

FOREIGNERS' FAMILY COMPOSITION IN LOMBARDY: TRENDS AND FUTURE SCENARIOS

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Abstract. The phenomenon of population ageing, while positive in terms of increased life expectancy, raises concerns across various aspects of political, social, and economic life in modern societies, including Italy. It calls for policy decisions that promote active and healthy ageing on one hand, and welfare measures that support couples' fertility on the other.

In demography, one factor that appears to positively influence fertility levels in host countries, at least in the short term, is immigration. This study analyses the migratory phenomenon in Lombardy through the lens of family composition among households with at least one foreign member, with the aim of assessing whether the immigrant population tends to form stable and cohesive family units. The underlying assumption is that immigration contributes to increasing fertility levels in the host country primarily through the formation of stable family structures.

By integrating data from two sources, i.e., ISTAT data on resident and forecasted population and ORIM survey on foreign people living in Lombardy, the paper investigates historical patterns and proposes a possible future scenario through the use of the *propensity method*. This technique entails estimating the number of families by applying the proportions of individuals, usually broken down by age and gender, who live in various forms of living arrangements.

The results suggest that the migration phenomenon in Lombardy has been evolving, with the family structures of foreigners increasingly aligning with those typical of the Italian population.

Nonetheless, further analysis is required to draw more reliable conclusions about future developments.

1. Introduction

It is well known that, nowadays, one of the most important challenge for several countries in the world, such as Italy, is population ageing, i.e., the increase both in the number and in the percentage of people aged 60 and over compared to the total population. Such phenomenon, that results from two concurring factors – high life expectancy and low fertility – affects several domains of modern societies, such as age-related public health expenditures, health care provision, labour force size and composition, intergenerational exchanges in both economic and social terms, and

pension systems sustainability. This raises questions about policy interventions directed to encourage fertility and promote healthy and active ageing.

Demographic research provides a further reply to the issue by considering migration as a potential contrasting force to the ageing of population. However, studies show that migration does not represent the only solution to ageing (Paterno, 2011), neither it plays a role in the long term (Billari and Dalla Zuanna, 2011; Gesano and Strozza, 2011), because its effects tend to reduce over the years (De Santis, 2011). In the short term, instead, migration is widely supposed to positively impact on total fertility rates, population growth and labour market (Harper, 2016).

Based on the assumption that the strength of the role played by immigration in increasing fertility rate of the host country in the medium term operates through family formation, this work aims to investigate the stable component of immigrated population by analysing its past trend and by illustrating potential future scenarios.

In particular, the analysis focuses on the Italian region Lombardy, where the yearly survey conducted by ORIM (Osservatorio Regionale per l'Integrazione e la Multietnicità) allow researchers to explore foreign population living in the area and its evolution over time in terms of socio-economic characteristics and, for the purpose of this study, in terms of family composition.

2. Theoretical framework on family formation in migration contexts

To examine the impact of immigration on fertility levels in the host country through the lens of foreign family settlement, it is useful to revisit key theoretical approaches on the link between migration and family formation. The literature outlines four main hypotheses (Kulu, 2005; Kulu & González-Ferrer, 2014): *socialisation*, whereby migrants retain fertility norms from their country of origin; *adaptation*, involving gradual adoption of host-country patterns; *selection*, which suggests migrants already share similar fertility preferences with the host population; and *disruption*, referring to a temporary fertility decline due to the stress of moving.

Beyond the migration-fertility nexus, it is crucial to consider other factors influencing not only attitudes toward fertility, in terms of both timing and total number of children, but also those related to couple formation. For example, Impicciatore *et al.* (2020) found that in Italy there is no universal fertility pattern among migrant women, and that different theoretical frameworks can be applied to their fertility behaviour depending on their country of origin.

The literature also highlights the *interrelation of events* hypothesis (Impicciatore *et al.*, 2020; Ortensi, 2015), which posits that high post-migration fertility may arise from the concurrence of multiple life events (Mulder and Wagner, 1993). In this context, the close link between migration, marriage, and childbirth plays a key role

(Milewski, 2007). The important temporal link between migration and union formation was also highlighted by Gabrielli *et al.* (2019), who additionally emphasised gender differences: around the migration event, migrant men show a low likelihood of forming couples, while migrant women are most likely to enter a union. Another factor to be taken into account is migration pattern: women migrating for family reasons tend to have their first child sooner after arrival and exhibit higher post-migration fertility compared to first-time and independent migrants (Ortensi, 2015). Similarly, Mussino and Strozza (2012) showed that the timing of motherhood varies by migration type: women migrating for family reasons tend to have children soon after arrival – supporting the interrelated events hypothesis – while those migrating for work generally delay childbearing as they adapt to the host country.

