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**The impact of fertility and education on changes across
cohorts and geographical areas in the
demography of grandparenthood: the Italian case**

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The impact of fertility and education on changes across cohorts and geographical areas in the demography of grandparenthood: the Italian case

Abstract

Grandparents play an important role within and beyond family life. However, little is known about the demography of grandparenthood. Given dramatic changes in fertility occurred in the last decades, this study aims to explicitly study the role that the number of children and age at first birth have on the timing of the transition into grandparenthood across different cohorts.

Data from the 2009 Italian Survey on 'Family and Social Relations' (N= 10,186) were used to estimate the median age at grandparenthood and the probabilities of being a grandparent at selected ages across parents born between 1920 and 1949 in the North and South of Italy.

Overall, we found a rise of about 5 years in two decades in the median age at grandparenthood, with higher values in the North than in the South. However, such postponement is largely driven by family compositional changes. For instance, although the likelihood of a mother with three or more children to become a grandparent by the age of 60 has not changed much over time and across geographical areas, the percentage of mothers with such characteristics has reduced significantly over time, particularly in the North.

Our findings reinforce the importance of changes in fertility profiles to capture the recent demographic shifts in the overall timing of transition into grandparenthood, with implications for intergenerational transfers and other roles in later life.

1. Introduction

Researchers have become increasingly interested in grandparents as populations age and the economic and social roles of grandparents in society and family life have become more visible (Bengtson 2001; Gray 2005). In particular, grandparents play an important role in providing informal childcare support to families. In Europe, 58% of grandmothers and 49% of the grandfathers look after at least one of their grandchildren under the age of 16 (Hank and Buber 2009). Therefore, numerous studies have investigated the impact of grandchild care provision on younger generations' fertility (Aassve et al. 2012; Pink 2018), on mothers' (Arpino et al. 2014) and grandmothers' labour force participation (Lumsdaine and Vermeer 2015; Di Gessa et al. 2016a) as well as on grandparents' health and well-being (Hughes et al. 2007; Chen and Liu 2012; Tsai et al. 2013; Arpino and Bordone 2014; Di Gessa et al. 2016b, c; Hank et al. 2018).

Yet, we know little about the timing of the transition to grandparenthood. The age when parents become grandparents has important implications not only for the experience of grandparenthood itself but also for its intersection with other life events, both grandparents' and (grand)children's. A number of studies have suggested that the age at grandparenthood influences the grandparent's perception of this event and, consequently, the meaning, experience, expectations, and responsibilities attached to this newly ascribed role. 'Off-time' grandparents (and particularly those who entered grandparenthood 'early') tend to feel older and are less likely to find the role rewarding and to feel close to their grandchildren compared to those who transitioned "on time" (Burton and Bengtson 1985; Hagestad and Lang 1986; Dench and Ogg 2002; Kaufman and Elder 2003; Bordone and Arpino 2016). Furthermore, depending on the timing of the transition, the grandparent role may compete with other responsibilities, roles, and

life events and transitions (including parenthood, labour force participation, participation in social activities, and other caregiving responsibilities to spouse and own parents just to name some) (Hagestad 1988; Szinovacz 1998; Leopold and Skopek 2015b; Arpino and Bordone 2017; Arpino and Gómez-León 2019). Finally, the timing of grandparenthood might also have differential effects on grandparents' provision of grandchild care. For instance, those who become grandparents later may be already out of the labour force and therefore have more time to spend with their grandchildren. However, they might also be more likely to experience important health limitations which may affect their ability to look after their grandchildren (Margolis and Wright 2017).

