

**Migrants, second generations and their family and fertility choices:
a pan-European analysis**

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Abstract

We use a pan-European comparative survey, the European Social Survey (ESS) wave 2 (2004), to study the family and fertility choices of migrants of first and second generations, together with “stayers” in countries of origin and “natives” in countries of destination. We build a combined dataset with countries that are (or have been) sending migrants and countries that are receiving migrants, therefore also exploring the (methodological) opportunities given by micro-level datasets that are available on a relatively large number of countries for research. In our analyses, we consider one group of sending countries that is nowadays characterized by very low and lowest low fertility, Greece, Italy, Portugal, Spain, and another sending country, Turkey, where fertility is still above replacement. Receiving countries are: Austria, Belgium, France, Denmark, Germany, Great Britain, Luxembourg, Netherlands, Norway, Sweden and Switzerland. We then describe, also by developing “*cœteris paribus*” regression models, the key behavioural and attitudinal differences between first- and second-generation migrants, peers that have stayed in their country of origin, and non-migrant citizens of destination countries. We then exploit the heterogeneity of destination countries, to test the effect of welfare provision on family and fertility choices, with a specific emphasis on sending countries that are characterized by low and very low fertility. Analyses are based a) on descriptive statistics; b) on generalized linear (mixed) models on completed fertility and fertility intentions.

1. Introduction

So far, most contributions in the literature on the fertility of migrants have focused on migration toward the United States, given its long-lasting and heterogeneous history of immigration (see, e.g., Bean et al., 1979; Blau, 1992; Goldberg, 1959; Kahn, 1994). Only during the last decades scholars have developed a peculiar interest in the study of reproductive patterns of migrants in Europe, given the relatively recent history of migration.

The classic literature has aimed at investigating whether, after crossing the borders, migrants adapt to the prevailing fertility behaviour in destination countries, or whether they maintain patterns that are typical of their country of origin. Several factors can have an impact on fertility after migration, such as the motives for migration, the strength of ties with the country of origin, the degree of integration in receiving country, individual-specific socioeconomic characteristics, as well as time since migration. To this aim, a debate originated on the various hypotheses allowing a comparison between the fertility behaviour of migrants and natives, as well as between migrants and stayers in the country of origin. Roughly, four main hypotheses have been developed: *assimilation* (socialization), *adaptation*, *selection* and *disruption* (see, e.g., Kahn, 1988; Stephen and Bean, 1992; Goldstein and Goldstein, 1981; Hertz, 1985; Kulu, 2005). The *assimilation* hypothesis predicts that migrants' fertility is influenced by the prevailing trend in the country of origin, because of the socialization process experienced in early stages of life and because of ties and networks maintained with the country of origin after migration; second and higher order generations, being socialized in destination countries, adopt the behaviours that prevail in the destination country. The *adaptation* hypothesis, instead, predicts that migration involves a change in fertility norms through which migrants' fertility adapts to the prevailing trend in the destination country, so that as time since migration increases, migrants' fertility becomes increasingly more aligned to the prevailing fertility behaviours in destination countries; the expectation is that ties with the country of origin weaken over time and integration in the new socio-economic environment will gradually take place. The *selection* hypothesis is based on the fact that migrants' fertility preferences are a priori closer to those of the natives than to those of stayers in the country of origin, due to their socioeconomic characteristics, which in general make them more different than non-migrants and more similar to natives. Finally, the *disruption* hypothesis predicts that the migration process itself causes an immediate but temporary drop in fertility since it prevents or postpones nuptiality and childbearing, but also since residential relocation involves monetary and non-monetary costs which act depressing fertility.

Referring to the importance of the socialization effect and of time since migration, the literature furthermore distinguishes between the situation of first and second generation of migrants. The first generation includes individuals who migrated from the original country when they already reached adulthood, while the second generation includes individuals who were either born in the receiving country or who spent there a great part of their childhood, and therefore had the chance to socialize in

the new country. Intermediate situations exist according to age at migration (see, e.g., Portes and MacLeod, 1999; Portes and Rumbaut, 1996).

So far, contributions investigating fertility outcomes and intentions after migration in the European setting aimed at comparing either fertility of migrants versus natives (see, e.g., Andersson, 2004, Andersson and Scott, 2005; Mayer and Riphahn, 2000; Milewski, 2007), either fertility of migrants versus non-migrants (see, e.g., Schoorl, 1990), or fertility of migrants of different origin residing in the same country (see, e.g., Lesthaeghe and Surkyn, 1995; Schoenmaeckers et al., 1999). Only few studies have undergone comparative micro-approaches including migrants, residents in destination countries as well as non-migrants residents in sending countries (see, e.g., Kulu, 2005 for what concerns residential mobility).

This paper aims at simultaneously exploring differences and similarities in fertility behaviour and intentions between migrants and stayers in their countries of origin, as well as between migrants and natives of destination countries. We furthermore take into account differences between first and second generation of migrants. To this aim, we consider two groups of countries: countries that are sending migrants –or which have been sending migrants over the last decades– and countries that are receiving migrants. As sending countries we consider Italy, Greece, Spain, Portugal –all countries currently characterized by low and lowest low fertility levels– and Turkey –a country where fertility is still above replacement. As destination countries, we consider: Austria, Belgium, France, Denmark, Germany, Great Britain, Luxembourg, Netherlands, Norway, Sweden and Switzerland. Our choice of sending countries is based on their longstanding status of migrant-sending countries, since we are interested in comparing first and second generations of migrants. On the other hand, receiving countries are selected according to historical flows of migrants coming from the abovementioned sending countries. Countries like Italy, Spain, Portugal and Greece are traditionally considered migrants-sending countries and have become only very recently migrants-receiving, while Turkey, also traditionally considered a migrant-sending country, is also a country of immigration, or better a transit country, especially for asylum seekers. Migration from the Southeastern Mediterranean countries toward Continental and Northern Europe is a quite recent phenomenon which can be traced back to the second half of the 20th century, when a series of bilateral recruitment agreements aiming to provide labour force for the post-World War II European economic recovery and for its subsequent economic boom, was pursued by the German, Swiss, Belgian, Luxembourgish, Austrian, Dutch and French governments to invite temporary guest workers primarily from Italy, Spain, Greece, Turkey and Portugal. On the other hand, by the end of the Second World War, the need for manpower made also Sweden a destination country for the labour-migration flow from Southern Europe, but differently from other Western countries, in Sweden no agreement was signed: immigration was free and permanent, a factor which made Sweden a country of destination also for refugees and asylum seekers. We also consider Great Britain, Denmark and Norway as receiving countries, even if only late and less comprehensive recruitment agreements were signed requesting labour migrants especially from

