

## **The determinants of the fertility desires of the children of immigrants living in Italy**

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### *Abstract*

The number of children desired by first- and second-generation migrants is influenced by several factors, often closely related to their place of origin and migratory history. Using the ITAGEN2 survey – the first Italian dataset on immigrants' children – we study the determinants of the fertility intentions of 11- to 14-year-old children of immigrants who live in Italy. With the use of multilevel models, we confirm an assimilatory perspective and show that the reproductive behaviour in the place of arrival strongly influences the fertility intentions of the children, whereas the reproductive attitudes of their ethnic group (measured with the fertility intentions of women living in the place of origin), while significant, are less relevant. Other individual characteristics, such as gender, sibling numbers and the timing of arrival in the host country, also play a relevant role.

## Introduction

In the last quarter of the 20<sup>th</sup> century, Italy suddenly changed from a country of emigration to a country of immigration. According to the National Statistics Institute, at the beginning of 2015 nearly five million foreigners were residing in the country (compared to less than half a million in 1991), slightly more than 8% of the total population and mostly located in the richer central and northern regions.<sup>1</sup> The vast majority of these people are employed in manual work and domestic service. 20% of them are minors, and 15% of the 503,000 new-born children in Italy in 2014 had two foreign parents.<sup>2</sup>

The magnitude of these numbers and the speed of their growth suggests an enquiry into the demographic contribution that foreigners have made and will make to Italy, a country which is rapidly “changing skin”. Billari and Dalla-Zuanna (2011) show that the great immigration flows of 1990-2010 can be considered replacement migration, since the arrival of young foreigners replaced the “missing births” of Italians over the 70s and the 80s. Even if the increase in foreigners has slowed with the economic crisis (according to official data, the net migration of foreigners was +400,000 in 2004 and 2009 but “only” +200,000 in 2014), it is likely that in the coming decades it will continue, as without immigration the number of people of working age (20-69) will decrease by 300,000 people a year over the next twenty years (UN World Population Prospects: The 2014 Revision, zero-migration scenario).<sup>3</sup>

However, in the medium-long term, the contribution of foreigners to solving the aging of the Italian population is less strong than might be imagined, as the fertility of foreign people speedily converges to that of their Italian peers (see, e.g., Ferrara *et al.* 2009; Mussino and Strozza 2012): foreign mothers aged 40-45 living in Italy in 2007 only had 15% more children than their Italian peer mothers (2.27 vs. 1.98, Castiglioni and Dalla-Zuanna 2011).<sup>4</sup> This convergence is not a surprise. Empirical analyses show that, overall, the reproductive behaviour of first-generation migrants already tends to converge towards that of natives, and the fertility of their children – especially if they were born in the host country or arrived there at an early age (the so-called second generation) – is often not distinguishable from that of their native peers.<sup>5</sup> As a result, scholars often treat the reproductive behaviour of migrants as a process of assimilation, and study it in relation to the behaviour of natives on the one hand and to their peers at home on the other hand.<sup>6</sup> In this perspective, when

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<sup>1</sup> At 1<sup>st</sup> January 2015, the top five countries represented among the foreigners living in Italy are Romania (23%), Albania (10%), Morocco (9%), China (5%) and Ukraine (5%). Overall, many ethnic groups coexist in Italy: as many as twenty nations are represented by more than 50,000 foreigners currently residing there: six former communist European countries, six Asian countries, six African countries, and two Latin American countries (demo.istat.it 1.7.2015).

<sup>2</sup> According to Italian law, children with two foreign parents may acquire Italian citizenship – on demand – only when they reach age 18, whereas new-born children with one foreign parent receive Italian citizenship immediately.

<sup>3</sup> Similar results have been shown for Spain by del Rey Poveda and Ortega (2010). For an analysis of European countries, see Wilson *et al.* (2013).

<sup>4</sup> A very similar convergence toward low fertility already happened in the period from 1950 to 1980, when millions of people emigrated from southern Italy (TFR of three-four children per woman) to the northwest (TFR less than two): Dalla-Zuanna and Impicciatore (2006) show that women from the south who migrated to the North give birth to a number of children much lower than that of their peers remaining at home, only a little higher than the number for their peers born in the NW regions.

<sup>5</sup> Goldscheider *et al.* 2008; Blau *et al.* 2013; De Valk 2008; Lee and Edmonston 2008; Huschek *et al.* 2010.

