is strongly needed. Nevertheless, what is reliable for a single country might not be reliable if we compare migration statistics coming from different countries. This problem is amplified when we consider free movement of persons within the European Union, where many cross-border movements within this area might remain uncounted by official statistics.

Official statistics on migration in Italy are based on changes of residence administrative source. This source is addressed to municipalities population registers (Anagrafi), aiming to collect the number of internal and international migration flows as well as the main socio-demographic characteristics of migrants. The Italian National Statistical Institute (ISTAT) has made great effort to enhance the quality and consistency of migration statistics, as well as the timeliness for data dissemination in order to meet new international standards (European Regulations 862/2007 and 1260/2013). The new rules and regulations have had a significant impact on the statistical processing of data and improved the quality of data collected, their consistency, and their integration with other administrative data sources.
The Italian administrative system is now facing a transitional period since, within next year, the Municipal Anagrafi are scheduled to be centralized in a unique Population register (ANPR), that will be managed by the Ministry of Interior. From a statistical point of view, the new system can further enhance the reliability of population statistics, in general, and of migration statistics, in particular, allowing data to be collected on a continuous basis. Closely linked to the creation of ANPR there is also the project of defining a statistical register of residents (ANVIS) which will be fully managed by ISTAT.

The impact of the new rules and of the new information systems on the production process is very significant. The objectives to be achieved are: an increased data quality in terms of timeliness, coverage and consistency with other administrative sources; the possibility of offering to the user more coherent and understandable statistical information. Positive impacts are also expected at the international level, where Italy is already involved in a project of data exchange and methodological information on migration statistics between National Statistical Institutes.

Framework and aim

Since the early nineties, the Italian National Institute of Statistics (Istat) has been trying to make the best possible use of the various available administrative sources within the international migration statistics field, overall the population registers. This, on one hand, has allowed for a large statistical documentation to adequately catch the main socio-demographic features of the migration phenomenon. On the other hand, Istat must always deal with the problem of using administrative sources which are not under the direct responsibility of the Statistical Institute. Moreover, as it occurs in many European countries, in Italy the underlying migration administrative sources and laws are pre-established to the international concepts and definitions as they are described in the Recommendations on Statistics of International Migration. Therefore, the migration flows statistics based on such sources are referred to a “de jure” legally resident population, and not to the “de facto” one.

During the last years, many changes have occurred under administrative point of view as well as under the statistical data management and collection procedures. The population registers digitalization and law changes are aimed to improve the administrative system productivity and to decrease the citizens’ administrative burden. Such changes have strongly influenced the statistical production and allow to improve the data quality in terms of timeliness, coverage and consistency with other administrative sources. Positive impacts are also expected at international level, especially with regard to the national statistics official comparability with the other European countries.

This paper will describe the present situation and the future possibilities about migration statistics in Italy, highlighting the strategic features aiming to improve the future statistical offer as well as investigating possible activities to obtain a better comparison at international level.

The Italian context of reference.

International migration are for years now a well-established component in the framework of the social and demographic dynamics of the country. It represents the unique factor of population growth in recent years. Since the earliest seventies the number of immigrants constantly exceeded the number of emigrants. Nevertheless, inflows have increased particularly in recent years, mainly due to foreign immigrants: between 2004 and 2013 the number of people coming from abroad is more than 4,5 million, and 3,7 million of them are foreign citizens.
Though many countries joined European Union in the last decade, the extra EU27 countries are still the origin of the larger amount of immigration flows towards Italy (2.7 million in majority Albanians, Moroccans, Ukrainians and Chinese).

Between 2004 and 2013 the migratory balance is about 2.5 million (2.1 million if we take into account also the deregistration “ex officio”). This number attests to the fact that the demographic increase is uniquely due to migration dynamics, with a natural one (difference between live births and deaths) that, in the same period, has given rise to a negative balance equal to 74 thousand units (5 million and 624 thousand live births and 5 million and 697 thousand deaths).

Data Source and legislative context

In Italy official statistics on international migration flows are based on local population registers under the responsibility of the Ministry of interior which is in charge of supervising local administrations and national security. Therefore population registers are used to produce migration statistics and the data collection is based on two forms. The first one is under the direct control of ISTAT and it is sent to all municipalities. Those are obliged to deliver aggregated data on the demographic balance of the resident population. The second one is concerning individual data on changes of residence that are transmitted to ISTAT, which is responsible for data correction and validation. Changes of residence data source provide the number of internal and international migration flows, the information on both the origin and destination of a single movement as well as the main socio-demographic characteristics of migrants. Since 2010, the international migration statistics produced by these two sources (individual and aggregated) are consistent.