3. The national and regional contest

According to the 2021 census¹, in Italy, there are more than 2 million and a half families with at least a foreign member, that is the 10% of all families living in the country, with a 38,3% increase compared with the 2011 census. Over this 10 years period, a change in both the size and the structure of families with at least a foreign member in Italy occurred: there was a significant rise in the number of single-member families (73,6%) and a slight increase in the number of those with 4 or more members (25,7%), so that the incidence of single-member families increased, while the incidence of both larger families and those with children reduced. This means that, nowadays, more foreigners live alone than they did in the past.

However, differences by geographic area can be detected: most of the families with at least a foreign member live in the North (63,2%), where very close percentages of single-member families (about 35%) and of those with 4 or more members (about 30%); in the Centre and in the Mezzogiorno area, instead, the highest percentage of families with a foreign member numbers one component only (between 41% and 45%), with larger families being represented for the 25% in the former and slightly more than the 20% in the latter. As for the family structure, the highest share of the type “couple and children” is observed in the North-west and in the North-east, (30% and 31% respectively), while the type “one parent and children” prevails in the North-west and in the South (14% in both areas).

Overall, as stated by ISTAT report, the changes in the dimension and in the structure of families with at least a foreign person reflects the steps of the migration process in the country: on one hand, the increase in the number of families with 4

¹ Information about families with foreign members in Italy as resulted from 2011 and 2021 population censuses and reported in this work is available online on ISTAT site at: <https://www.istat.it/comunicato-stampa/le-famiglie-con-stranieri-nei-censimenti-della-popolazione-anno-2021/>

or more people suggests migrants have been settled in the area by creating joined family groups; on the other hand, the raise in the number of families with one person only leads us considering the migration plan as a still in process project.

4. The case study: foreign families in Lombardy

As for the region Lombardy, data presented in the PoliS-Lombardia report (Sara Della Bella, 2022) based on the 2011 census and the 2018-2019 new permanent census, indicate that in 2019, the proportion of households with at least one foreign member consisting of a single person (31.3%) was nearly equal to that of larger households with four or more members (32.4%); also, in all provinces except for Milan, both in 2011 and in 2019, the share of families with at least 4 people exceeded that of single-member households.

However, this study aims to examine the internal composition of households with at least one foreign member in Lombardy. This focus is motivated by the observation that reunited or joined families are more likely to establish long-term residence in the host country or region, and they are more likely than other household types to contribute to the fertility rate of the native population.

To this end, the paper draws on data from the annual survey conducted by the Regional Observatory for integration and Multiethnicity (ORIM), which was established in 2000 by the Region Lombardy with the primary objective of fostering and disseminating comprehensive knowledge regarding the dynamics of migration in Lombardy and the challenges associated with the social inclusion of migrants. Since 2001, the Observatory has systematically collected detailed information on the foreign population living in Lombardy, by applying an inclusive approach that encompasses all categories of migrants, i.e., residents, regular non-residents, and undocumented individuals, regardless of legal status or residency and by conducting at regular intervals, thereby ensuring the continuity and comparability of the data over time (Maiorino and Terzera, 2023).

The survey covers a broad array of dimensions, including socio-demographic characteristics, educational background, social integration, religious affiliation, employment conditions, income levels, health status, and household composition.

In particular, the datasets provide information about people living with respondents thereby allowing researchers to identify and classify family types, such as joint and broken families.

Through this approach, the paper aims to trace the evolution of the composition of foreign families in Lombardy by analysing past trends and projecting potential future developments.

5. Data and method

5.1. Data selection

This study draws on data from two different data sources: ORIM surveys and ISTAT databases.

As for ORIM survey, waves conducted between 2001 and 2019 were employed. Individuals holding only Italian citizenship were excluded from the analysis.

Nine age groups were created using five-year intervals, with broader ranges for the first and last categories² (<20, 20-24, 25-29, ..., 50-54, 55+).

The following family categories were identified based on respondents' cohabitation status, with all categories disaggregated by sex:

- Lone person.
- Couple without children.
- Lone parent.
- Couple with children.
- Never-married person living with at least one parent.
- Other person³.

As for ISTAT data, instead, different databases were employed in order to extract:

- Total resident population (including native and foreign people) by sex and age for the period 2002-2024;
- Foreign resident population by sex and age for the same period;
- Population projections 2023-base for the total population by sex and age, selecting the median scenario.