In this study, we investigate for the first time to our knowledge fertility differences in the demographic transition to grandparenthood, filling gaps in the knowledge about one of the most common role transitions in later life. How many people become grandparents and at what age depend mostly on demographic trends, namely longevity, their own and their children's fertility and timing of parenthood. For instance, increased life expectancy means it is now quite common for a child to grow up while their grandparents and even great-grandparents are alive (Hagestad 2006; Murphy 2011). While shifts in fertility –including childlessness – affect both the percentage of the population that ever becomes grandparent and the timing of this transition. If age at first birth for two successive generations (G1 and G2) were identical, the expected age at grandparenthood for G1 would be about double their age at parenthood. However, with the advent of the so-called second demographic transition (van de Kaa 2001; Lesthaeghe 2010), most European countries have witnessed a steady rise in childlessness, an upward trend in age at first birth, and declining parity distribution

across the cohorts born after the Second World War. Whereas European women born between 1945 and 1949 reached the lowest levels of permanent childlessness at 8-10%, childlessness has doubled (around 16% to 20%) among women born 20 years later (Miettinen et al. 2015; Sobotka 2017). Similarly, in most European countries, the cohort mean age at first birth (MAFB) has increased substantially for the cohorts born after 1960 (Frejka and Calot 2001; Frejka and Sardon 2006). Overall, declines in fertility coupled with increased timing of parenthood suggest a delay in the timing of grandparenthood.

So far, only a few studies have investigated the timing of grandparenthood and how this has changed across cohorts. Leopold and Skopek (2015b), using data from the USA and Europe, compared the median age at grandparenthood among those born roughly between 1930 and 1947 demonstrating considerable heterogeneity across countries in the timing of the transition to grandparenthood. The same authors compared the median age at grandparenthood among East and West German women born between 1929 and 1958 (Leopold and Skopek 2015a). Although the median ages were different in East and West Germany, women born between 1949 and 1958 had an estimated median age at grandparenthood between 5 (West) and 6 (East) years higher than those born 20 years earlier (i.e. between 1929 and 1938). Using Canadian data, Margolis (2016) also found a substantial delay of grandparenthood over time: 58% of women aged 50-54 were grandmothers in 1985 compared to only 29% in 2011, with an increase in median age at grandmotherhood of about 10 years in a quarter of a century. Thus, this literature suggests that the prevalence and timing of the transition to grandparenthood are undergoing rapid change in response to global trends in declining fertility. However, none of these papers explicitly studied the role that changes in fertility had on the

transition into grandparenthood, and its timing, across cohorts. An exception is the paper by Skopek and Leopold (2017) which attempted to show such differences using educational gradients as a proxy for different fertility histories.

Our paper adds to the existing knowledge on the demography of grandparenthood by exploring directly the linkages between fertility profiles (i.e., number of children and age at first childbirth) and the transition to grandparenthood across cohorts. In this respect, we explore the likelihood of grandparenthood at various age-thresholds and the timing of grandparenthood. We do so with relation to Italy, as the Italian context presents an interesting setting given its well-known variations in fertility profiles across geographical areas and cohorts. This national context provides a lens through which we can explore the effect of demographic change on regional and cohort differences in the transition to grandparenthood.

Grandparenthood in Italy: macro-regional fertility differences across cohorts

Concerning our research focus, Italy has witnessed three main demographic changes that may have shaped grandparenthood differently across birth cohorts and geographical areas. In this manuscript, given well-known fertility differentials (Dalla Zuanna and Micheli 2004; Caltabiano 2016) we distinguish and compare the regions in the North and the Centre of Italy (hereafter referred to as the North) and those in the South

First, although the cohort fertility rate (CFR) in Italy has declined throughout the 20th century, Southern Italian CFR has been consistently higher than in the rest of the country, with a value of 3.3 for the 1920 cohort and almost 1.9 for those born in 1965 compared to about 2.1 and 1.4 in the North (see Figure 1).

[FIGURE 1]

Second, childlessness and fertility rates have developed differently across Italian regions. For instance, whereas among the oldest cohorts childlessness was more common in the South of Italy, from the 1960s it has been more prevalent in the North (Tanturri and Mencarini 2004). Also, as shown in Figure 2, the percentage of women with only one child increased in the North from already about a quarter to almost a third among women born in 1930 and 1950, respectively; whereas it remained stable at about 10% in the South. Additionally, almost half of Southern Italian women born 1930-49 had three or more children compared to a quarter in the North of Italy (Santini 1995; Rosina 2004).