<sup>6</sup> Over recent decades, adaptation has been the prevalent mechanism in international migration studies of immigrant fertility (Scott and Stanfors 2010). Some studies have focused on adaptation in multicultural countries, such as the US and Australia, where consistent migration flows contribute to defining the overall fertility level: the degree and the speed of assimilation depend on the cultural distance between the origin and destination countries, ethnic concentration, and the kind of social interaction in the host country (Abbasi-Shavazi and McDonald 2000; 2002). Adaptation has also been observed in recent studies on Europe and North America, and is extended to other aspects of reproductive behaviour: Goldscheider *et al.* (2008) find that the distinctive family patterns of some recent immigrants in Sweden (e.g. early marriage, large family size, extended family obligations, and a dominance of mother and childcare roles for women) are clearly challenged when there are contacts with the economic and political realities of Swedish society. The transition to adulthood of many adult children of immigrants to Sweden is rapidly becoming similar to that of children born to Swedish-origin parents. The family patterns and plans of young men and women of Turkish and Polish origin in Sweden clearly differ from their parents' but less from those of their peers of Swedish origin. The assimilation of Swedish attitudes and behaviour is slower for children with Turkish parents, but faster for the highly-educated second generation. When the idea of assimilation is tested using the most appropriate and sophisticated methods, the results are somewhat more controversial. Lee and Edmonston (2008) study the case of Canada and test whether fertility

considering the fertility behaviours of migrants some of the characteristics of the migration process, such as the country of origin, age, migration status and duration of the stay in the country of destination, must be taken in account.

It is, therefore, interesting to examine more deeply these processes of convergence, to try to understand the origin of this mechanism. The focus here is on the desired fertility of immigrants' children (IC), as we are particularly interested in understanding how their "dream" family is linked to families they knew at home and to meeting their Italian peers. The multi-ethnic character of immigration to Italy and the differences between the areas of arrivals (large cities and small communities, industrial areas and regions devoted to agriculture and tourism...) are particularly suitable for this type of study.

The article starts with several research hypotheses developed from the results of previous studies on the reproductive intentions of first- and second-generation migrants. A description of the data and methods used and some preliminary results follow. Using multilevel models and controlling for numerous individual characteristics, we measure the statistical relationship between the reproductive intentions of IC and the fertility *milieu* of the country of origin on the one hand and the reproductive intentions of their Italian peers on the other. The last section is devoted to some concluding remarks.

### *Research hypotheses*

The aim of this article is to investigate the dynamics of the fertility intentions of IC living in Italy, using a large database of 10,000 children of migrants aged 11-14 resident in Italy towards the end of 2006. They show some rapid assimilation processes relating to many aspects of the lives of preadolescents: friendship relations, work and educational expectations, preferred language and attitude to religion (Dalla-Zuanna *et al.* 2009; Gabrielli *et al.* 2012; Minello and Dalla-Zuanna 2013). We start with three research questions (RQ) connected to their time of arrival in Italy, the impact of peers on their expected number of children, and the relevance of ethnic ties in defining their fertility intentions.

RQ1. *Are the fertility intentions of IC living in Italy similar to those of their Italian peers?*

In the literature, the main idea for interpreting the reproductive behaviour of immigrants is adaptation, which predicts a gradual assimilation to the fertility norms and behaviour of the host society.<sup>7</sup> The mechanism of adaptation fits what is happening to the preferred number of children in the Netherlands (De Valk 2008, Table 1). The differences in preferred fertility between provenances halve in the second generation, and only Moroccans – i.e. those coming from a high-fertility country – would like to have more children than the natives. We expect that the fertility intentions of IC living in Italy are not far from those of their Italian peers, and that adaptation depends on the timing of arrival in Italy, as noted in other aspects of pre-teen life.

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intentions vary by immigrant generation. At first sight, the answer appears to be "yes". Descriptive results show that the first generation has modestly higher fertility intentions than average (2.14 versus 2.06) and the gap is larger between the first and third generations (2.14 versus 2.03). However, once nineteen appropriate controls were considered in a regression model, the differences in fertility intentions by immigrant generation were eliminated. The results are consistent with Belanger and Gilbert's (2006) analysis using 2001 census data on the fertility (total fertility rate) of immigrant women and their daughters. They find that once controls for factors such as visible minority status and education are included, generational differences in fertility disappear. Even in the U.S., when controlling for several socio-economic characteristics, the fertility of migrants from Asia and Europe in the last decades of the 20<sup>th</sup> century is only slightly higher than that of natives (Blau *et al.* 2013). The fertility of Latino immigrants is somewhat higher than that of natives – although considerably lower than that of their peers at home. For every country of origin, the second generation have fewer children than their parents, Latino women continue to have a few more children than natives, those of European origin behave very similarly to their peers with native parents, and those of Asian origin have a very low fertility rate (Blau *et al.* 2013).

<sup>7</sup> Assimilation may also be influenced by the selection that is often implicit in the migration process: migrants are selected through socioeconomic characteristics (mainly "anxiety" for upward mobility), which in turn also influence fertility behaviour. Another mechanism is disruption, i.e. a temporary effect which depresses fertility in the first period after the move, because of spousal separation or the settling-in process. At a later time, couples may (or may not) recover their "lost" early fertility (Mussino and Strozza 2012).