It is important to note that ISTAT projections do not distinguish between native and foreign residents; therefore, the projected figures encompass the entire resident population.

5.2. The method

As in previous studies (Barbiano di Belgiojoso, 2010; Blangiardo *et al.*, 2012), the Propensity method was adopted in this paper to produce family projections. Such

² It is worth noting that, up to the 2018 survey, respondents were aged 14 and over, whereas in subsequent survey waves, only individuals aged 18 and over were included. However, the minimum age varies by survey waves. I created the age category “<20”, which includes individuals aged 14–19 in the ORIM waves and those aged 0–19 in the ISTAT data; all were grouped into the first age category. Regarding the last age group, there is no upper age limit defined in the survey; therefore, I have considered individuals aged 55 and over as comprising the final category in both data sources.

³ According to ISTAT, the category 'Other person' refers to multi-person households, consisting of cohabiting individuals who do not form a single family unit, as well as households composed of two or more distinct family units.

method was used by Statistics New Zealand (2004) to produce New Zealand Family and Household Projections for the period 2001-2021.

In accordance with the New Zealand national family and household projections (2001 base to 2021) (Statistics New Zealand , 2004), the methodology forecasts the future numbers of households and families by applying age- and sex-specific *living arrangement type rates* (LATRs) to demographic projections; essentially, these propensities represent the likelihood of individuals occupying different household roles. The sum of LATRs across all family types, while holding sex and age class constant, is equal to one (Statistics New Zealand , 2004; Barbiano di Belgiojoso, 2010). By multiplying the projected population by these propensity rates, the distribution of individuals across various living arrangement types is obtained, which is then aggregated to produce estimates of future family and household counts (Statistics New Zealand , 2004).

This analysis employed the propensity method, tailored to the structure and limitations of the available data, and implemented through the following procedure:

- I. LATRs were calculated using ORIM waves (from 2001 to 2019), broken down by age class and sex.
- II. since the population projections provided by ISTAT do not distinguish between the native and foreign populations, I selected the resident individuals, both Italian and foreign, stratifying by sex and by the nine age groups previously defined, up to the year 2024.
- III. I then calculated the proportion of the foreign population relative to the total population and computed the average value over the last five years (2020–2024). This average was then applied recursively to the subsequent years, such that each year from 2025 to 2030 corresponded to the average proportion observed over the preceding five years.
- IV. I applied this value to the total population projected by ISTAT – 2023-based – in order to estimate the foreign population up to 2030.
- V. I then applied to this estimated population the LATRs, calculated as the average over the last five years (2015–2019) of the waves from the ORIM survey used, in order to obtain the population distribution by the different living arrangement types previously described.
- VI. Finally, based on this distribution, the corresponding numbers of families were subsequently derived, according to the following rationale:

It should be noted that applying the same rates to the projected foreign population each year – i.e., assuming that LATRs remain constant over the projection period – implies that any variations in the distribution of individuals by type of living arrangement, as well as in the size and composition of families, are attributed solely to changes in the size and structure of the population (Statistics New Zealand , 2004).

- for individuals living alone and for single-parent families, each person was matched to one family; the total number of such households was obtained by summing all males by age group living alone and all females by age group living alone in the former case, and by summing all males and all females by age group living with one or more children in the latter case;
- for couples living with or without children, the total number of families, calculated as discussed above, was divided by two;
- in the case of individuals classified under the “Other” category, the resulting total was divided by the average household size for this group, calculated as the mean of the average household sizes recorded in the ORIM dataset over the 2015–2019 period.

6. Main results

Figure 1 shows the evolution of foreign family types in Lombardy from 2008 to 2019. I did not consider the earlier years because information on parents was not available, making it impossible to calculate the category “Never married person living with at least one parent.” The same limitation applies to the years 2015, 2017, and 2018, which also lack this information. In these cases, I calculated the average value for this category over the five preceding years and subtracted it from the “Other” category. As shown in the data, the “Other” category consistently exceeds all other categories for males across the years. The observed reductions in 2015, 2017, and 2018 may be attributed to data adjustments made to estimate the category “Never married person living with at least one parent.”