Turkey. Although guest workers were supposed to come back to their country of origin in order to prevent settlement into receiving countries, most of them were able to obtain residence permits of unlimited duration and therefore did settle. Moreover, the economic stagnation in the mid-1970s pushed European governments to adopt more strict immigration rules which were basically aimed at stopping the entry of foreign workers. Nonetheless, migration flows continued throughout the 1980s and most of the 1990s, due to family reunification (and family formation) movements, so that today, in post-war host countries, communities of Southern European immigrants can be found. Migration from Turkey to Western Europe continued not only in the form of family reunification and formation (frequently through arranged marriages), but also in the form of asylum seeking –dominated by Kurd ethnicity– and in the form of clandestine or undocumented labour migration (Eurostat, 2000).

The remainder of the paper is organized as follows. In Section 2 European Social Survey data are presented and some descriptive statistics are shown. In Section 3 we describe our analytical strategy. Section 4 presents and discusses the main results. Section 5 concludes.

2. Data

We use data from the European Social Survey (ESS) Round 2 2004/5, third edition.¹ The ESS is a biennial multi-country social survey that aims at measuring and monitoring changing values and behaviours of Europeans, while providing sophisticated micro-level datasets with a particular attention devoted to questionnaire preparation and sampling strategies that ensure a high comparability between all participating countries. Data are collected using face-to-face interviews, with a particular care in the quality of the translation of questionnaires into national languages. Moreover, the translation of questionnaires into languages other than the national one is provided for any minority language groups constituting 5% or more of each country population, an element which is of particular importance in the process of migrant selection within the survey.

We restrict our analyses to two groups of European countries: countries which are “sending” migrants and those which are “receiving” migrants. Within the group of sending countries we furthermore distinguish between a cluster of Mediterranean countries nowadays characterized by low and lowest low fertility levels, Greece, Italy, Portugal and Spain, and Turkey, where fertility is still above replacement. Receiving countries are: Austria, Belgium, France, Denmark, Germany, Great Britain, Luxembourg, Netherlands, Norway, Sweden and Switzerland.² For what concerns the non-migrant

¹ Edition 3.0 was delivered in December 19 2006, and contains data on the following countries: Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, and United Kingdom. The Italian data file contains deviations from the ESS questionnaire: due to the way interviews and questionnaires were conducted in Italy, rotating modules were administered as split ballot.

² The selection of receiving countries is driven by the present of migrants from the specific sending countries here analyzed, in the national samples of the ESS-2. However, as discussed in the introduction, the selection here made also fit historical and actual migration flows.

group, we only consider non-migrant citizens born in sending and receiving countries, therefore excluding cases of migration toward the sending countries (for example, migrants from Bulgaria to Turkey or from Switzerland to Italy are not considered), cases of migration within sending countries (for example, migrants from Turkey to Greece, which are a consistent number, are not considered), as well as cases of migration toward the receiving countries from sending countries other than the ones here considered and cases of migration within receiving countries. As we are interested in fertility decisions (and focus on intentions to illuminate on factors leading to fertility decisions), the final sample is furthermore restricted to respondents aged 15 to 45.³ Table 1 presents the distribution of immigrants by country of origin and destination country in the sample.

Table 1: Number of immigrants (age 14-45) in receiving countries in the sample.

<i>Sending Countries</i>	Turkey	Spain	Portugal	Greece	Italy	
<i>Receiving Countries</i>						Total
Austria	25	0	0	2	16	43
Belgium	10	3	1	4	30	48
Switzerland	13	12	22	4	57	108
Germany	44	1	3	6	13	67
France	1	10	16	1	12	40
Great Britain	0	2	2	1	1	6
Luxembourg	1	4	153	0	46	204
Netherlands	14	4	1	1	6	26
Norway	2	2	0	2	0	6
Sweden	6	2	0	1	1	10
Total	116	40	198	22	182	558

ESS data are representative of the actual distribution of immigrants in Europe. For example, ESS data reflect the heterogeneous origin of immigrants in Germany, Switzerland, Luxembourg and the Netherlands. Furthermore, the presence of Turkish communities in Germany, Belgium, Austria and The Netherlands –all countries with which, in the second half of the 1900s, Turkey signed bilateral agreements aimed to provide labour force for the post-war European economic boom, and where, thereafter, Turkish guest workers settled, originating a family reunification movement–, is correctly highlighted in our data.⁴ Finally, ESS data also fit the actual situation in Luxembourg, where

³ The question on fertility intentions is asked on the basis of the year of birth, considering only respondents, both males and females, born between 1959 and 1990 inclusive. This however leads the upper age of respondents to vary according to the year, namely 2004, 2005 or 2006, in which the survey was carried on in the country.

⁴ Today, Turkish immigrants represent the highest share, respectively 26%, 11% and 9% of the total foreign born Population living in Germany, in The Netherlands and in Denmark (Source: Federal Statistical Office Germany, 2002; Statistics Netherlands, 2003 and Statistics Denmark, 2003), and, respectively, the 12,5% and 6% of foreigners living in Austria and France (Source: Statistics Austria, 2002 and National Institute for Statistics and Economic Studies, 1999).

immigrants from Portugal and Italy represent, respectively, 29% and 9% of total foreigners in the country.⁵

The ESS includes useful information as it allows distinguishing between the first and the second generation of immigrants. This can be done since data contain information on the country of birth of migrants and on the time since their first migration in the receiving country, as well as information on the country of birth of both parents. In our subsequent analyses, we consider as “migrants” those respondents who were born in one of the five sending countries here considered, or who were born in one of the receiving countries, but whose either father or mother was born in one of the sending countries. We then distinguish migrants belonging to the first generation as those emigrated at age 6 or later, while we consider migrants belonging to the second generation as those who were either born in one receiving country or there emigrated before age 6.⁶

