

## **THE STRUCTURE OF MIGRATION FLOWS FROM ROMANIA TO ITALY (2008-2016)**

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**Abstract:** In this article, based on data from Eurostat databases, we have tried, by applying mathematical methods of quantification of the migratory femomen to understand structurally this phenomenon. During the study, the resulting data revealed several statistically interesting situations. However, for an overall understanding of the migratory phenomenon in Romania, we intend in the near future to further elaborate such studies and for other destinations of the Romanian migrant population, such as: Spain, Hungary, Austria, Belgium, Denmark, Ireland or the Netherlands, for which Eurostat databases are quite generous.

**Key words:** emigrant, emigrant by sex, emigrant by age, permanent emigration, temporary emigration, annual averages

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### **INTRODUCTION**

Birth and death, marriage, and divorce are demographic events. With a classic term, they fall into the general notion of natural movement of the population. The closed-end population, as defined in his time, is a community that is always renewed, under the effect of births and deaths, and these processes find their full expression in the stable population model (Caselli et al, 2005).

The population is also an open system. Thus, its number and structure, on a national scale or on a territorial-administrative unit, may be influenced by external and internal migration. This part of the general movement of a population is *the migratory movement of the population* (Pécoud et al, 2007). Thus, the general

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movement of the population, her dynamics, consists of two movements, natural and migratory, whose equation of balance results as a sum of the initial population, *the natural balance* (difference between the number of live-births the number of deaths) and *the migratory balance* (the difference between the number of immigrants and the number of emigrants) (OECD, 2007).

Migration, as an event involving the change of a person's status, is no longer dual, biological-social, that they had birth and death. It is entirely a social event. This means that migration has a social conditioning, in the broadest sense of the word, and generates social consequences, among which, of course, and demographic consequences. That is why the study of migration is interdisciplinary excellence. Thus, sociology, geography, political economy are among the most interested sciences of knowledge of migration (Ritzer, 2015).

Demographics are interested in this event, primarily as a factor of the general movement of the population, as the population flow that changes the number and structure of the population in the locality of origin and in the locality of destination, but also by the demographic characteristics of the two populations. At the same time, demography also studies demographic phenomena such as the birth rate, mortality, marriage, or divorce of the migrated population, the change in reproductive behavior, etc. (Ford, De Jong, 1970).

Migration is then studied as a factor of redistribution of population in the territory, as a factor of urban growth, and last but not least, of social homogenization (Nel at all, 2016). The process is particularly wide and with implications at all levels.

In this article we will be limiting to consider migration as a factor of the general movement of the population. For this purpose, will be presented the main notions, indices, methods of description and analysis of migration.

### **METHODOLOGY AND TERMINOLOGY**

Population mobility is the process by which people change their residential, professional or social status by moving to another status. Accordingly, schematically can be distinguished: *space mobility*, *professional mobility* and *social mobility* (Canzler, 2016). By extension, can also be applied to the change of matrimonial status (by switching from one civil status to another), change of educational status, etc.

Modern studies used, in describing and analyzing mobility, regardless of its character, longitudinal method (on cohorts) and matrix representation, with the help of the probability matrix from one status to another, from one state to the next, precisely because mobility is a lot of passages. This explains the recent trend of use of Markov's theories (Aigner, 2013).

*Spatial mobility* of the population is the process that includes the sum of population displacements in space, caused by various causes, on larger or smaller distances, accompanied or not of permanent (permanent) change of the legal domicile or usual residence. In this notion are quantified travel of tourists, of seasonal workers, the commuters, of people from one locality to another, including those accompanied by permanent change of residence (Aybek et al, 2014).

*Population migration* is a form of population's geographical mobility, accompanied by a change of usual residence, between two clearly defined administrative-territorial units. It is also called residential migration, because the person involved in such a movement changes his residential status (Gould, Findlay, 1994). Thus, in the notion of population migration or residential

migration are not quantified nomadism, trips, tourist activities or seasonal movements (seasonal migration), different forms of commuting or pendulum migration.

Therefore, it is important to define geographic units correctly or territorial-administrative between which they occur residential changes. For Romania, these units are those defined by the administrative division of the territory in 1968: the commune (including the suburban commune), the city (including the municipality), the county and the country. These changes are pursued through official information systems. Changes of domicile within the same city or city (municipality) do not fall within the notion of migration, although they may have a large scale or can generate certain economic consequences.

In relation to the official borders of a country, migration can be:

- *internal migration* represent all movements, which generates definitive (permanent) change of usual residence within a country, between the territorial-administrative units;
- *international migration (external migration)* represent all movements which generates definitive (permanent) change of usual residence between two countries.