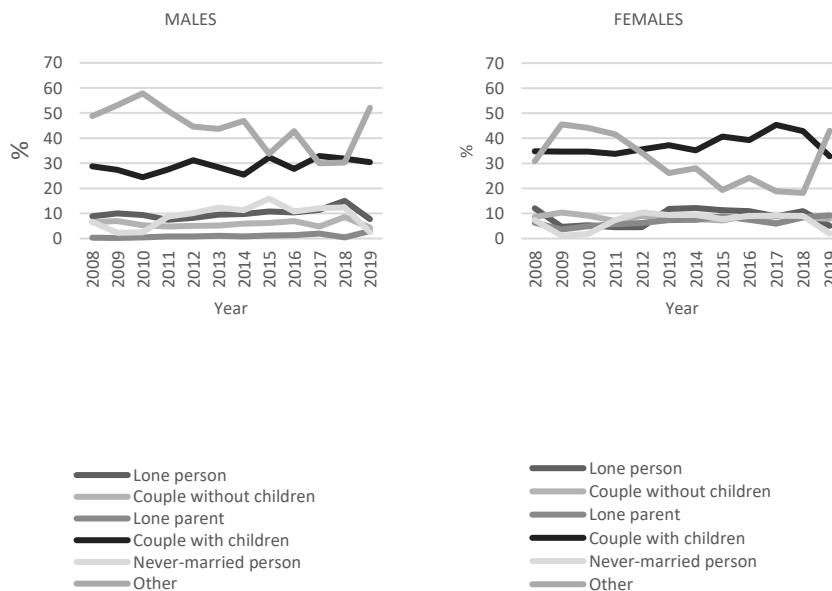
For females, starting from 2012, the “Couple with children” category surpasses the “Other” category and becomes the predominant family type from that point onward. For both sexes, there is an increase in the share of individuals living in multi-person households in 2019. However, this may be attributable to the sampling design of the most recent survey wave, and only subsequent waves will allow us to determine whether this represents an actual upward trend beginning in that year.

A slight increase is observed in the “Never married person living with at least one parent” category for both males and females after 2010.

The LATRs, presented as an average over the 2015–2019 period (Figure 2), reveal more pronounced differences by gender. As for females, consistent with findings from other studies conducted in the Lombardy region (Barbiano di Belgiojoso, 2010), it appears that immigrant women follow the typical family life course pattern. This involves a sequence of stages in which they progressively occupy different roles: daughter living with at least one parent – particularly up to the 20–24 age group – followed by wife within a family unit (typically with

children), peaking around ages 35–39, and finally, a higher likelihood of living alone beginning around ages 50–54.

Figure 1 – Foreigners' family types in Lombardy, 2008-2019.



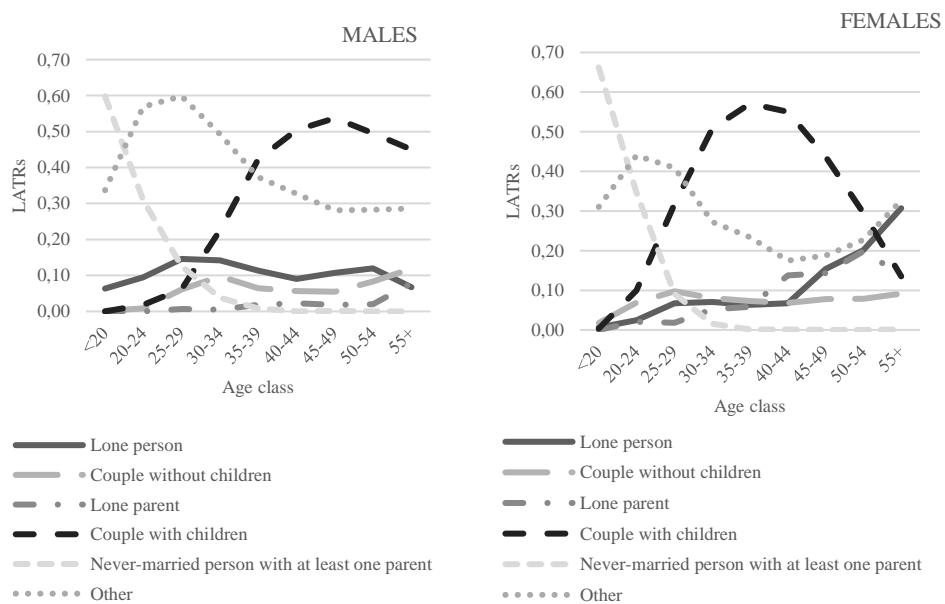
Author's elaboration on ORIM data.