Table 2 presents a set of comparative descriptive statistics on the groups of respondents analyzed in our study. Due to similarities in fertility patterns, respondents coming from Italy, Spain, Portugal and Greece are grouped together, as well as respondents residing in the above mentioned Mediterranean countries. For a matter of simplicity, we also group together non-migrant citizens of all host countries, while migrants from Turkey and non-migrant Turkish citizens are treated as two distinct groups. The table presents four different sources of information which will be discussed below: basic variables, “Second Demographic Transition indicators”, “integration indicators” and fertility indicators. As basic variables for describing our samples we consider mean age, number of years of education completed, proportion enrolled in education, proportion employed in paid work, religion identification⁷, proportion ever married and the share of second generation migrants. We call “Second Demographic Transition indicators” a list of variables evoking the acceptance of changing values and behaviours in everyday life as the experience of cohabitation or divorce/separation (for those who ever married), acceptance of same-sex partnerships and two indicators of the perceived changing gender roles, namely the disagreement on the fact that women should quit work for the sake of the family and that, when jobs are scarce, men should have more right to job than women. As “integration indicators” we present the percentage of migrants speaking as their first language the language of their host country, the proportion of migrants holding the host country’s citizenship, the proportion of migrants with a long permanence (ten years or more) in the receiving country, an indicator of perceived discrimination on the basis of the nationality and the proportion owning the dwelling. Finally, as fertility indicators,

⁵ Source: Central Service for Statistics and Economic Studies, 2003. Immigration in Luxembourg can be dated back to the second half of the 1800s when the need of labor force for the newborn iron industry requested guest workers especially from Portugal and Italy. Since then, Portuguese and Italian labor migration in Luxembourg has increased gradually.

⁶ Given the modest sample size of the migrants group, it would be meaningless to discriminate also between intermediate generations of immigrants.

⁷ Religion identification is meant as the stated belonging to a particular religion or denomination.

we compare the parity distribution of each group in our sample and the proportion expressing a positive fertility intention.⁸

The five groups under analysis⁹ are homogeneous by age (mean age is between 29 and 32), with the partial exception of non-migrant Turkish citizens. Residents in Turkey spend in education, on average, five years less than other Europeans, while Turkish emigrants spent two years less. Moreover, the shares of working women both resident in Turkey or emigrated elsewhere –respectively 12% and 19%– is much lower if compared to the shares of other working women of European origin, in all cases accounting for more than 51%. On the other hand, Turkish women are the most religious and the most frequently married: 97% of Turkish residents and 86% of Turkish migrants consider themselves as belonging to a particular religion or denomination, while the proportion married for these two groups are 66% and 68% respectively. For what concerns the religious identification of migrants from the Southern European cluster, the table shows a weaker affiliation of migrants compared to peers who stayed in their country of origin, while they are more religious than natives. The proportion of migrants belonging to the second generation group is much higher in the Mediterranean cluster (on average 65%) compared to the Turkish one (on average 45%). As expected, the Turkish group results to be the less “modernized”: the proportions of Turks who ever cohabited or ever divorced/separated are very low, while the proportion accepting same-sex couples, as well as the proportion agreeing that men should have more right to job than women when jobs are scarce are the lowest with respect to all other samples. When the statement about the fact that women should quit work for the sake of the family is asked, only low proportions disagreeing are found in all European samples (varying between 27% and 37%), but such proportions are far lower in the sample of Turkish non-migrants (21% women and only 10% men). In the same way, Turkish emigrants show behaviours similar to that of citizens of their country of origin. For example, the share disagreeing that women should quit work for the family are even lower in the sample of Turkish migrant women (only 8% women express disagree with statement above, while migrant men are aligned to the European average) compared to non migrants, suggesting a strong preference for the traditional family model within Turkish female migrants. In other respects, however, the Turkish origin seems to be mitigated by adaptation to the prevailing cultures in host countries. For example, women emigrated from Turkey are more educated, more frequently employed in paid work and less religious than women living in Turkey. They also seem more “modern” both with respect to Turkish men, either they migrated or not, and to non-migrant women. Indeed, 15% of emigrated women have ever cohabited –against 0% of non-migrant Turkish women and 2% of emigrant men– and 11% of ever married emigrated women ever experienced a divorce or a separation –but, again, the comparison with the male migrant counterpart

⁸ In order to define positive fertility intentions, we group the answers “probably yes” and “definitely yes” to the following question “Do you plan to have a child within the next three years?”; respondents for whom the information on fertility intentions is missing are excluded from the analyses.

⁹ Emigrants from Mediterranean countries, emigrants from Turkey, non-migrants residents in Turkey, non-migrants residents in Mediterranean countries and residents in receiving countries.

(1%) or with non-migrant Turkish women and men (3% and 2% respectively), suggest a more degree of “modernization” for the former group. Further, gays and lesbians are sensibly more accepted by both migrant men and women. Moreover, about 33% of both men and women emigrated from Turkey express disagree on the fact that when jobs are scarce, men should have more right to job than women, while emigrant women seem to agree more than non-migrant Turks on the fact that women should quit work for the sake of the family. Considerations similar to those discussed for Turkish non-migrant citizens and Turkish emigrants, also apply to Italian, Spanish, Greek and Portuguese non-migrant residents and emigrants. Furthermore, Turkish immigrants seem to be less “integrated” if compared to immigrants coming from other Mediterranean countries. Using the percentage of migrants speaking as their first language the language of their receiving countries as an indicator for adaptation to customs and lifestyle of host countries, Southern European migrants seem to be better “adapted” if compared to migrants from Turkey –being the average proportions between men and women respectively 72% and 41%. Same conclusions can be drawn on the basis of citizenship holders –the proportions holding the citizenship of the host countries are 56% versus 45%– or on the basis of dwelling ownership –the proportions living in a dwelling owned by one household member are 49% versus 17%. Nonetheless, the Turkish group has started living in the receiving countries earlier compared to the Mediterranean one, as can be deduced by the proportion residing in the receiving country for more than ten years. Further, the Turks migrated in Europe in our sample report a high perceived discrimination on the basis of their nationality (20%) while this feeling is much smaller for other immigrants (only 2% on average).