Period (the length of migration) is that period of migration, determined at the time of registration and which may be (Kilkey, Palenga-Möllenbeck, 2016):

- *fixed period or interval*, defined from the beginning of the period or through the length of the period;
- *migration in the course of life* defined as recorded migration, usually, in censuses, representing the interval between the date of birth (in the place of origin) and the date of registration (in the destination city), making an abstraction by the number of journeys.

For a correct description and statistical analysis follow separately:

- *migration* or *movement from* one place to another, this being the demographic “event” by analogy with the birth and death event;
- *migrant* is the person who has committed one or more migrations.

For probabilistic interpretation and the compilation of probabilistic migration tables, it is important to make a distinction between people who have made one or more migrations, migrant people and the population exposed to “migration risk” (Williams, Baláz, 2014).

In relation to participation in migration, each person has a certain situation.

*Migration status* or *mobility* is defined based on the population census data classification, in the following categories (Parsons, Smeeding, 2006):

- non-immigrant population;
- immigrant population within the country;
- immigrant population outside the country (through external immigration).

This classification has an analogy with classification by professional status (by socio-professional categories) and by social status (by social category).

*Place of origin* (departure) represents the locality from which the migrant goes, so from which the movement begins (usually marked with index i).

*Place of destination* (arrival) is the place where the migrant person moves (note with index j).

Taking into account the two fundamental types of migration, it is advisable to use the following expressions (Kucera et al, 2012):

- *departures and arrivals*, as events within internal migration as they appear in the databases of the National Institute of Statistics in Romania and

Eurostat; accordingly, those people have leaving their home town and arrived in the destination town;

- *immigration and emigration*, as events in international migration; accordingly, those persons are emigrated from one country and immigrated to another country.

*Gross migration* represent the sum of the arrived (immigrants) and the displaced persons (emigrants). This indicator is to know the magnitude or intensity of the displacements between town  $i$  (town/place of departure) and  $j$  (town/place of arrival) and also, for calculating the gross redistribution rate of the population in the territory (Kucera et al, 2012).

A special form of migration is *the return migration* that represents migrant people who, after a period of residence in the destination city, return to the place of origin (Nadler et al, 2016; Conway, 2016).

Migration flows include a group of migrants which have the same place of origin (departure) and same place of destination (arrival), in a given time period.

Migration description and analysis depend on sources of information on migrants, the volume of recorded features and of course and the quality of those data.

In Romania, migration data sources are generally:

- censuses of the population;
- household surveys;
- permanent population registers;
- other sources.

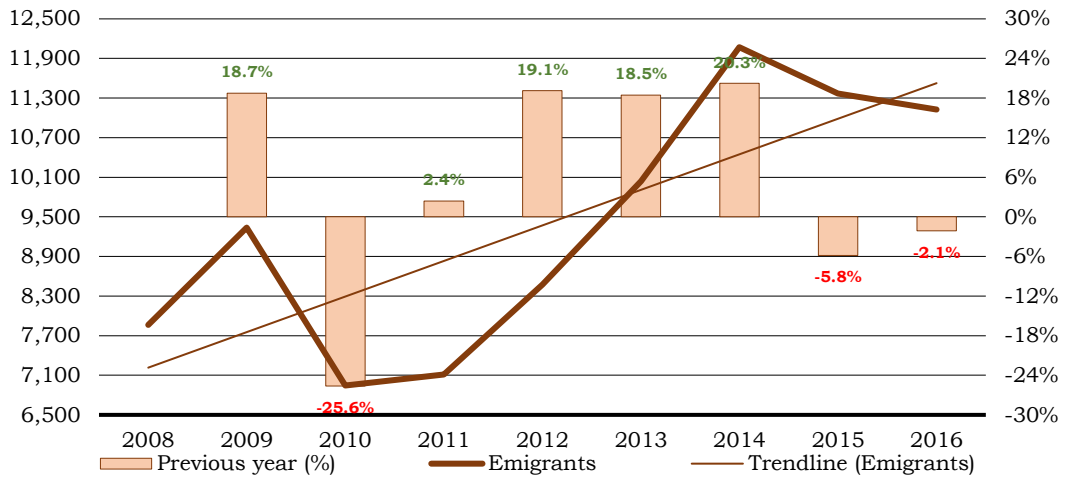
Under the current conditions in Romania the sources of migration are censuses of the population the current migration statistics and statistical surveys. Current statistics of migration are based on statistical data in the databases of the National Institute of Statistics (<http://statistici.inse.ro/shop/>) or in the Demographic Yearbook of Romania published by the same institution. In its current form, the Tempo Online database (updated and managed by the National Institute of Statistics in Romania) contains a large number of characteristics for migrant home change: gender, age, residence, etc. However, statistics for the study of migratory flows from Romania are provided by Eurostat, through its databases (<http://ec.europa.eu/eurostat>).