For males, this pattern occurs later. In fact, the peak in the proportion of men living in a couple is observed at a later stage compared to women, specifically in the 45-49 age group. Moreover, the tendency for men to live alone is slightly higher than for women up to ages 40-44. The share of men living in multi-person family arrangements (classified under the "Other" category) is consistently higher than that of women up to the penultimate age group, reaching as high as 60% in the 25-29 age group. This may suggest that these arrangements likely represent early forms of cohabitation at the beginning of the migration process. The subsequent transition to living in a nuclear family (as part of a couple with children) may be partly the result of family reunification processes.

Table 1 presents the different types of foreign families in Lombardy (expressed as percentages of the total number of foreign families in each year) for 2015, 2020, and 2030, obtained by applying the LATRs to the resident foreign population. Specifically, LATRs from 2015 were applied to the actual foreign resident population (based on data provided by ISTAT) for the same year; the LATRs calculated as the average over the 2015–2019 period were applied to the actual

resident foreign population in 2020; and the same average was applied to the projected foreign population in 2030 (obtained by recursively using the average proportion of foreigners in respect to the total population, as detailed above).

Figure 2 – Living arrangement type rates in Lombardy, 2015-2019 average.



Author's elaboration on ORIM data.

Table 1 – Foreigner families in Lombardy in 2015 and 2019 and potential projections for 2030 with constant LATRs (percentage values).

Family type	2015	2020	2030
Lone person	0.28	0.25	0.26
Couple without children	0.07	0.07	0.08
Lone parent	0.12	0.12	0.12
Couple with children	0.34	0.35	0.34
Other	0.18	0.21	0.21

Author's elaboration on ISTAT and ORIM data.

The data show relatively stable percentages over time, but consistently show that the most represented family type is the couple with children.

7. Discussion and conclusion

Lombardy is a key region in the EU due to its high concentration of foreign residents and diverse migrant settlement patterns, making it a representative case for broader migration trends in Italy (Gabrielli et al., 2019). While notable differences in migrant settlement emerge across the country, Mussino and Strozza (2012) found that women arriving in the South, the Centre and the Islands face a lower risk of first birth than those arriving in the North, with no major differences between the North-West and North-East. Nevertheless, further investigation comparing Northern Italy as a whole with the rest of Italy could offer deeper insights into the links between migration, couple formation, and fertility. Existing research, however, remains focused on Lombardy, mainly due to the availability of long-term data from ORIM.

Data on past trends suggest that the migration phenomenon in Lombardy has been evolving, with the family structures of foreigners increasingly aligning with those typical of the Italian population. This is evident when observing the evolution of foreign family types in Lombardy from 2008 to 2019, where data show a downward trend in the “Other” category, particularly among women. For men, “Couple with children” is the second most common family type after “Other,” while for women, it becomes the most represented category starting in 2012. The analysis of LATRs, calculated as the average over the 2015–2019 period, further indicates that the family formation patterns among foreigners in Lombardy are broadly similar to those observed among Italians. Excluding the presence of multi-family households, foreigners tend to follow the same age-related stages of household formation, whether with or without children.

The application of LATRs to the actual foreign resident populations in 2015 and 2020, as well as to the projected foreign population in 2030, confirms that the most prevalent family type in Lombardy is “Couple with children,” and that no substantial changes are expected in the near future.

Overall, the data suggest that foreign families tend to be more stable compared to the past and are increasingly forming more traditional family structures.

However, no reliable conclusions can be drawn regarding future scenarios for two key reasons. First, the lack of official projections for the foreign population presents a methodological challenge for forecasting. The use of the average proportion of foreigners among the total resident population in Italy over the past five years was deemed a reasonable short-term assumption, but it is clearly inadequate for medium- to long-term projections. Second, the decision to apply constant LATRs – based on

the same rationale – does not account for potential changes in the propensities themselves (Statistics New Zealand, 2004; Barbiano di Belgiojoso, 2010). Future developments of this work will focus on implementing a more sophisticated method for forecasting the foreign population and on estimating variable LATRs.

To promote the long-term settlement and integration of immigrants in the region, several policy considerations are necessary. First, measures should support family reunification and the creation of new family units by removing administrative barriers and ensuring access to adequate housing and employment, key conditions for stability and social cohesion. Second, policies should prioritise families over individuals, addressing both children's integration challenges and parents' difficulties in balancing work and family life. This is especially relevant, as migrant families often lack support from extended kin, such as grandparents. Moreover, while family reunification is generally easier for children and spouses, it remains more complex for grandparents or unmarried partners. Finally, attention should also be paid to the marriage market, particularly where it intersects with access to citizenship, for example, in unions between naturalized citizens and non-citizens.

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