[FIGURE 2]

Third, women's age at first birth has increased differently in the North and the South, particularly among cohorts born from the mid-1950s. Overall, Italian women born between 1930 and 1955 experienced a decline in MAFB (from about 26 to 24.8) with little variation across geographical areas (see Figure 3 for more details). However, since the 1955 birth cohort, MAFB have increased faster in the North: the North-South gap in MAFB raised from 0.84 in the 1955 cohort to almost 2.6 years for the cohort of women born in 1969.

[FIGURE 3]

These three main demographic changes suggest that one should expect i) a later entry into grandparenthood over cohorts; and ii) a higher likelihood to be grandparents at younger ages for Southern Italian women as compared to those in the North, as the former tend to have more children at younger ages.

2. Data and Methods

We used data from the 2009 Italian Survey on ‘Family and Social Relations’ (‘Famiglia, soggetti sociali e condizione dell’infanzia’), a nationally representative study which collects information on a range of contemporaneous and retrospective demographic and socio-economic characteristics for about 44,000 individuals (ISTAT 2009).

All respondents were asked whether they were grandparents at the time of interview, and if so, how many grandchildren they had. Grandparents were also asked the age of up to three grandchildren. To determine the *timing of grandparenthood* (i.e., the age of transition into grandparenthood), we calculated the respondent’s age at the time of the oldest grandchild’s birth. For respondents with up to three grandchildren (64% of grandparents), this was simply calculated by subtracting the age of the oldest grandchild from the age of the respondent. For those with four or more grandchildren (36% of grandparents), we considered the lowest age between (i) the age calculated by subtracting the age of the oldest grandchild from the age of the respondent and (ii) the youngest age at which any of the respondent’s children left home¹. In this latter case, we added 2 years assuming that respondents would become grandparents in about 2 years’ time from when their child left the parental home. This is a reasonable assumption for the cohorts under study for two main reasons. First, several studies have shown a strong

¹ This information is available for up to seven children (i.e., 99.6% of all the sample).

correlation between residential autonomy and marital/fertility behaviour, particularly in Italy and among older cohorts. Indeed, almost 90% of Italians born in the 1950s and mid-1960s (i.e., approximately the children of the 1920s-1930s birth cohorts) left their parents' home to get married, with little difference between North and South of Italy. For those birth cohorts, transition to parenthood was also likely within the first year of marriage (Billari and Kohler 2000; Billari et al. 2001; Rosina and Fraboni 2004). Second, our data show that among respondents with up to three grandchildren (and for whom we can establish the *exact* age at grandparenthood), there is a strong correlation ($r=0.78$) between the ages at grandparenthood calculated with the two methods described above. In our study, overall -among the full sample of grandparents- we replaced the age at grandparenthood for about 14% of grandparents.

2.1 Analytical sample and main variables of interest

From the original sample ($N = 43,850$), we selected respondents aged 60 and over at the time of the interview with at least one child, obtaining a working sample of 5,623 mothers and 4,563 fathers ($N = 10,186$) who could be “at risk” of grandparenthood. We could not consider respondents born in the 1950s (that is 50 and older at the time of the interview) because only about 20% of them had become grandparents, and we therefore could not calculate their median age at grandparenthood. Based on a question on residency at the time of the interview, we stratified the sample by geographical area (North and South, based on the statistical partition proposed by ISTAT) and birth cohort (1920s, 1930s, and 1940s). Respondents were asked a number of questions about their fertility histories, based on which we distinguished between respondents with one, two, or three and more children. Following other studies (Keenan and Grundy 2018), we then considered age at parenthood by including a trichotomous variable, indicating whether

the respondent became a parent before the age of 21, between 22 and 29, or at 30 and older.