## **THE STRUCTURE OF MIGRATION FLOWS**

### **Total number of emigrants**

In the period 2008-2016, according to the survey conducted by Eurostat, emigrated from Romania to Italy, permanent or temporary, a total of 84,336 people, representing only 13.4% of the total number of people who left Romania permanently or temporarily. We say "only" because, for example, emigrated from Romania to Spain, permanent or temporary, a total of 436,188 people, representing 69.3% of the total number of people who left Romania permanently or temporarily. According to these data, the main destination with regard to the choice of emigrants followed by Italy, Hungary (4.3%), Austria (3.3%), Belgium (2.8%), Denmark (1.7%), Ireland (1.6%), Netherlands (1.2%), etc.

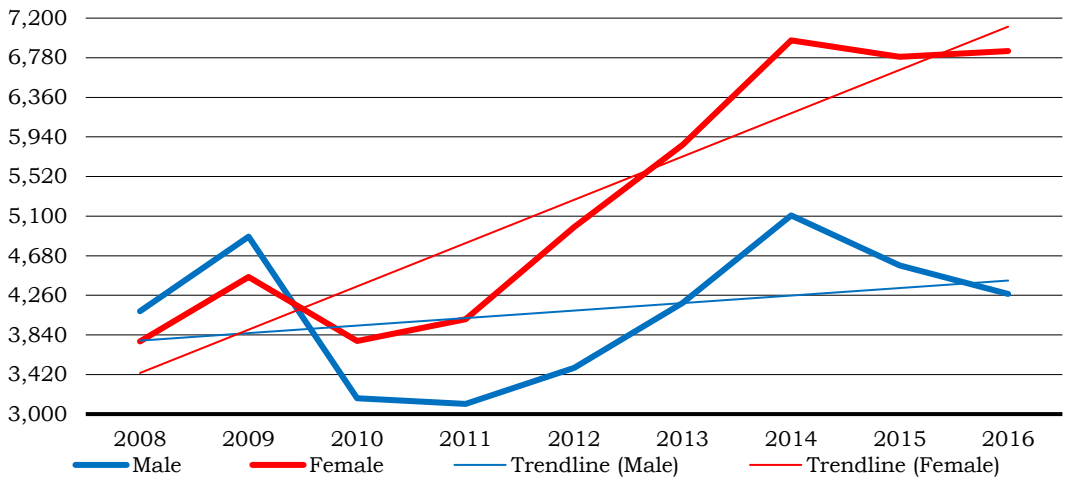
From the above data resulting in an annual average of 9,371 emigrants (with values that varied from year to year from 6,945 emigrants to 12,071 emigrants), respectively gross annual growth of 408 emigrants and an average annual increase of 5.7% (with percentages that varied from year to year from -25.6% to 20.3% and gross values from -2,392 to 2,033) (Figure 1).