Istat yearly collects individual data from more than 8 thousand municipalities. The number of changes of residences (internal and international) is about 1 million and 8 thousand per year. The data collected are not usable as they stand because data quality problems are present due to errors during the data entry, missing information or other invalid data. Therefore, the first data cleaning activity is the detection and the deterministic removal of errors and inconsistencies.

As regards missing information, a donor method is used to impute missing values. The validated data are cross checked against the data by aggregated form (demographic balance) and the inconsistencies are removed in order to produce a unique, more accurate and consistent migration statistics as required by the Regulation EC No 862/2007 of the European Parliament and of the Council.

As mentioned, during the past years, many changes have occurred under administrative point of view. The first collecting data form which encodes all the foreign States was introduce in 1995. Since then this form was not changed till 2012, the year when “real time changes of residence” law was introduced. This law not only changed the collecting data form, but also it has established new rules to define the population registering procedure.

The main news are about how long it takes to the administrative office to work on this procedure. Before a change of residence form was sent in to Istat only after having checked the real residence of the requesting person. Now instead the municipalities receiving a registration application are obliged to define the administrative procedure within two working days and only after it they can verify if the requesting person is entitled to it. Under the statistical point of view this new law allows to receive the residence change information almost in real time with a noticeable reduction of the time lapse between the moving request and the objective transmission for statistical purposes.

Another important normative change is about the total elimination of the paper forms in the communication between Public Administrations. This not only allows a faster and more efficient communication between municipalities, but it is also a way of improving the
quality of the data transmitted from the Anagrafi to Istat. The control rules in action when data are transmitted verify the completeness and the consistency of the received information as well as, at the same time, an immediate check of the consistency with the other statistical data sources (e.g. demographic balance).

It has to be said that Istat for some years now paved the way for the telematic transmission of all the demographic statistics and in 2012, when this law was adopted, about the 95% of the municipalities were already prepared to the telematic transmission use and the percentage of paper forms was already very low.

These normative changes have made it possible to already achieve a first important result: since this year on, Istat is providing preliminary migratory flows estimation within a few months lapse by the reference year. The preliminary estimates are also very useful for the nowcasting procedure of the population.

New normative changes: the Italian centralized population register ANPR.

The complete digitalization of the population register not only represents a tool for increasing the administrative sector productivity as well as reducing the citizens administrative burden, but this allows also to make an important change in the population register management: the centralized register.

The Decree Law No 179/2009 establishes, with art. 2, the ANPR, l’Anagrafe Nazionale della Popolazione Residente. The ANPR is a unique and centralized database of the Italian resident population that should replace the 8 thousand local registers kept at municipality level within the 31 December 2015.

This will represent a real revolution in the Italian population registers system, considering that the Anagrafe has always been conceived as “municipal”. The transformation of Italian population registers from “local” to “centralized” is designed to:

- speed up the communication between the municipalities (internal changes of residence)
- allow a real time display of the information to other government agencies that at various level of interest (taxes, social security and welfare, health, motor vehicles, statistics) make massive use of demographic data
- improve the activity of the population register demanded by citizens.

By a statistical point of view the new system will be concerning all the demographic data and it can further enhance the reliability of population statistics, in general, and of migration statistics, in particular. The ANPR will also make it possible to continuously monitor population movements by linking changes in the population stock with outflows and inflows. Moreover, the register will allow to collect all the changes of residence, both within and between Italian municipalities as well as tracking the movements of nationals abroad.

Progress and future plans

It is obviously in the interest of both local and central administrations to ensure that the population register is updated and the number of individuals registered in the Anagrafe reflects the reality of the situation. However, due to mistakes by the individuals or administrations concerned, errors occur so Istat still needs to check and correct the data working along with the administrative bodies involved in the data collection activities and registers updating.

For this reason, closely linked to the creation of the centralized population register, it has been developed, and will be fully managed by Istat, a project of engineering and implementing an information system of demographic accounting on individual basis.
(MIDEA: micro-demographic accounting) as well as of defining a statistical population register of individuals/households (ANVIS-ANFAM: Anagrafe Virtuale Statistica).

Specifically, the aim is ensuring the integration intra/inter all the individual flow-records that feed and/or modify the individual stock-records of ANVIS-ANFAM, in order to grant – within the logical and technological architecture of the information system – the global consistency of MIDEA-ANVIS, regarding the quality of its contents, the database time-updating and the statistical production releases time-schedule.