As concerns the comparison of the various groups according to their behaviours and intentions about fertility, from a first descriptive analysis no clear general pattern can be discerned. However we can curiously notice that Turkish men, both migrants and stayers, exert a very similar parity distribution, while migrant Turkish women are more frequently at higher parities than stayers as well as than non-migrant residents in receiving countries. A probable reason for the higher fertility observed in our sample for Turkish migrants could be due to the fact that most of Turkish emigrants come from South-Eastern Turkish regions, which present a much higher fertility with respect to other Turkish regions. (Source: Turkish Statistical Institute, see section 3 of the paper for a further discussion on this issue). We can finally notice that also migrants from Southern European countries show a gender parity distribution similar to that observed for citizens of receiving countries, which in turn is higher than that observed for Southern European non-migrant citizens.

Table 2: Descriptive analysis. Data are weighted by design and population size weights.

	Migrants from Southern Europe		Migrants from Turkey		Non-migrant, Turkey		Non-migrant, Southern Europe		Natives, receiving countries	
	M	W	M	W	M	W	M	W	M	W
Basic variables										
Age (mean)	32	32	29	29	30	30	30	32	31	32
Education (mean, number of years)	12	13	11	10	8	7	13	12	13	13
Main activity: Student (%)	20	20	21	22	19	14	20	17	20	17
Main activity: Employed (%)	64	53	56	19	51	12	68	51	68	56
Religious identification (%)	46	50	71	86	96	97	71	79	39	46
Ever married (%)	48	56	53	68	58	66	40	59	41	54
Second generation migrants (%)	64	66	46	44						
Second Demographic Transition indicators										
Ever cohabited (%)	22	22	3	15	2	0	6	10	24	30
Ever separated/divorced (%)	10	22	1	11	2	3	6	9	13	17
Acceptance of gays and lesbians ¹⁰ (%)	80	76	41	47	27	29	72	78	80	89
Women should not quit work for family ¹¹ (%)	28	27	34	8	10	21	27	27	33	37
Men should not have more right to job ¹² (%)	59	70	32	29	12	26	51	58	62	73
Integration indicators										
Foreign language speaker ¹³ (%)	67	76	42	39						
Citizenship holder (%)	57	55	40	50						
Long permanence in receiving country ¹⁴ (%)	79	76	81	85						
Perceived discrimination on nationality ¹⁵ (%)	1	2	21	19						
Dwelling ownership ¹⁶ (%)	50	47	21	12	74	65	85	85	62	60
Fertility indicators										
N. children even born (%):										
0 (%)	52	49	55	38	52	40	66	50	54	39
1 (%)	13	5	9	7	9	12	14	17	14	18
2 (%)	28	37	19	26	18	20	15	25	21	27
3+ (%)	7	9	18	28	21	28	5	9	12	16
Intention to have a birth in the next 3 years (%)	27	18	20	22	19	14	24	21	21	20
Tot. N.	212	230	56	60	504	667	1,237	1,479	3,870	4,147

¹⁰ % agreeing or strongly agreeing that “Gay men and lesbians should be free to live their own life as they wish”.

¹¹ % disagreeing or strongly disagreeing that “A woman should be prepared to cut down on her paid work for the sake of her family”.

¹² % disagreeing or strongly disagreeing that “When jobs are scarce, men should have more right to job than women”.

¹³ % of emigrated respondents speaking most often at home the receiving country’s language.

¹⁴ % first coming to live in the receiving country ten years ago or earlier.

¹⁵ % positively answering to the question: “Would you describe yourself as being a member of a group that is discriminated against in this country?” and stating their group is discriminated against on the basis of nationality.

¹⁶ % positively answering to the question: “Does any member of this household own this dwelling?”.

Table 3 presents the same descriptive analysis as above, but comparing the first and the second generations of immigrants coming from both Mediterranean countries and Turkey. Due to the small sample size of these two groups, we present results combining the categories of men and women. From the table we see that if, on the one hand the second generation of Southern Europeans is less religious than the first one, on the other hand the first generation of Turks appears as religious as the first one. Second generation migrants are generally more educated and less frequently married than first generation migrants. Nonetheless, we need to take into account that the second generation is on average younger. For this reason, they are more frequently still in education and less frequently employed. On the other hand, the second generation, as expected, seems more “modern” and more “integrated”. Indeed, individuals with migrant origin who were born in the destination countries or who there migrated at a pre-scholar age had the chance to socialize in a more modern context in which they could integrate more easily.

On the other hand, the second generation in our sample is less fertile, even though more willing to give birth to a(n additional) child than people of the same age migrated after the age of 14 years.¹⁷ However, Turkish immigrants belonging to the second generation do not differ much from those belonging to the first one along various dimensions. For instance, religious identification appears to be the same for both groups. Homosexuals are only slightly more accepted by the second generation. The proportion speaking the receiving country language at home as the first language is about the same in the two generations and perceived discrimination on the nationality basis is about the same. When public morality questions like the different right to access the job market for men and women or the necessity for women to leave paid work for the their families, the second generation of Turkish immigrants seems even less “modern” than the first generation, suggesting the latter to be more oriented to the traditional gender role separation model of the family than the first generation. On the other hand, the more striking differences between first and second generation Turkish immigrants regard achieved and intended fertility, the former resulting sensibly reduced (almost four times lower) and the latter sensibly increased (almost four times higher) for the second generation.

¹⁷ But again, the age distribution of first and second generation immigrants need to be taken into account, the first generation group being constituted of individuals ten years older than the second generation group, on average.