**Figure 1.** Total number of emigrants (2008-2016)  
 (Data source: <http://ec.europa.eu/eurostat>)

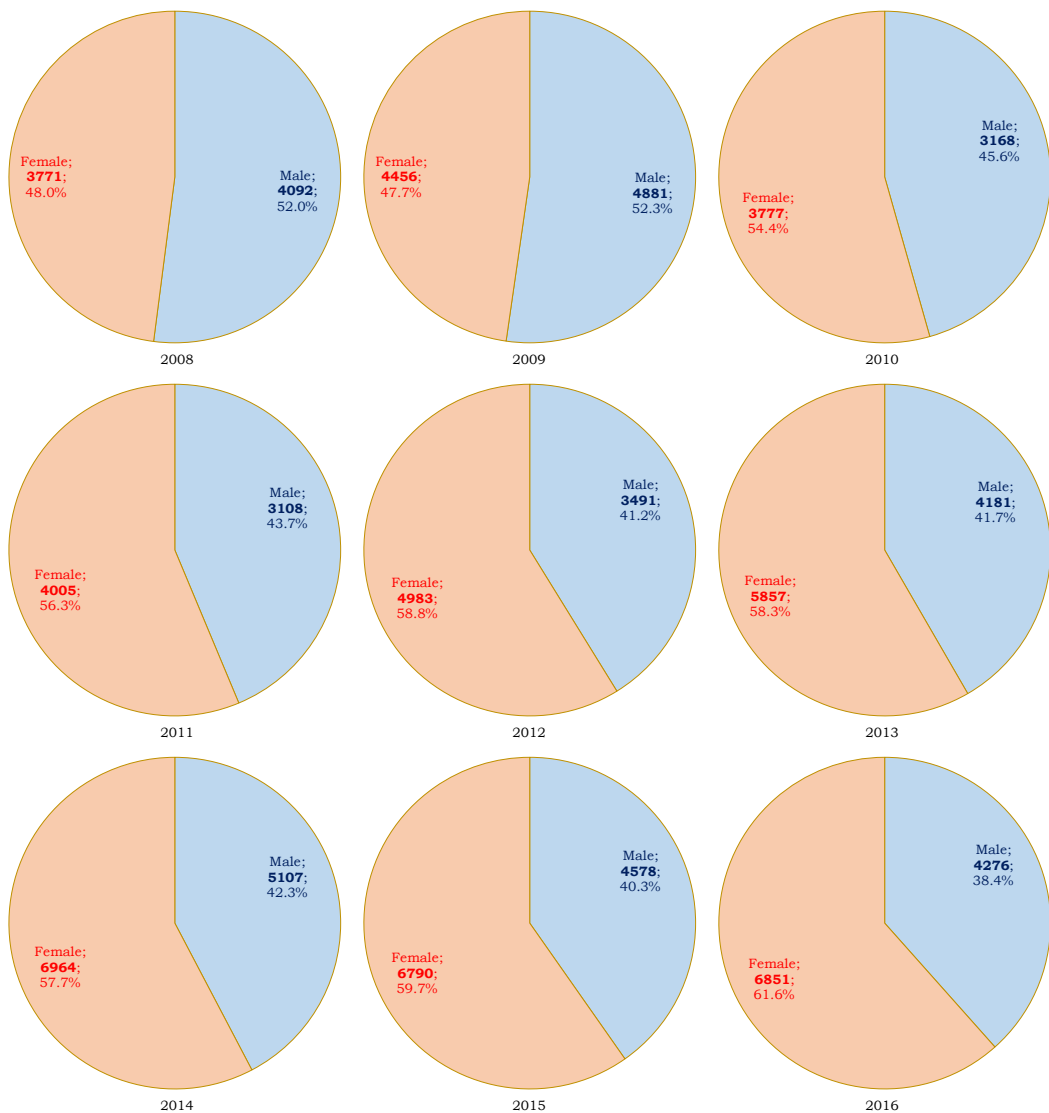
**Emigrants by sex**

Of the total 84,336 people who emigrated definitively or temporarily to Italy, men represent 43.7%, respectively 36,882 emigrants. From the above data resulting in an annual average of 4,098 emigrants (with values that varied from year to year from 3,108 emigrants to 5,107 emigrants), respectively gross annual growth of 23 emigrants and an average annual increase of 2.4% (with percentages that varied from year to year from -35.1% to 22.1% and gross values from -1,713 to 926). At the same time, of the total 84,336 people who emigrated definitively or temporarily to Italy, men represent 56.3%, respectively 47,454 emigrants. From the above data resulting in an annual average of 5,237 emigrants (with values that varied from year to year from 3,771 emigrants to 6,964 emigrants), respectively gross annual growth of 385 emigrants and an average annual increase of 8.5% (with percentages that varied from year to year from -15.2% to 24.4% and gross values from -679 to 1,107) (Figure 2).



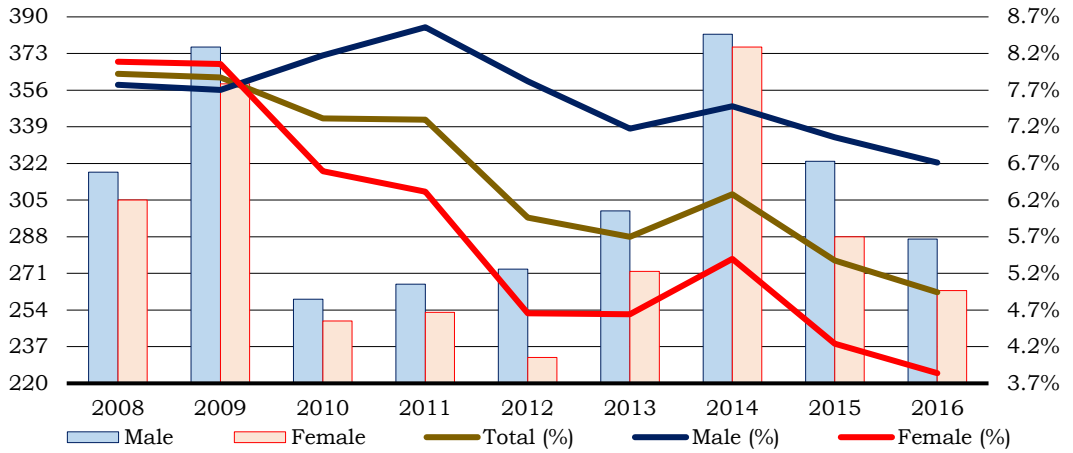
**Figure 2.** Emigrants by sex (2008-2016)  
 (Data source: <http://ec.europa.eu/eurostat>)