Table 1. Preferred number of children. Women living in the Netherlands in 2000 by provenance and generation

Origin	Preferred children	
	Parent	Child (2 <sup>nd</sup> gen.)
Turkey	2.65	2.39
Morocco	3.74	2.90
Suriname	2.82	2.51
Antilles	2.59	2.53
Netherlands	2.57	2.35
Variation coefficient	0.17	0.09

Source: De Valk 2008

*RQ2. How strong is the impact of native peers' intentions on the fertility intentions of the children of immigrants?*

If adaptation works, the first reference group of natives in the host country is often composed of schoolmates. Children who share their educational environment with peers will tend to homologate to the dominant attitude of natives for two reasons. First, peers influence each other through information exchange, modelling and reinforcement of norms and values (Kindermann & Gest 2009; Ryan 2000); values regarding family can be transmitted in the school environment, as happens with values regarding education. Second, children who are in a certain school not only share their educational context with their peers but also their life context and socioeconomic resources, which are determinant in defining fertility intentions (Di Giulio et al. 2011).

In Italy, in fact, families tend to choose the school on the base of spatial proximity. This characteristic could be a determinant of fertility intentions *per se*, and could be expressed through a similarity between the children of immigrants and their native peers. Hence, we expect the number of children desired by first- and second-generation migrants to be correlated with that desired by the native pupils attending the same school. If these expectations are confirmed, we can identify a sign of adaptation of IC to the values of the host society.

*RQ3. Are the fertility intentions of the children of immigrants influenced by the fertility dynamics of the country of origin of their parents?*

If the adaptation mechanism prevails, the fertility of immigrants and their children should be more influenced by that of the host country than that of the origin country. However, we expect that the fertility intentions of the children of immigrants may be associated with the fertility dynamics of the country of origin of their parents for two reasons. First, fertility intentions can be part of the migration history of the ethnic group. In fact, many studies confirm that culture, norms, and values in the country of origin have a continuing effect throughout the life of a migrant in a new fertility setting (Abbasi-Shavazi and McDonald 2000, 2002; Sobotka 2008; Milewski 2007). Values such as the number of children desired, proxying for childcare attitudes and investment in the next generation, strongly characterize an ethnic group and can be transmitted even outside of national borders (cultural hypothesis: Forste and Tienda 1996) and fertility preferences are driven by culture and values, which can be maintained after migration through the existence of subcultures (entrenchment hypothesis: Coleman 1994).

Second, the attitudes of the country of origin can be a sign of the strength of family background over school ties. The fact that the family of origin has an impact on fertility behaviour has been repeatedly demonstrated in the literature (Balbo and Mills 2011, Dommermuth et al. 2011), especially when using the number of siblings as a predictor of fertility intentions. We also use information related to ethnic origins and fertility intentions in the country of origin of the parents, and expect that it has an effect in determining fertility intentions.

*Data and methods*

ITAGEN is a survey of students living in Italy and attending middle school during the 2005-6 school year (Dalla-Zuanna *et al.* 2009; Barban and Dalla-Zuanna 2010; Barban and White 2011; Minello and Barban 2012; Gabrielli *et al.* 2012; Minello and Dalla-Zuanna 2013; Paterno and Gabrielli 2014). It is the first extensive nationwide survey focusing on children with at

least one foreign-born parent. It focuses primarily on the determinants of social integration and contains a complete series of information about the school environment. The baseline questionnaire focused primarily on the characteristics of the family, the migratory process, the use of time, opinions and aspirations for the future (Barban and White 2011). The data were collected through a questionnaire which the students filled out in the classroom under the supervision of a researcher and their teacher. The questionnaire was partly inspired by the Children of Immigrants Longitudinal Study (CILS), a large-scale longitudinal investigation of the process of assimilation into American society of a sample of “new” second generation teenagers.<sup>8</sup> Schools were randomly chosen among those with a foreign student body of at least 10% in the north of Italy and 3% in the south. In each school, researchers interviewed all the IC and one entire class for each cycle (6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> grade). The total sample is composed of 10,554 pupils with at least one foreign parent and 10,150 pupils with both parents Italian. Most of the interviewees was born in 1993/94. The size of the sample reflects an aim to guarantee representation of all ethnic minorities and different life contexts. The subjects lived in forty-four provinces situated in ten regions and attended 251 junior high schools.

The desired number of children – our dependent variable – is a specific question asked in the ITAGEN2 questionnaire, with five possible modes of response: none, one, two, three, four or more. We treat it as an ordinal variable.

Since we use a multilevel approach, we include some important second-level covariates in our models: the 251 schools, and the 81 countries of origin represented by more than five subjects (see below). The features of the school potentially relating to the number of desired children are: the mean number of children desired by the Italian classmates and the mean number of siblings of the Italian school friends. At the country of origin level, we calculate the effective total fertility rate (TFR) in 2005-10, the projected TFR in 2020-25 (i.e. the years of “maximum” contribution to reproduction by children aged 11-14 in 2006-07), and the latest available figure for the autochthon desired fertility of women of fertile age. For each country we use the data from the Population Division of the UN, DHS, and other international surveys on reproductive behaviour and attitudes.