2.2 Methodological approach

After presenting descriptive statistics, we use survival analysis (Blossfeld et al. 2007) to examine the age at transition to grandparenthood. Following Leopold and Skopek (2015a), we set the time axis to start in a respondent's year of birth and to end at the age at which the first grandchild was born. If no grandchild was born, we censored the process at the interview date. Using Kaplan-Meier estimates, we first calculated the median age at grandparenthood and then the probabilities of being a grandparent at different selected ages (that is at 45, 50, 55, 60, and 65). This way we can show how timing and likelihood of grandparenthood differ by fertility profiles, across cohorts, and across geographical areas. All analyses are implemented separately for men and women, as previous studies have reported different ages at grandmotherhood and grandfatherhood, in line with age differences in the timing of first marriage by gender (Leopold and Skopek 2015b, a; Margolis 2016). However, given the limited space available, we present results only for women and comment on those for men (available upon request). For all analyses and descriptive tables we used weights, based on the population's marginal distribution coefficients provided by ISTAT.

3. Results

3.1 Descriptives

In 2009 (the year of interview), 72% of fathers and 81% of mothers aged 60 and over were grandparents in Italy. However, there were substantial variations across cohorts and geographical areas (Table 1). Over cohorts, we notice a decrease in the proportion

of both mothers and fathers who had become grandmothers by the age of 60. For instance, about 76% of Southern Italian mothers born in the 1920s had become grandmothers by the age of 60 compared to 66% of those born two decades later. Furthermore, the percentages of parents who turned grandparents are always lower in the North compared to the South.

As expected, cohort and geographical differences were quite striking when fertility measures were considered. For instance, although the percentage of men and women with three children or more declined everywhere over the cohorts under study, larger families remained more common in the South than in the North. About 20% of Italian women born in the 1940s had three children or more in the North compared to 44% in the South. In the same cohort, one third of women had only one child in the North compared to 15% in the South.

[TABLE 1]

3.2 Timing of grandparenthood

Figure 4 (upper panel) presents the estimated median age (i.e., the 50th percentile) at grandparenthood for mothers of the three cohorts and two areas under study, from survival analysis. The geographical divide along the North-South line and cohort differences are easily noticeable: Overall, mothers in the North of Italy born in the 1920s had an estimated median age at grandmotherhood of 53 compared to 58 among those born in the 1940s. Also, in the South the median age at grandmotherhood increased from 51 to 55.

Additionally, we estimated timing of grandparenthood by number of children and age at first birth. Interestingly, variations over cohorts and across geographical areas are in this respect not always evident. For instance, mothers of three or more children entered grandparenthood, on average, at about the same age in the North and in the South, with very little postponement (from 48 to 51) over cohorts (Figure 4, middle panel). Similarly, those mothers whose first child was born before the age of 21 transitioned into grandparenthood in their mid-40s across all three generations, with a slight increase of median age only among the youngest cohort (Figure 4, bottom panel). However, it should be noted that mothers of an only child and those who had their first child after the age of 30 show considerable delay in the process of grandparenthood over cohorts both in the North and in the South. The median age at grandmotherhood is above 60 for mothers of an only child born in the 1930s and 1940s, and it approaches 70 for mothers born in the 1940s who had their first child after their 30th birthday (that is, whose first child was born after 1970).

[FIGURE 4]

Similarly, Table 2 shows selected results of the Kaplan-Meier estimates for rates of grandmotherhood at different ages, and separately by the two extreme categories of number of children (1 vs 3+) and of age at parenthood (≤ 21 vs 30+).

Overall, regardless of the geographical area, between 80% and 90% of Italian mothers under study had become grandmothers by the age of 60 if they had three or more children, with slightly lower percentages among the oldest cohorts (see Table 2 for full details). Among mothers with an only child, the percentage who experienced this

transition by age 60 was lower and declined across cohorts: for instance, in the South, 57% of mothers born in the 1920s had become grandmothers by the age of 60 if they had had one child only compared to less than 40% of those born two decades later. Similar patterns and figures were also observed in the North.