Table 3: Comparison between the 1st and the 2nd generation of immigrants aged 18-45, men and women (1st generation: migrated when aged 14 or more; 2nd generation: born in Europe or migrated before the age of 14)

	Migrants from Italy, Spain, Portugal and Greece		Migrants from Turkey	
	First generation	Second generation	First generation	Second generation
Basic variables				
Age (mean)	37	29	35	22
Education (mean, number of years)	12	13	9	12
Main activity: Student (%)	6	27	3	44
Main activity: Employed (%)	73	51	48	24
Religious identification (%)	64	39	79	79
Ever married (%)	83	35	90	25
Second Demographic Transition indicators				
Ever cohabited (%)	18	23	4	10
Ever separated/divorced (%)	20	13	8	0
Acceptance of gays and lesbians ¹⁸ (%)	64	86	43	46
Women should not quit work for family ¹⁹ (%)	21	30	26	15
Men should not have more right to job ²⁰ (%)	52	71	38	20
Integration indicators				
Foreign language speaker ²¹ (%)	56	79	39	42
Citizenship holder (%)	17	77	32	61
Long permanence in receiving country ²² (%)	74	100	81	100
Perceived discrimination on nationality ²³ (%)	4	1	20	19
Dwelling ownership ²⁴ (%)	41	52	20	12
Fertility indicators				
N. children even born (%):				
0	30	62	20	78
1	14	7	1	17
2	42	27	41	1
3+	14	5	38	5
Intention to have a birth in the next 3 years (%)	20	24	9	35
Tot. N.	189	253	64	52

¹⁸ % agreeing or strongly agreeing that “Gay men and lesbians should be free to live their own life as they wish”.

¹⁹ % disagreeing or strongly disagreeing that “A woman should be prepared to cut down on her paid work for the sake of her family”.

²⁰ % disagreeing or strongly disagreeing that “When jobs are scarce, men should have more right to job than women”.

²¹ % of emigrated respondents speaking most often at home the receiving country’s language.

²² % first coming to live in the receiving country ten years ago or earlier.

²³ % positively answering to the question: “Would you describe yourself as being a member of a group that is discriminated against in this country?” and stating their group is discriminated against on the basis of nationality.

²⁴ % positively answering to the question: “Does any member of this household own this dwelling?”

3. Analytical strategy

In order to study fertility decisions given the information available in the ESS, we focus on fertility intentions and realized fertility. Clearly, actual fertility is influenced by factors that are not measured in a cross-sectional survey like the ESS. For this reason, fertility intentions provide a better variable to focus on in our study (for a similar strategy on the study of fertility determinants using the ESS see, e.g., Mills et al., 2008).

On *fertility intentions*, we estimate a logistic regression model on the intention to have a(n additional) birth within the next 3 years. The exact question used in the survey is: “Do you plan to have a child within the next three years?” Respondents could choose between the following answers: “definitely not”, “probably not”, “probably yes” and “definitely yes”. We group answers into two categories: the probability of intending not to have a child in the near future is identified by the two answers “definitely not” and “probably not”. The remaining two answers, “probably yes” and “definitely yes” are collapsed into a second category that indicates the intention to have a child within the next 3 years. Respondents for whom the information on fertility intentions is missing are excluded from the analyses.

In a first model (model 1), independent covariates are binary variables indicating the following statuses: being a migrant from either one of the Mediterranean countries considered in this study, namely: Italy, Spain, Portugal and Greece, being a migrant from Turkey, being a second generation migrant, being a non-migrant citizen of either one of the abovementioned four Mediterranean countries and being a non-migrant Turkish citizen. We also account for differences within Turkey explicitly distinguishing three of the seven geographical Turkish regions. Namely, we separately consider Central Anatolia, the Eastern and the Southeastern (i.e., Central Anatolia, North Eastern Anatolia, Middle Eastern Anatolia and South Eastern Anatolia, according to the statistical units definition), to which we will refer as “Southeastern Turkey” in the following, for a matter of simplicity. The reason is twofold. First, we expect different results from the two clusters of regions, the former constituting a quite homogeneous group for what concerns the industrialization processes, working opportunities on the one hand, and recorded fertility levels on the other hand. Indeed, Southeastern regions in Turkey are predominantly rural and socially conservative, and they are characterized by a remarkably low degree of industrialization²⁵, high unemployment rates, and high fertility²⁶, if compared to other Turkish regions (see also Dinçer, 1996). Second, the above discussed

²⁵ All these regions present a Gross Domestic Product per capita lower than the country average for all years between 1995 and 2001, while among other regions, only West and East Black Sea regions present below average GDP levels, while Mediterranean region is only slightly below the average. Source: Turkish Statistical Institute, 2001. On the same ground, Southeastern regions record the highest unemployment rate, with the only exception of Northeastern Anatolia. Furthermore, the proportion employed in the industry sector is for all Southeastern regions below the national average, while the agriculture sector absorbs a great part of the active population. Source: Turkish Statistical Institute: Household Labor Force Data Base, 2006.

²⁶ The TFR in 2000 for the cluster of Southeastern region ranks from 2.69 in Central Anatolia to 4.57 in the Middle East Anatolia, while for all other regions it is lower than 2.56. Source: Turkish Statistical Institute, 2000.

factors become a push to emigration: migrants from the poorer Southeastern regions move firstly in the Northwestern regions seeking for a job and for better living conditions, and subsequently move again towards Western Europe (cf. İçduygu et al., 2001; Eurostat, 2000 and Schoenmaeckers et al., 1990 for a similar argument). We thus need to take into account that most of the Turkish migrants in our sample could be coming from Southeastern Turkey, even though we do not have information on the region or town or origin of immigrants or their parents. In order to account for differences within Turkey, we use a binary variable identifying Southeastern Turkish regions.

In models 2 and 3, we also control for age, the number of years spent in full time education, the status of having ever been married, that of being enrolled in education or in paid work, the respondent's religion identification and parity. In model 2 we simply distinguish between childless respondents (reference category), respondents with one child, with two children and with three or more children, while in model 3 we distinguish between non migrants (reference category), migrants and second generation migrants childless respondents (reference category), respondents with one child and respondents with two or more children, in order to control for any eventual linkage between fertility and the status of being a migrant.

For what concerns *realized fertility*, or children ever born, we develop a series of generalized ordered logistic models where the response variable is the actual number of children ever born (0, 1, 2, 3+ children). In a first model we use as covariates the status of migrant with origin in the low-fertility Mediterranean cluster as well as the status of migrants with origin in Turkey, the status of native in the receiving and sending countries (as before distinguishing between residents in Mediterranean countries, residents in Turkey and in Southeastern Turkey), as well as the status of being a second generation migrant. In model 2 we also control for some background individual characteristics like age, the number of years of full time education completed and religious identification. Models 3 and 4 are computed on the sub-sample of respondents who have ever been married. We also use a Poisson regression model on the number of children ever born, using the same controls as above. In this model, we control for the exposure time calculated as the fertile years span (age 15 up to the survey day). Design and population size weights are applied to all regression models.