In addition, ITAGEN2 reveals some individual characteristics of the respondents that – according to the literature – may be connected with reproductive attitudes and the assimilation process: migration status,<sup>9</sup> sex, the geographical area of residence in Italy (North, Centre and South), parents’ level of education (four categories: high, medium, low, unknown), whether the mother has a job (yes or no), the number of siblings, economic wellbeing,<sup>10</sup> attitude toward family or career,<sup>11</sup> self-reported knowledge of the Italian language, an index of proximity to the parental culture,<sup>12</sup> and the proportion of foreign pupils in the class as reported by each respondent.

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<sup>8</sup> The Children of Immigrants Longitudinal Study (CILS) was designed to study the adaptation process of the immigrant second generation, which is defined broadly as US-born children with at least one foreign-born parent or children born abroad but brought to the United States at an early age. See Rumbaut and Portes (2006); also see <http://www.icpsr.umich.edu/icpsrweb/RCMD/studies/20520>.

<sup>9</sup> Four categories: born in Italy; age of arrival from 0 to 5; age of arrival from 5 to 9; age of arrival 10 or above.

<sup>10</sup> The index is calculated considering three main aspects: housing conditions (whether or not they live in an overcrowded household and if the house is owned/free of charge); the number of durable goods possessed among 10 listed in the questionnaire: dishwasher, microwave, digital camera, video recorder, computer, washing machine, scooter, car, bicycle, at least fifty non-school books; and whether the children spent at least a few days on holiday with their family during the previous summer. The first component, relative to housing, is evaluated with a score on a scale from 0 (uncomfortable situation: overcrowding and free use of the house) to 3 (well-off situation: the house is not overcrowded and ownership of the house). The second component is measured, instead, simply as the sum of assets owned (therefore, with a score on a scale of values between 0 and 10). Finally, the holiday variable is transformed into a dichotomous variable equal to 1 if the family had spent at least a few days at a holiday resort during the previous summer and 0 otherwise. The sum of the three scores thus obtained, from 0 to 14, is then statistically standardized by subtracting the mean of the distribution and dividing by the standard deviation so as to obtain a homogeneous indicator scale (Maggino, 2006; OECD, 2008).

<sup>11</sup> Preference for a “woman in career” category as opposed to an “angel of the hearth” category (dichotomous variable equal to 1 if the preference goes to “woman in career”, and 0 otherwise).

<sup>12</sup> The index takes into account some characteristics of the children's daily lives. 10 variables are used for this purpose (listed below) and they are all transformed into dichotomous variables with a value of 1 if a certain condition is true and 0 otherwise. The overall score varies from 0 to 10 and is given by the sum of the values of the variables. The index is then statistically standardized. The variables of interest are: 1. Having mainly foreign friends; 2. Regularly speaking a foreign language; 3. Attributing little importance to friendships made at school and classmates; 4. Participating in a continuous manner in ethnic parties/meetings; 5. Willingly going to these meetings; 6. Considering relatives the only people they can ask for help in the case of problems; 7. Preferring to help a relative, instead of a friend; 8.

We use a multilevel approach. Multilevel models allow us to answer our second and third research questions since they produce estimates taking into account the individual's membership of a particular group (in this case, the school and the country of origin). The data are therefore considered to be situated in a two-distinct-level hierarchical structure, in which the units of the first level are individuals and those of the second level are schools or countries of origin. Instead of estimating a regression line for each of the 251 schools (referred to by the subscript “s”) or for each of the 81 countries considered (“c”), we insert random terms which take a different value for each of the sub-units. In the estimation of these models only foreign students from countries represented by at least five subjects in the entire sample (81 countries out of the total of 139 present) are included.

In addition to random effects, in each of the two models we also insert an explanatory variable at the second level: the average number of siblings of schoolmates for Model 1 and the average number of children desired by women living in the country of origin for Model 2. We also test other variables (for Model 1 the number of children desired by Italian schoolmates; for Model 2 the estimated TFR in the country of origin in 2005-10 and in 2020-25). The two variables chosen are those that increase the statistical performance of the two models. As we shall soon see, the number of children desired by women still living in the country of origin is correlated with the number of children desired by the students interviewed.<sup>13</sup>