Of the total nine years covered by this study (2008-2016), in only two of them, the emigrant masculine population was numeric superior of the feminine emigrant population, respectively in the first period covered by this study (2008-2009). Over the next seven years covered by this study, the female emigrant population was superior of the male emigrant population. In fact, share of female population increases throughout the period covered by this study; if at the beginning of the study period, the female emigrant population was less by about five percentage points than the male emigrant population, at the end of the study period, the feminine emigrant population was more than 20 percentage points than the male emigrant population. On average, over the whole period covered by this study, the share of female emigrant population was higher than that of the male emigrant population by 11.7 percentage points. (Figure 3).

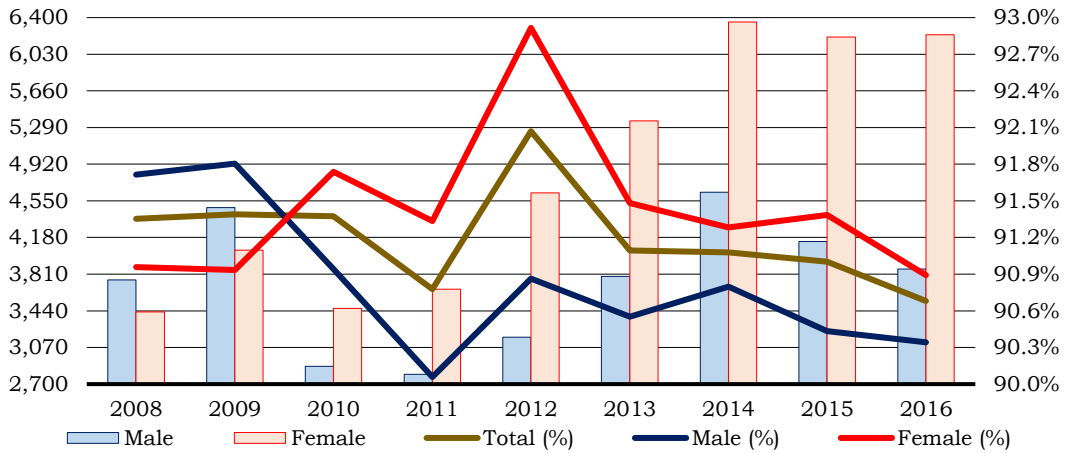


**Figure 3.** Emigrants by year and sex (2008-2016)

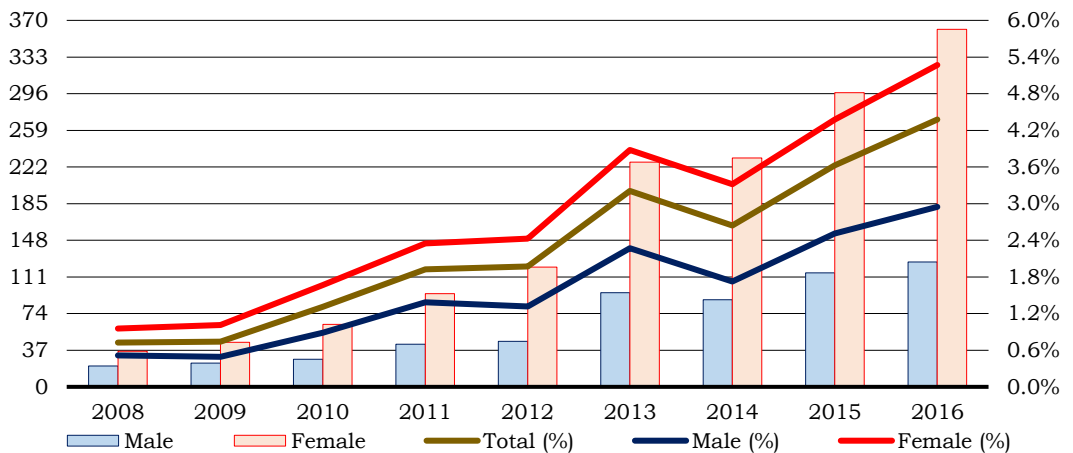
(Data source: <http://ec.europa.eu/eurostat>)