When we consider age at first childbirth, we find, as expected, that the large majority (more than 80%) of women who became mothers at young ages (≤ 21) had become grandmothers by the age of 60 in all geographical areas and cohorts considered. On the contrary, a rather low percentage of ‘late’ mothers transitioned into grandparenthood by age 60 and this percentage decreased across cohorts, particularly in the North. For instance, about 40% of women born in the 1920s who became mothers at 30 and older had become grandparents by the age of 60 (41% in the North and 46% in the South). Among those born two decades later, the percentages of ‘late’ mothers who had become grandmothers by the age of 60 were 13% in the North and 20% in the South.

Results for fathers (not shown, available upon request) yielded similar conclusions, although the transition to grandparenthood occurred, on average, about 5 years later for all cohorts and geographical regions considered, reflecting the usually older age of men in couples. Yet, increases in the median age at this transition were similar to those observed among mothers. From the 1920s to the 1940s cohorts, grandfatherhood was delayed by about 5 years rising from 58 to 63 in the North, and from 55 to 60 in the South. Also among fathers, those who had their first child above age 30 and those who had one child only transitioned into grandparenthood in the mid- to late-60s and beyond, particularly among the most recent cohorts under study.

[TABLE 2]

4. Discussion and Conclusions

This study was the first to investigate explicitly fertility differences in the demographic transition to grandparenthood, filling gaps in the knowledge about one of the most common role transitions in later life. Using data from Italy and exploiting its well-known fertility differences over cohorts and across geographical areas, this study found a postponement in the timing of grandparenthood across subsequent birth cohorts, in line with Leopold and Skopek (2015a) and Margolis (2016).

However, our analyses clearly showed that the postponement of this transition is mostly driven by fertility compositional changes across cohorts. Indeed, the median age at grandparenthood has not changed much across cohorts and geographical areas for mothers with three or more children as well as for those who have experienced parenthood at younger ages. Mothers of three or more children faced the transition into grandparenthood in their late 40s/early 50s, similarly across cohorts and geographical areas considered. Despite the slight increase observed in their median age at grandparenthood over cohorts, the speed is slower (about 2-3 years in two decades) than that observed in the general population (4-5 years). Also, women who became mothers at 21 or younger had become grandmothers in their mid-40s both in the North and in the South of Italy, and in all birth cohorts considered. This suggests that the overall shift that we observe at country-level (that is, both mothers and fathers in the North have been transitioning into grandparenthood later than those in the South and in both macro-regions there has been a postponement of grandparenthood) is mostly driven by dramatic changes in the distribution of fertility across cohorts and geographical areas.

Our findings have important implications for research on grandparenthood and related areas of study, such as grandparenting. First, our analyses suggest that given current

cohort trends in fertility (with increasing age at childbirth and levels of childlessness), subsequent cohorts of men and women are less likely to experience the transition into grandparenthood at all and if they do, they are more likely to experience it at later ages. This may in turn affect the subjective perception of this event and, consequently, the meaning, experience, expectations, and responsibilities attached to this role. Such postponement is also coupled with fewer grandchildren which may have important consequences on how grandparents relate to their grandchildren, with more exclusive relations to them compared to the past (Hank et al. 2018).

Second, our results suggest that the overall postponement of median age at grandparenthood is not uniform across different subgroups of mothers and fathers, with those having large and early families experiencing this transition at younger ages than those with fewer and later born children. This is important because even in low fertility countries like Italy, a non-negligible percentage of women (about 15%) in 1970 completed their fertility histories with three or more children (ISTAT, 2017). These mothers are likely to become grandmothers in their mid-50s and therefore to face the prospect of juggling multiple roles, combining paid work with family-caring obligations (Evandrou and Glaser 2004; Vlachantoni et al. 2019). Supporting these women who might have to provide care for both their parents and their grandchildren while being in paid employment still remains a critical challenge, particularly given that becoming a grandparent affects early retirement and that taking care of grandchildren conflicts with commitments such as paid work (De Winter and Van Bavel 2013; Di Gessa et al. 2016a).