Within each subgroup the logit of the probability of the event of interest is estimated, taking the lowest mode on the ordinal scale as reference category. In fact, even if the response variable is expressed in natural numbers (desire to have 0, 1, 2, 3, 4 + children), it was considered appropriate to use ordinal logistic regression models because the “distance” between the different preferences is unknown. It is assumed, moreover, that in each school or between each country the slope of the line does not change, but only the intercept (fixed effects models), i.e. that the explanatory variables act in the same way in each of the subgroups of units. Two models are estimated, adding the random effect to the school (s) and to the country (c):

$$\text{logit}(Y_{i(s)}) = \ln[\theta_{i(s)}] = \alpha_s + \gamma X_{i(s)} + \delta Z_s + \varepsilon_{i(s)} \quad (\text{Model 1})$$

$$\text{logit}(Y_{i(c)}) = \ln[\theta_{i(c)}] = \alpha_c + \eta X_{i(c)} + \theta Z_c + \varepsilon_{i(c)} \quad (\text{Model 2})$$

The random intercepts are  $\alpha_s$  (schools) and  $\alpha_c$  (countries);  $\varepsilon_{i(s)}$  (or  $\varepsilon_{i(c)}$ ) is the vector of error terms, which has a multinomial distribution. The coefficients  $\gamma$  and  $\eta$  measure the influence of the individual, X, variables on fertility preference, whereas the coefficients  $\delta$  and  $\theta$  measure the influence of community, Z, variables. Reading these coefficients and their statistical significance, we detect the main determinants of the fertility intentions of the IC living in Italy (our first research question). Comparing the statistical goodness-of-fit of the two models, we show that the number of children desired by foreign students is greatly influenced by the place of origin or arrival.

### *Preliminary analysis*

#### *The fertility intentions of IC*

Young Italians want more children than IC (2.14 vs 2.00). In both groups the mode is two, but a higher proportion of Italians want three (20% vs. 13%) and a lower proportion one (13% versus 18%), see Table 2. This result is different from that observed in the Netherlands (De Valk 2008), where the young Dutch claimed to want fewer children than the IC (Table 1).

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Attributing great importance to religion; 9. Considering it of little importance to know other ways of life and cultures; 10. Being back in the country of origin of their parents at least once in the previous year.

<sup>13</sup> The results do not change substantially even if these variables are inserted in the second-level models. We prefer to include only one of these variables for each model in order to allow the possibility of comparing the models.

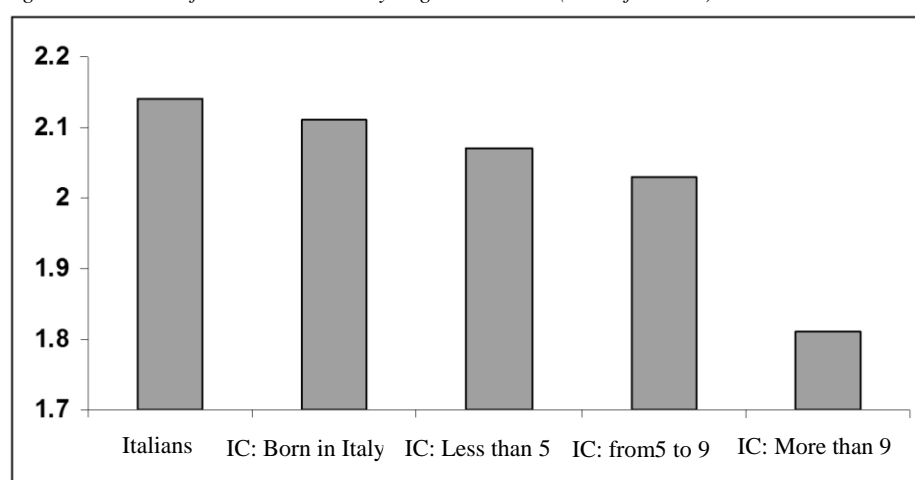
Table 2. Distribution of Italians and IC by desired number of children (%)

	0	1	2	3	4+	Total	TFR
Italians	4.4	13.5	55.0	19.7	7.5	100	2.14
IC	5.9	18.3	55.6	12.8	7.4	100	2.00

Source: ITAGEN2

However, the preferences expressed by IC also change depending on their age on arrival in Italy (Figure 1). As expected on the basis of the literature (Huschek *et al.* 2008; Scott and Stanfors 2010), and as already found from other characteristics reported by ITAGEN2 (Dalla-Zuanna *et al.* 2009; Gabrielli *et al.* 2012; Minello and Dalla-Zuanna 2013), second-generation children (G2) are not distinguishable from natives in terms of fertility preferences, while the newly arrived are quite dissimilar, depending on the time spent in the host country. In this case, they show a desired fertility which is considerably lower compared to that of the natives. This is in particular the case for those who arrived in Italy later in life.

Figure 1. Number of desired children by migration status (time of arrival)



Source: ITAGEN2

#### Siblings and desired fertility in the 251 schools

Referring to the number of siblings, the variability among the 251 schools in the ITAGEN2 sample considered here is quite intense, both for Italians and IC (table 3). On the contrary, the desired fertility is more concentrated around an average of two children. The correlation between the four indicators in Table 3 is quite low, and always less than 0.1. It will be interesting to see whether – on the contrary – in the multilevel models the individual fertility level (actual or desired) of the IC is related to the average fertility desires of the Italian school children.