In order to test the potential selection of migrants' fertility with respect to welfare generosity concerning the family, we use data from the OECD Social Expenditure Database to construct a country-specific quantitative variable accounting for the total family expenditure in a country, expressed in percentage of GDP and referred to the year 1999²⁷ (see table 4). We expect migrants who settled in host countries with a family-friendly welfare system to express positive intention to have a (an additional) birth in the near future, as well as to be at higher parities. In order to test this assumption, we insert in our models a quantitative variable accounting for the total expenditure the individual country's governments devote to the family (comprehending family allowances, maternity

²⁷ The year 1999 is the nearest year presenting available data for each of the considered country. After 1999, data for Turkey are no more available.

and parental leave and other cash benefits). We further add an interaction between such a variable and the status of being a migrant, in order to study any eventual link between fertility intentions/outcomes and the degree of family-welfare provided by host countries.

Table 4: Total family expenditure in percentage of GDP for the year 1999. Countries are sorted in a descending order.

<i>Country</i>	<i>Family Expenditure</i>	<i>Children ever born to natives</i>	<i>Children ever born to migrants from Southern Europe</i>	<i>Children ever born to migrants from Turkey</i>
Norway				
Denmark	3% or more	1.193	1.253	1
Sweden				
France				
Luxembourg				
Austria				
Belgium	1.5-3%	1.119	1.024	1.056
Great Britain				
Germany				
Netherlands			1.110	1.833
Switzerland				
Italy	0-1.5%	1.097		
Turkey				
Greece				
Portugal				
Spain				

Source: OECD Social Expenditure Database (SOCX) 2007 and own elaborations on ESS-2.

4. Results

Analyses on fertility intentions (Table 5) show that, with respect to natives in receiving countries and to stayers in the countries of origin, migrant men and women from both Southern European countries and from Turkey are less frequently intending to have a(nother) child in the near future. The differences are not statistically significant for Turkish migrant women and for Southern European women, except in the model without controls. When controlling for parity distribution and other factors (Model 3 in Table 5), fertility intentions for migrant women become similar to those other women in the sample: being a woman who already achieved parity two or higher parities is negatively associated with short-term fertility planning. For migrant men the opposite is true, since compared to other men at the same parity, they are much more likely associated with positive fertility intentions. Non-migrants citizens of sending countries are more frequently intending to have a(n additional) birth in the short-run, this association being strongest for men in Southeastern Turkey. However, a distinction in the reasons driving such effects is needed. The positive effect found for Southern European non-migrants may easily be driven by the fact that, on average, Southern Europeans are at

lower parities if compared to other individuals in the sample (see Table 2): they might be more willing to have a birth because they have been postponing childbearing. For what concerns Turks, instead, the positive effect on fertility intentions is a “pure” one: Southeastern Turks do intend to have a(n additional) child simply because they intend to achieve a large family size. In this respect, it needs to be taken into account that most of the Turkish migrants in our sample might originally come from Southeastern Turkish regions, traditionally characterized by high fertility levels.

On the other hand, second generation migrants show positive fertility intentions, but, again, differences between the two sexes appear: second generation women are more prone to have an additional birth, even when they already have had more than one child, while for men such an interaction turns out to be negative at higher parities. The sign and significance of other controls are as expected: being married, religious and highly educated increase the likelihood of exerting positive intentions about fertility, while being still enrolled in education and having already reached a big family size act in the opposite way.

As expected, more generous family-welfares are associated with higher fertility intentions, the effect being stronger for women. In this respect, migrating to a receiving country whose welfare system is particularly favourable towards the family has a significantly positive effect on the intention to have a birth in the next future for men, while for women such interaction is not statistically significant.

A subsequent set of models focused on realized fertility, i.e. children ever born to respondents. From the generalized ordered logistic models 1 and 2 in Table 6, we find that migrants are more likely to have a higher number of children when compared to both residents in receiving and sending countries. Migrant women from Mediterranean countries are likely to reach parity two, while women from Turkey are more likely to have larger families. Migrant men show a positive association with large family sizes, which is strongest for migrants with Turkish origins. Second generation migrants, especially women, on the contrary, are more frequently at lower parities. As expected, Southern Europeans are negatively associated with actual family size, while the opposite is true for Turks, and in particular for South-eastern Turks.

Further, while family-welfare provision has an effect on realized fertility, it seems that the more family-friendly the receiving country’s welfare is, the less likely it is that men who there migrated, will have a high number of children. This effect is present also in the generalized order logistic model where only men who have ever been married are considered (model 4 in Table 6), even though the effect is significant only when parity transition from two to three or more children is considered. The same variable does not seem to have a significant effect on women’s achieved fertility. These results are further confirmed by models run on the sub-sample of respondents who have ever been married. Instead, in the Poisson model (Table 7) some of the effects are lost.

Table 5: Logistic regression model on the intention to have a child within the next three years. Data are weighted by design and population size weights.

	All	Men	Women
Model 1			
Migrant from Southern Europe	-0.461	0.119	-1.294 **
Migrant from Turkey	-0.389	-0.197	-0.747
Second generation migrant	0.800 **	0.292	1.517 ***
Non-migrant. Southern Europe	0.192 *	0.251 *	0.138
Non-migrant. Turkey	-0.367 ***	-0.343 ***	-0.388 **
Non-migrant. South-eastern Turkey	0.222 **	0.563 ***	-0.127
Male	0.141 **		
Model 2			
Migrant from Southern Europe	-1.531 **	-2.114 **	-0.720
Migrant from Turkey	-1.146 *	-1.927 **	-0.131
Second generation migrant	0.997 **	0.921	1.333 ***
Male	0.121		
Age	0.791 ***	0.795 ***	0.864 ***
Age ²	-0.013 ***	-0.013 ***	-0.015 ***
Ever married	1.065 ***	1.062 ***	1.025 ***
One child	-0.222 **	-0.108	-0.370 ***
Two children	-1.973 ***	-2.170 ***	-1.892 ***
Three children	-2.068 ***	-1.785 ***	-2.429 ***
Student	-1.108 ***	-0.944 ***	-1.351 ***
Employed	-0.018	0.060	-0.234
Education (N. years)	0.045 ***	0.037 **	0.051 ***
Religious identification	0.163 **	0.212 **	0.139
% Family expenditure on GDP	0.574 ***	0.464 ***	0.688 ***
% Family expenditure on GDP * Migrants	0.354	0.678 *	-0.170
Non-migrant. Southern Europe	0.680 ***	0.598 ***	0.739 ***
Non-migrant. Turkey	0.318 *	0.139	0.366
Non-migrant. South-eastern Turkey	0.393 ***	0.867 ***	-0.110