On a purely demographic ground, the new system will allow to:

- switch from an aggregate-based population system of accounting to an individual one
- switch from a traditional population census to a register based one, including a permanent and individual monitoring of the population archives
- meet deadlines, constraints and definitions imposed by the European Regulations
- provide more consistent and standardized information on population stock and flows

Furthermore, stock-flow integration and longitudinal consistency in the MIDEA-ANVIS information system are fundamental requirements not only for the statistical production, but also in order to get the following research targets:

- Building micro-longitudinal surveys using microdata of administrative and/or sample origin (life event biographies)
- Applying multistate demography longitudinal models and techniques, also incorporating them in demographic projections (dynamic models of sub-population projections)
- Building an integrated multivariate system of socio-demographic synthetic period indicators (event occurrence tables), based on change-of-state probabilities in a multistate system: this multivariate system of indicators will be integrated in the wider BES indicator system
- Building a universe-base of socio-demographic units (individuals/households) aimed at designing intrinsically integrated sample surveys on specific sub-populations
- Building a universe-base of socio-demographic units (individuals/households) aimed at reducing the sample variability, by maximizing the use of the simple selection technique

The demographic data collection is going to change at the end of the next year, when the access to the administrative database, ANPR, will allow to collect data on a continuous basis.

As mentioned, the new rules and the new information systems impact on the production process is very significant. The status of a population stock and its demographic structure can be estimated at any time and not only yearly or after a census. The objectives to be achieved are an increased data quality in terms of timeliness, coverage and consistency with other administrative sources as well as the possibility of offering to the user a statistical information more coherent and understandable.

Positive impacts are also expected at the international level, where Italy is already involved in a project of data exchange and methodological information on migration statistics between National Statistical Institutes. The main emerging outcome so far, thanks to a trilateral working group between Italy, Spain and Romania, is the improvement of migration statistics supplied under the Regulation 862/2007. Further initiatives in this
direction, to improve quality and consistency of the administrative records at EU level and to facilitate the interchange of data between EU Member States, are absolutely welcome. As a matter of fact, they would reinforce and improve a close control of the migration flows within the EU Zone.

Moreover, these initiatives might also stimulate appropriate discussions aiming to develop a legal framework for monitoring migration flows between countries of the EU.

Conclusions

In Italy, municipal population registers records and other administrative data, such as permits of stay, are the main sources used for producing (population and) migration statistics. Although the related normative framework has progressively changed over time, today Italy is at the dawn of a real “administrative revolution” founded on the transition from a system of over 8,000 municipal population registers (“Anagrafi comunali”) to a unique centralized national system ANPR (“Anagrafe Nazionale della Popolazione Residente”), including the register of Italian citizens resident abroad.

Parallel to such administrative radical change, Istat, on statistical side, is implementing a new information frame of population accounting, based on individual flows of demographic events (MIDEA = MIcro DEmographic Accounting), that will continuously feed a population stock register (ANVIS = ANagrafe VIrtuale Statistica) for statistical purposes. ANVIS aims to achieve substantial improvements in terms of data quality, coverage, internal consistency (especially as far as internal migration records are concerned) and external consistency with other administrative sources. The integrated MIDEA-ANVIS system shall offer to users better and consistent population (and migration) statistics, as well as demographic outputs more consistent with the concepts and definitions set up by the EU Regulations (namely the 862/2007 and 1260/2013 ones). By the way, the ANVIS statistical stock will also allow for improving efficiency in designing samples on individuals and households, as well as applying multistate and micro-longitudinal models and methods to socio-demographic units.

Anyway, such efforts to widen and improve the use of administrative records for statistical purposes is consistent with the approach recommended at international and EU level, in particular. In this regard, in our national experience, a very important challenge to face is devoting great attention to constantly maintain the administrative register and records quality, over time. This goal may be achieved by using the “statistical warnings” provided by ANVIS (jointly with those coming from the annual C-Sample performed in the frame of the new “permanent Census”) to monitor the shape of the administrative records of ANPR. The aim, of course, is maintaining over time good quality standards of the administrative records that feed the statistical data base ANVIS, thus permanently ensuring high-quality standards to the “circular” production flow of population (and migration) statistics.

Many efforts, at European Union level, have being made to enhance migration statistics in the light of what is required by the EU regulations. It would be desirable if, in order to ensure intrinsic comparability, such efforts should not be limited to coordinate definitions, procedure productions, estimation methodologies and outputs, but if they start to be extended also to make more and more consistent the different sources used by each country, ideally moving towards a common system of administrative input and measures, with particular regard to origin/destination records of internal migration from/to countries of the Union.