Table 3. Siblings and desired children in the 251 schools of the ITAGEN2 sample

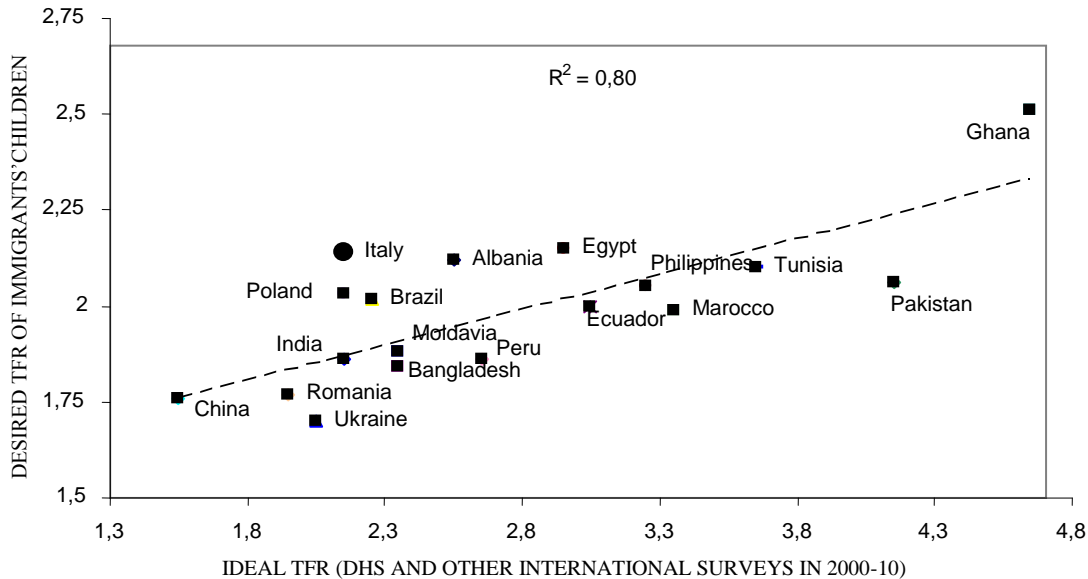
	Siblings		Desired children	
	Italians	IC	Italians	IC
Mean of school-means	1.40	1.80	2.16	2.00
Variance of school-means	0.119	0.238	0.068	0.056
Coefficient of variation of school-means	0.247	0.271	0.121	0.118

#### Different countries, different preferences

The higher the fertility in the country of origin, the higher the desired fertility of the students. (Figure 2, see also Appendix 1). A stronger relationship exists with the desired fertility of women living in the countries of origin, as detected by several

surveys (mainly DHS) in the early years of the 21<sup>st</sup> century. This result confirms that further analyses in this direction are needed and that the variable should be used at the second level in Model 2.<sup>14</sup>

Figure 2. Mean number of desired children by ITAGEN2 children and women interviewed in the countries of origin. (Countries with 130 cases or more)



## Results

The preliminary analysis is in itself sufficient to show an increasing convergence of the fertility desires of the IC to that of the young Italians as the length of their stay in Italy gradually stretches out (RQ1). The results in Figure 1 are also confirmed by both our statistical models for IC (Table 4) net of all the other variables considered here, including the second level ones.

To answer RQ2 and RQ3, we estimate two models of ITAGEN2. The data are clustered according to the 251 schools (Model 1), and the 81 countries with more than five subjects represented (Model 2).

The first relevant result is that the two models do not differ much either in terms of values or the significance of the individual fixed effects. Before focusing on second-level aspects we take a quick look at the individual-level variables. The boys wish to have more children than the girls, and those who want more children are also more oriented towards the family than towards the career, they live in a larger family, and their mother has had less work experience. These results are in line with those suggested by the literature. On the other hand, social class does not have any palpable influence, as there are no differences according to either the education level of the parents or the economic wellbeing index. Those who think they have good skills in the Italian language and – in apparent contradiction – those who feel closer to the culture of their parents want to have more children.

We now consider the results for the second-level variables. For both Model 1 and Model 2 the multilevel structure is statistically significant, as indicated by a Wald test for the intraclass correlation coefficient. This indicator is 10.4% for Model 1 and 6.9% for Model 2, showing that the influence of the place of arrival on desired fertility is stronger than that of the country of origin. This result is also confirmed by a likelihood test (see the last row of Table 5). However, despite a predominant role of schoolmates, we find that both second-level variables are statistically significant: the IC who wish to

<sup>14</sup> The coefficients of variation of the different fertility indicators among the nineteen countries for which more than 130 young students were interviewed in ITAGEN2 (see Appendix). This indicator is 0.38 for the real fertility in 2005-10, 0.31 for the desired fertility of women who have remained in the country of origin, 0.20 for the actual number of children present in immigrant families in Italy, and halves again (0.10) for the average number of children desired by the young students. The experience of migration “levels out” differences in fertility, and desires are more uniform than reality.



have more children live in contact with Italian peers with more siblings and come from countries where women want to have more children.