Table 5 (Continued)

	All		Men		Women
Model 3					
Migrant from Southern Europe	-2.176	**	-3.883	***	-0.245
Migrant from Turkey	-1.779	**	-3.795	***	0.608
Second generation migrant	1.207	**	2.140	***	0.382
Male	0.115				
Age	0.794	***	0.796	***	0.867 ***
Age^2	-0.013	***	-0.013	***	-0.015 ***
Ever married	1.074	***	1.069	***	1.022 ***
One child	-0.263	***	-0.188		-0.364 **
Two+ children	-1.998	***	-2.061	***	-2.003 ***
One child * Migrant	1.637	**	2.733	**	0.266
Two+ children * Migrant	0.135		1.987	**	-2.803 ***
One child * Second generation migrant	0.758		1.231		0.761
Two+ children * Second generation migrant	-1.126		-3.201	**	1.929 *
Student	-1.104	***	-0.942	***	-1.347 ***
Employed	-0.015		0.052		-0.225
Education (N. years)	0.046	***	0.036	**	0.053 ***
Religious identification	0.168	**	0.215	**	0.141
% Family expenditure on GDP	0.572	***	0.469	***	0.680 ***
% Family expenditure on GDP * Migrants	0.477	*	0.801	*	0.003
Non-migrant. Southern Europe	0.677	***	0.596	***	0.740 ***
Non-migrant. Turkey	0.311	*	0.142		0.360
Non-migrant. South-eastern Turkey	0.384	***	0.885	***	-0.129
Tot. N.			12,462	5,879	6,583

Table 6: Generalized ordered logistic regression on children ever born. Data are weighted by design and population size weights.

Model 1		All		Men		Women
Migrant from Southern Europe				0.729	***	
	c.0	1.058	***			1.296 ***
	c.1	1.245	***			1.765 ***
	c.2	0.320				0.542
Migrant from Turkey		1.079	***	0.687	*	1.420 ***
Second generation migrant		-1.892	***	-1.269	***	-2.470 ***
Male						
	c.0	-0.566	***			
	c.1	-0.446	***			
	c.2	-0.402	***			
Non-migrant. Southern Europe						-0.487 ***
	c.0	-0.417	***	-0.399	***	
	c.1	-0.546	***	-0.650	***	
	c.2	-0.959	***	-1.264	***	
Non-migrant. Turkey				0.388	***	
	c.0	0.219				0.140
	c.1	0.364	***			0.301 *
	c.2	0.628	***			0.677 ***
Non-migrant. South-eastern Turkey						
	c.0	-0.563	**	-0.684	***	-0.526 *
	c.1	-0.338		-0.358	**	-0.289
	c.2	0.245		0.494	***	0.210
Tot. N.		12,462		5,879		6,583

Table 6 (Continued): Generalized ordered logistic regression on children ever born. Data are weighted by design and population size weights.

Model 2		All	Men	Women
Migrant from Southern Europe		0.409		
	c.0		0.185	-0.577
	c.1		0.873	0.192
	c.2		3.355 ***	-1.199
Migrant from Turkey		1.364 ***		0.591
	c.0		0.965	
	c.1		1.482 *	
	c.2		3.493 ***	
Second generation migrant		-0.676 **	-0.182	-1.181 ***
Male				
	c.0	-0.677 ***		
	c.1	-0.442 ***		
	c.2	-0.360 ***		
Non-migrant. Southern Europe				
	c.0	-0.043	0.076	-0.161
	c.1	-0.234 *	-0.248	-0.228
	c.2	-0.637 ***	-0.768 ***	-0.572 ***
Non-migrant. Turkey		0.564 ***	0.704 ***	0.444 **
Non-migrant. South-eastern Turkey				
	c.0	-0.421	-0.452 **	-0.452
	c.1	0.051	-0.021	0.059
	c.2	0.809 ***	0.851 ***	0.732 **
Age		0.515 ***	0.370 ***	0.625 ***
Age^2		-0.005 ***	-0.003 ***	-0.007 ***
Education (N. years)		-0.107 ***	-0.081 ***	-0.126 ***
Religious identification		0.191 **	0.199 *	0.208 **
% Family expenditure on GDP		0.377 ***	0.386 ***	0.376 ***
% Family expenditure on GDP * Migrants				0.285
	c.0	-0.155	-0.105	
	c.1	-0.039	-0.329	
	c.2	-0.343	-1.615 ***	
Tot. N.		12,462	5,879	6,583

Table 6 (Continued): Generalized ordered logistic regression on children ever born. The sample is restricted to respondent who have ever been married. Data are weighted by design and population size weights.

Model 3	All	Men	Women
Migrant from Southern Europe	0.017	-0.293	
c.0			0.070
c.1			1.079 *
c.2			-0.264
Migrant from Turkey			
c.0	-0.413	-0.784 **	0.147
c.1	0.426	0.058	0.828
c.2	0.680 *	0.423	0.823
Second generation migrant	-0.360	-0.182	-0.718
Male	-0.156 **		
Non-migrant. Southern Europe	-0.803 ***		-0.710 ***
c.0		-0.694 ***	
c.1		-0.879 ***	
c.2		-1.381 ***	
Non-migrant. Turkey		0.194	
c.0	-0.045		0.068
c.1	0.133		0.147
c.2	0.476 ***		0.518 ***
Non-migrant. South-eastern Turkey			
c.0	-0.506	-1.014 ***	-0.251
c.1	-0.041	-0.248	0.094
c.2	0.632 ***	0.799 ***	0.610 ***
Tot. N.	12,462	5,879	6,583

Table 6 (Continued): Generalized ordered logistic regression on children ever born. The sample is restricted to respondent who have ever been married. Data are weighted by design and population size weights.