**Figure 4.** Emigrants of less than 15 years (2008-2016)  
(Data source: <http://ec.europa.eu/eurostat>)



**Figure 5.** Emigrants from 15 to 64 years (2008-2016)  
(Data source: <http://ec.europa.eu/eurostat>)



**Figure 6.** Emigrants of 65 years or over (2008-2016)  
(Data source: <http://ec.europa.eu/eurostat>)

### **Emigrants by age**

Of the total number of 84,336 permanent or temporary emigrants from Romania to Italy during 2008-2016, 5,381 emigrants, representing 6.4% of the total number of emigrants from Romania to Italy, are under 15 years of age, 76,894 emigrants, representing 91.2% of the total number of emigrants from Romania to Italy, are from 15 to 64 years, and 2,061 emigrants, representing 2.4% of the total number of emigrants from Romania to Italy, are 65 years or over. Of the total number of 36,882 permanent or temporary male emigrants from Romania to Italy during 2008-2016, 2,784 male emigrants, representing 7.5% of the total number of male emigrants from Romania to Italy, are under 15 years of age, 33,512 male emigrants, representing 90.9% of the total number of male emigrants from Romania to Italy, are from 15 to 64 years, and 586 male emigrants, representing 1.6% of the total number of male emigrants from Romania to Italy, are 65 years or over. Of the total number of 47,454 permanent or temporary female emigrants from Romania to Italy during 2008-2016, 2,597 female emigrants, representing 5.5% of the total number of female emigrants from Romania to Italy, are under 15 years of age, 43,382 female emigrants, representing 91.4% of the total number of female emigrants from Romania to Italy, are from 15 to 64 years, and 1,475 female emigrants, representing 3.1% of the total number of female emigrants from Romania to Italy, are 65 years or over (Figure 4, 5, 6).

During the survey period (2008-2016), the total emigrant population less than 15 years, decreased on average from year to year by 9 people (with a minimum of -277 emigrants less than 15 years and a maximum of 186 emigrants less than 15 years). Ponderal, however, for the entire period covered by this study (2008-2016) there was an increase of 0.4% for emigrants less than 15 years (with a minimum of -30.9% for emigrants less than 15 years and a maximum of 32.5% for emigrants less than 15 years). During the survey period (2008-2016), the total emigrant population from 15 to 64 years, has increased on average from year to year by 363 people (with a minimum of -2,187 emigrants from 15 to 64 years and a maximum of 1,850 emigrants from 15 to 64 years). Ponderal, for the entire period covered by this study (2008-2016) there was an increase of 5.6% for emigrants from 15 to 64 years (with a minimum of -25.6% for emigrants from 15 to 64 years and a maximum of 20.8% for emigrants from 15 to 64 years). During the survey period (2008-2016), the total emigrant population of 65 years or over, has increased on average from year to year by 54 people (with a minimum of -3 emigrants of 65 years or over and a maximum of 155 emigrants of 65 years or over). Ponderal, for the entire period covered by this study (2008-2016) there was an increase of 33.1% for emigrants of 65 years or over (with a minimum of -0.9% for emigrants of 65 years or over and a maximum of 92.8% for emigrants of 65 years or over) (Figure 4, 5, 6).

During the survey period (2008-2016), the male emigrant population less than 15 years, decreased on average from year to year by 4 male people (with a minimum of -177 male emigrants less than 15 years and a maximum of 82 male emigrants less than 15 years). Ponderal, however, for the entire period covered by this study (2008-2016) there was an increase of 0.4% for the male emigrants less than 15 years (with a minimum of -31.1% for the male emigrants less than 15 years and a maximum of 27.3% for the male emigrants less than 15 years). During the survey period (2008-2016), the male emigrant population from 15 to 64 years, has increased on average from year to year by 14 male people (with a minimum of -1,600 male emigrants from 15 to 64 years and a maximum of 851 male emigrants