Table 4. Multinomial ordinal logistic regression models with random intercept

		MODEL 1	MODEL 2	
RANDOM EFFECTS	$\alpha_s$ , School	0.383		
	$\alpha_c$ , Country of origin		0.243	
Intraclass correlation coefficient		10.4%	6.9%	
Variable		Coefficients		
FIXED EFFECTS	Intercept:	4+	-4.07*	-3.25*
		3	-2.83*	-2.06*
		2	-0.09	0.65*
		1 (Ref. 0)	1.65*	2.38*
	FIRST LEVEL	Sex: Female	-0.17*	-0.13*
		High Importance of career (ref. Low)	-0.36*	-0.35*
		Mother is working	-0.04	-0.10*
		Number of siblings	0.16*	0.13*
		Level of education of the father – medium	-0.03	-0.02
		Level of education of the father – low	-0.01	0.01
		Level of education of the father – missing (ref. High)	-0.06	-0.04
		Level of education of the mother – medium	0.04	0.07
		Level of education of the mother – low	0.04	0.06
		Level of education of the mother – missing (ref. High)	-0.06	0.06
		Economic health index	0.01	-0.01
		Time of arrival – 10 or more	-0.38*	-0.30*
		Time of arrival – 5 to 9	-0.19*	-0.08*
		Time of arrival – less than 5 (ref. Born in Italy)	-0.06	-0.01
		Good knowledge of Italian	0.46*	0.44*
		Proximity with the parental culture	0.07*	0.03*
SECOND LEVEL	Mean number of siblings of the Italian schoolmates	0.46*		
	Autochthon desired fertility of women in fertile age		0.13*	
N		8,811		
-2LOGL		82,387.6	70,259.1	

\* p<0.05

Source: ITAGEN2

## Summary and discussion

The literature on the fertility behaviours of immigrants arriving in Western countries suggests a progressive assimilation: the fertility of the second generation is often almost indistinguishable from that of the native peers. However, little is known on how fertility choices are formed and whether they are similar to those of natives or if they depend on the country of origin or the country of arrival. This paper has aimed to test whether a mechanism of adaptation characterizes the dynamics of fertility intentions.

First, we have demonstrated that the fertility desires of children with a migrant background converge toward those expressed by their Italian peers: the desired number of children is 2.1 among the Italians and 1.8 among IC who arrived after their tenth birthday, but this gap closes rapidly if the length of time spent in Italy increases, and it becomes almost irrelevant for the G2 (those born in Italy). There is a convergence of wishes, then, but to a higher fertility. This result – also confirmed by our multivariate models – shows a rapid process of assimilation with the family size of the Italian classmates, confirming what was already found for other dimensions of the lives of the pre-teens interviewed in the course of ITAGEN2.

We have compared two multilevel models that include – respectively – the desired fertility of women remaining in their home countries (measured by DHS-type surveys) and the size of the Italian families encountered in the place of arrival (measured using the mean number of siblings of the Italian schoolmates) in order to understand whether adaptation to the country of arrival or the impact of the country of origin prevails. The country of origin matters, because an increase in the average number of children desired by women remaining at home also increases the number of children desired by the pupils now living in Italy. However, the influence of the place of arrival is clearly stronger: the number of children desired by IC grows significantly as the number of siblings of their Italian schoolmates increases, confirming the overwhelming force of assimilation when interpreting the social behaviour of IC living in Italy.

These results may contribute to the scientific and political debate on migration in Italy in two ways. First, in the construction of the new multi-ethnic Italian society, assimilation clearly prevails over segregation. In other words, after a few years in Italy even in sensitive spheres such as the construction of intimacy, IC develop a mentality very similar to their Italian peers. On the one hand this speed may be due to the specific characteristics of socialization of children in Italy: kindergarten and primary school are almost completely multi-ethnic and without class segregation. Moreover, the children of Italians and IC have many opportunities to meet outside school (in sport teams, parishes, streets and squares) and this is also determined by the limited presence in Italian cities of ethnic ghettos. Furthermore, assimilation may also be facilitated by the peculiarities of immigration to Italy, which is almost totally determined by a desire for upward social mobility, almost always starting from the lower rungs of the social ladder. In this perspective, to become “like Italians” can be a real life goal.<sup>15</sup> However, this rapid process of assimilation does not only have positive aspects. In fact, the greater the desire to become like Italians, the greater the frustration if this target is not reached. Unfortunately, data on educational attainment and on the early stages of the careers of the young children of immigrants show that many dreams should be placed back in the drawer (Barban and White 2011; Minello and Barban 2012; Azzolini *et al.* 2012).