Model 4	All	Men	Women
Migrant from Southern Europe			
c.0	-1.083	-1.411	-1.083
c.1	0.290	1.183	-0.569
c.2	0.663	3.933 ***	-1.981 **
Migrant from Turkey			0.127
c.0	-0.286	-0.841	
c.1	1.198	2.129 **	
c.2	1.885 ***	4.041 ***	
Second generation migrant	-0.199	-0.010	-0.567
Male	-0.297 ***		
Non-migrant. Southern Europe			
c.0	-0.037	0.017	-0.006
c.1	-0.194	-0.361	-0.106
c.2	-0.633 ***	-0.842 ***	-0.440 **
Non-migrant. Turkey		0.732 ***	0.676 ***
c.0	0.534 **		
c.1	0.786 ***		
c.2	0.604 ***		
Non-migrant. South-eastern Turkey			
c.0	-0.275	-0.720 ***	0.025
c.1	0.315	0.170	0.313
c.2	0.867 ***	1.066 ***	0.824 ***
Age			0.592 ***
c.0	0.392 ***	0.468 ***	
c.1	0.707 ***	1.002 ***	
c.2	0.577 ***	0.860 ***	
Age^2			-0.007 ***
c.0	-0.004 **	-0.004 ***	
c.1	-0.008 ***	-0.012 ***	
c.2	-0.006 ***	-0.009 ***	
Education (N. years)		-0.053 ***	-0.097 ***
c.0	-0.070 ***		
c.1	-0.069 ***		
c.2	-0.101 ***		
Religious identification	0.168 *	0.195	0.179 *
% Family expenditure on GDP	0.389 ***	0.363 ***	0.411 ***
% Family expenditure on GDP * Migrants	c.0 0.292	0.463	0.312
c.1	-0.021	-0.523	0.599
c.2	-0.565 **	-1.878 ***	0.489
Tot. N.	12,462	5,879	6,583

Table 7: Poisson regression on children ever born. Data are weighted by design and population size weights.

	All	Men	Women
Migrant from Southern Europe	0.117	0.260	-0.022
Migrant from Turkey	0.410 **	0.529 **	0.240
Second generation migrant	-0.089	0.098	-0.224
Male	-0.141 ***		
Age	0.189 ***	0.190 ***	0.191 ***
Age^2	-0.002 ***	-0.002 ***	-0.003 ***
Education (N. years)	-0.047 ***	-0.044 ***	-0.052 ***
Religious identification	0.103 ***	0.120 **	0.094 ***
% Family expenditure on GDP	0.142 ***	0.152 ***	0.131 ***
% Family expenditure on GDP * Migrants	-0.104	-0.196	-0.023
Non-migrant. Southern Europe	-0.173 ***	-0.181 **	-0.179 ***
Non-migrant. Turkey	0.175 **	0.245 **	0.090
Non-migrant. South-eastern Turkey	0.292 ***	0.441 ***	0.165 *
Tot. N.	12,462	5,879	6,583

5. Conclusions

In this paper, comparative data from the European Social Survey have been used to study the fertility choices of migrants, as well as of stayers in countries of origin and natives of countries of destination. We have considered two groups of sending countries, South-eastern Europe, namely, Italy, Spain, Portugal and Greece, nowadays characterized by very low and lowest low fertility, and Turkey, where fertility is still above replacement. We account for differences between two generations of migrants. We further account for heterogeneity within receiving countries with respect to family-welfare provisions.

Differences and similarities across the clusters of natives, migrants and stayers have been investigated through comparative descriptive analyses according to their attitudes toward modern lifestyles –what we have called “Second Demographic Transition indicators”; the cluster of migrants has been further investigated according to some “integration indicators” and first and second generation migrants have been described along the same dimensions. It emerged that migrants show behavioural and attitudinal differences with respect to peers who stayed in the countries of origin, possibly adapting to the cultural context at destination. This is particularly true for second generation migrants, who have been socialized in the receiving countries. Migrants from Turkey seem to be, in a way, less adapted to the prevailing norms at destination than migrants from Southern Europe. We also focused on fertility indicators, however, being the population under analysis still at young ages, some individuals might be just starting reproduction. Thus, as a further test of the competing hypotheses regarding cultural assimilation and adaptation of migrants, we should also focus on some other indicators, like home departure and perhaps pre-marital sex.

According to our main findings from regression models, family-welfare provisions are positively associated with fertility intentions of natives as well as of male migrants. As expected, we also find a positive association between family-friendly welfares and realized fertility for natives in the receiving countries. However, we find a negative association between migrants’ fertility and family-welfare generosity in receiving countries for men, the effect being significant only for large family sizes (i.e., 3 or more children even born). At first glance, this result might seem contrary to the expectation that the effect of family-friendly welfare climates on fertility is favourable not only for natives, but also for migrants. Indeed, within the group of migrant men, there might be a sort of selection bias: first-generation migrants might have entered a union in their country of origin before migration took place, and they might have started their reproducing career before crossing the borders, as well. This assumption seems motivated by the estimates we find for the migrant status variable on realized fertility: migrant men are likely to achieve large family size, irrespectively of their origin. Under this perspective, the effect of welfare provision in the host country may no longer influence their family size, other more powerful factors coming to play a role on such an outcome, like the possibility of family reunification and the time until it takes place. For migrant women, the estimated effect of host

countries' family-welfare on fertility is positive (even if not significant) and not much different than the one observed for native women. Incidentally, married women are less likely to migrate than men, especially if they already started motherhood.

A main drawback of this study is that no distinction between fertility before and after migration is made. In order to disentangle such a complex relation we would need to test the effect of welfare allocated to the family only on fertility after migration and at the same time we would need to control for the time since migration, in interaction with the additional fertility achieved after crossing the borders. However this could not effectively be done in this study since, if the ESS provides information on the year of birth of children ever born, it only provides a time-range variable accounting for time since arrival in the receiving country (the question "How long ago did you first come to live in [country]?" allowing the following possible answers: "Within the last year", "1-5 years ago", "6-10 years ago", "11-20 years ago" and "More than 20 years ago"), so that it would be misleading to assign a birth to a period before or after the borders crossing.

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