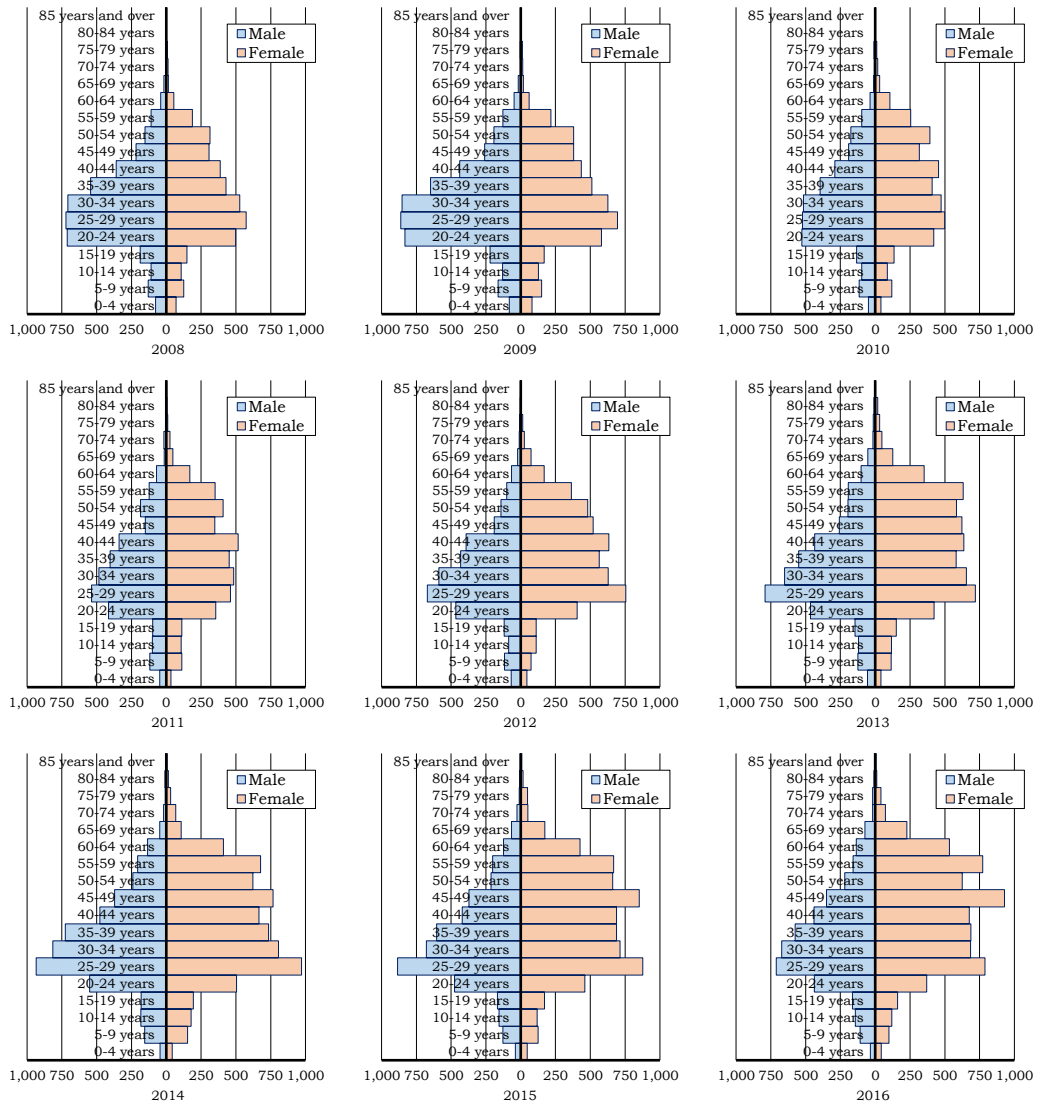
from 15 to 64 years). Ponderal, for the entire period covered by this study (2008-2016) there was an increase of 2.3% for male emigrants from 15 to 64 years (with a minimum of -25.7% for the male emigrants from 15 to 64 years and a maximum of 22.5% for the male emigrants from 15 to 64 years). During the survey period (2008-2016), the male emigrant population of 65 years or over, has increased on average from year to year by 13 male people (with a minimum of -7 male emigrants of 65 years or over and a maximum of 49 male emigrants of 65 years or over). Ponderal, for the entire period covered by this study (2008-2016) there was an increase of 28.9% for male emigrants of 65 years or over (with a minimum of -7.4% for the male emigrants of 65 years or over and a maximum of 106.5% for the male emigrants of 65 years or over) (Figure 4, 5, 6).