Second, as pointed out at the beginning of this article, in the early 21<sup>st</sup> century strong positive net migration has enabled the number of young adults in Italy to remain fairly constant over time, despite the low fertility of the 70s and 80s. In the following 25 years, fertility never exceeded 1.5 children per woman (although Italians claim to want two or more...). Therefore, to avoid a dramatic drop in the labour force in the coming years and decades, these important immigration flows should continue because foreigners, and especially their children, will in all likelihood have a moderate fertility, similar to if not less than that of their Italian peers. However, the openness of boundaries should not contrast with policies that allow Italians and foreigners to realise their dreams of having a family with two children or more. Unfortunately, in the present day in Italy, also these policies belong to the world of dreams.

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<sup>15</sup> IC – mainly the girls – see offspring as a barrier to success in the job market. These results confirm the idea that status anxiety is the main driver when interpreting the massive migration to Italy of the two decades from 1990 to 2010. In a classic interpretation of the demographic transition, low fertility can be perceived as a vehicle for accelerated social mobility (Dalla-Zuanna 2007). This devouring status anxiety – absorbed by children in their families – could help in explaining why young people newly arrived in Italy want a number of children significantly lower than their Italian peers.

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Appendix 1

Some measures of fertility by country. Countries with at least 130 IC in the ITAGEN2 sample

Country	Mean number of children in the family <sup>(3)</sup>								
	TFR					Mean number of desired children <sup>(3)</sup>			
	(A) 2005-10 <sup>(1)</sup>	(B) 2020-25 <sup>(1)</sup>	(C) Desired in 2001-10 <sup>(2)</sup>	(D) Total	(E) Children arrived in Italy after their 10 <sup>th</sup> birthday	(F) Children arrived in Italy before their 10 <sup>th</sup> birthday	(G) Total	(H) Children arrived in Italy after their 10 <sup>th</sup> birthday	(K) Children arrived in Italy before their 10 <sup>th</sup> birthday
<i>Italy</i>	1.4	1.5	2.1	2.3			2.1		
Albania	1.6	1.5	2.5	2.4	2.7	2.4	2.1	2.0	2.2
The FYR of Macedonia	1.5	1.4	n.a.	2.9	2.7	3.0	2.1	1.9	2.1
Moldova	1.5	1.5	2.3	2.1	2.2	1.7	1.9	1.9	1.8
Montenegro	1.3	1.7	n.a.	3.1	2.7	3.3	2.1	2.1	2.1
Poland	1.3	1.6	2.1	2.4	2.7	2.2	2.1	2.0	2.1
Romania	1.4	1.6	1.9	2.1	2.1	2.0	1.8	1.7	1.9
Ukraine	1.7	1.6	2.0	2.1	2.2	1.9	1.8	1.7	2.0
Brazil	1.9	1.7	2.2	2.5	2.3	2.6	2.0	2.0	2.0
Equador	2.6	2.1	3.0	2.8	2.7	2.8	2.0	1.9	2.1
Peru	2.6	2.2	2.6	2.6	2.4	2.7	1.9	1.7	2.0
Egypt	2.9	2.2	2.9	3.1	3.6	3.0	2.1	2.1	2.2
Morocco	2.4	1.8	3.3	3.6	3.9	3.4	2.0	1.9	2.0
Tunisia	2.0	1.7	3.6	3.3	3.6	3.2	2.1	2.0	2.2
Ghana	4.3	3.6	4.6	3.3	3.3	3.3	2.6	2.4	2.6
China	1.6	1.6	1.5	2.4	2.2	2.5	1.7	1.7	1.9
India	2.7	2.4	2.1	2.7	3.0	2.6	1.9	1.8	1.9
Pakistan	3.7	2.7	4.1	4.2	4.1	3.3	2.1	2.0	2.1
Bangladesh	2.4	1.8	2.3	2.9	3.1	2.8	1.8	1.8	1.9
Philippines	3.3	2.8	3.2	2.4	2.6	2.3	2.1	2.1	2.1
Mean	2.2	2.0	2.7	2.8	2.8	2.7	2.0	1.9	2.1
Variation coefficient (Std. deviation / Mean)	0.38	0.29	0.31	0.20	0.21	0.19	0.10	0.09	0.08
Linear correlation with the mean number of desired children (Total)	0.54	0.62	0.80	0.48	0.46	0.52	1.00		

<sup>(1)</sup> UN Population Division, World Prospect, 2010 revision

<sup>(2)</sup> DHS and other population surveys

<sup>(3)</sup> Itagen2

n.a.: data not available

NOTES: Means, variation coefficients and correlations are calculated excluding Italy. The data in columns A and B (TFR) are not comparable with those in columns D, E and F (the mean number of children in the family) as TFR is calculated including women without children. Moreover, in the mean number of children in the family, children with a higher number of siblings are obviously over-weighted.