During the survey period (2008-2016), the female emigrant population less than 15 years, decreased on average from year to year by 5 female people (with a minimum of -110 female emigrants less than 15 years and a maximum of 106 female emigrants less than 15 years). Ponderal, however, for the entire period covered by this study (2008-2016) there was an increase of 0.5% for the female emigrants less than 15 years (with a minimum of -30.6% for the female emigrants less than 15 years and a maximum of 38.2% for the female emigrants less than 15 years). During the survey period (2008-2016), the female emigrant population from 15 to 64 years, has increased on average from year to year by 350 female people (with a minimum of -587 female emigrants from 15 to 64 years and a maximum of 999 female emigrants from 15 to 64 years). Ponderal, for the entire period covered by this study (2008-2016) there was an increase of 8.5% for female emigrants from 15 to 64 years (with a minimum of -14.5% for the female emigrants from 15 to 64 years and a maximum of 26.6% for the female emigrants from 15 to 64 years). During the survey period (2008-2016), the female emigrant population of 65 years or over, has increased on average from year to year by 41 female people (with a minimum of 4 female emigrants of 65 years or over and a maximum of 106 female emigrants of 65 years or over). Ponderal, for the entire period covered by this study (2008-2016) there was an increase of 35.3% for female emigrants of 65 years or over (with a minimum of 1.8% for the female emigrants of 65 years or over and a maximum of 87.6% for the female emigrants of 65 years or over) (Figure 4, 5, 6).

### **Emigrants by age group and sex**

One of the suggestive graphical representations for the study of the population is the chart of population by age group and sex. According to the representations generated by data obtained from Eurostat, for all the years covered by this study (2008-2016), stands out the majority share of the majority of the adult population (from 15 to 64 years), both for the male emigrant population and for the female emigrant population. even in the adult population (from 15 to 64 years), are highlighted by a majority share age groups from 20 to 24 years, from 25 to 29 years, from 30 to 34 years, and from 35 to 39 years, which represents 52.0% of the total emigrant population and 57.0% of the total total emigrant population from 15 to 64 years. Also from the graphical representations of the population by age and gender the femonens observed in the study of the emigrant population by sex, respectively a smaller initial share of the female emigrant population. Starting with 2011 can be seen an increase in the proportion of the female emigrant population from 40 to 59 years, and then starting with 2014 can be seen an increase in the proportion of the female

emigrant population from 40 to 65 years, fact that imbalances roughly equal situations observed both within the young population (less than 15 years), and the aging population (65 years or over) (Figure 7).



**Figure 7.** Emigrants by year and sex (2008-2016)

(Data source: <http://ec.europa.eu/eurostat>)

**CONCLUSIONS**

Italy is one of the favorite destinations of emigrants from Romania. The causes are multiple, but the most relevant are the small distances between the place of departure and the place of arrival of the emigrants (compared with Spain or the UK, two other favorite destinations of Romanian emigrants), the easy availability of transport and, last but not least, the linguistic compatibility (Romanian language and Italian language have about 30% of the same lexicon). This study has highlighted, among others, the following:

- in migratory flows the female population is the majority;
- the trends of numerical evolution of emigrants are more obvious for the feminine population;
- the share of young migrant population (less than 15 years) is declining;
- the ratio of the young population (less than 15 years) and adult population (from 15 to 64 years) decreased from 1:12 to 1:18 (total emigrant population), from 1:12 to 1:13 (total male emigrant population) and from 1:11 to 1:24 (total female emigrant population); this indicates either the fact that the emigrant population of major age (from 19 to 64 years) chose not to make children, focusing their interest in work, or children were left in Romania in the care of other family members (grandparents, brothers or sisters, cousins, etc.) or in the care of other people, situations that generate, sooner or later, complications of a social nature;
- the ratio of the adult population (from 15 to 64 years) and the aging population (65 years or over) increased from 1:126 to 1:21 (total emigrant population), from 1:179 to 1:31 (total male emigrant population) and from 1:95 to 1:17 (total female emigrant population); this indicates either the fact that the third-age migrant population increased in number and share in the period covered by this study (2008-2016);
- 68.5% of the female emigrant population from Romania in Italy, respectively 32,511 women, are of childbearing age (from 15 to 49 years), which is causing demographic problems in Romania;

As we have already mentioned, we intend, in the near future, to further elaborate such studies and for other destinations of the Romanian migrant population, such as: Spain, Hungary, Austria, Belgium, Denmark, Ireland or the Netherlands, for which Eurostat databases are quite generous. Thus, by analyzing the structure of the migration phenomenon, we will be given a complex understanding of the migration phenomenon from Romania.

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