Third, the changing profile of grandparenthood may also have implications for the type and quality of intergenerational exchanges of time and money resources. On the one

hand, becoming a grandparent later might reduce the overlap with other activities such as care for living parents and employment. On the other hand, however, given that the health of grandparents has important implications for intergenerational transfers (Hank and Buber 2009; Di Gessa et al. 2016a), those who become grandparents later might be less likely to provide care to their grandchildren in light of current trends in disability and functioning among older people (Chatterji et al. 2015).

A few important limitations of our study should however be acknowledged. First, our data did not allow us to estimate precisely the age at grandparenthood for about a third of grandparents. Future studies wanting to investigate how compositional changes affect the timing of grandparenthood will be required when more accurate data is available. Second, in our study we could not consider how multigenerational fertility changes are affecting the transition to grandparenthood for the most recent cohorts of people. Given that only 20% of respondents born in the 1950s had become grandparents by the time of interview (i.e. when they were aged 50-59), it would have not been possible to calculate the median age at grandparenthood unless we imputed their survivor curves, which was out of the scope of this work. Finally, our study focussed on respondents with children; further research is required to investigate the effect that childlessness (of both generations) has on the likelihood of the transition into grandparenthood.

Despite these limitations, our study has shown how changes in fertility over time and differences across regions have shaped the transition into grandparenthood in Italy, offering new insights on the extent to which the delay of grandparenthood is attributable to compositional fertility changes (such as postponement of first birth and reduction in family size). Current and future trends in fertility will impact on the future evolution of

the demography of grandparenthood, with relevant implications for intergenerational transfers.

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Table 1. Descriptive statistics on the total sample and parents, by geographical area, cohort, and gender

W O M E N						
	North			South		
	1920s	1930s	1940s	1920s	1930s	1940s
ALL SAMPLE (N=6,496)						
Childless	16.3	11.9	11.0	14.9	14.6	12.5
Grandparent	72.6	73.4	56.0	79.6	77.2	65.9
N	873	1,493	1,651	546	918	1,015
ONLY MOTHERS (N=5,623)						
Number of children: 1	33.1	26.4	31.0	18.2	12.1	15.2
2	40.3	44.5	49.8	27.6	34.5	40.8
3 +	26.6	29.1	19.2	54.2	53.4	44.0
Age at parenthood: ≤ 21	17.9	14.2	17.6	14.9	21.1	24.0
≥ 30	21.8	17.9	15.2	26.5	21.1	18.3
Mean	26.1	26.0	25.3	26.7	25.8	25.3
Grandparent	88.7	85.2	66.3	93.9	90.0	72.8
Grandparent by 60	71.8	66.6	56.2	75.9	74.2	65.5
N	732	1,301	1,468	463	781	878
M E N						
	North			South		
	1920s	1930s	1940s	1920s	1930s	1940s
ALL SAMPLE (N=5,213)						
Childless	11.0	12.2	13.7	8.3	9.8	9.4
Grandparent	79.3	69.0	45.2	83.8	78.7	54.9
N	470	1,199	1,544	334	715	951
ONLY FATHERS (N=4,563)						
Number of children: 1	27.7	26.6	34.4	14.8	13.2	11.8
2	43.8	48.6	50.0	32.9	38.3	47.4
3 +	28.5	24.8	15.6	52.3	47.5	40.8
Age at parenthood: ≤ 21	3.0	2.3	2.9	3.8	5.2	4.9
≥ 30	54.7	44.9	35.4	53.1	45.8	40.8
Mean	30.4	29.7	29.1	30.6	29.6	29.3
Grandparent	89.1	78.7	52.6	91.3	87.1	60.6
Grandparent by 60	55.1	46.7	39.6	62.9	62.9	50.3
N	415	1,041	1,315	301	636	855

Source: Famiglia, soggetti sociali e condizione dell'infanzia (2009).

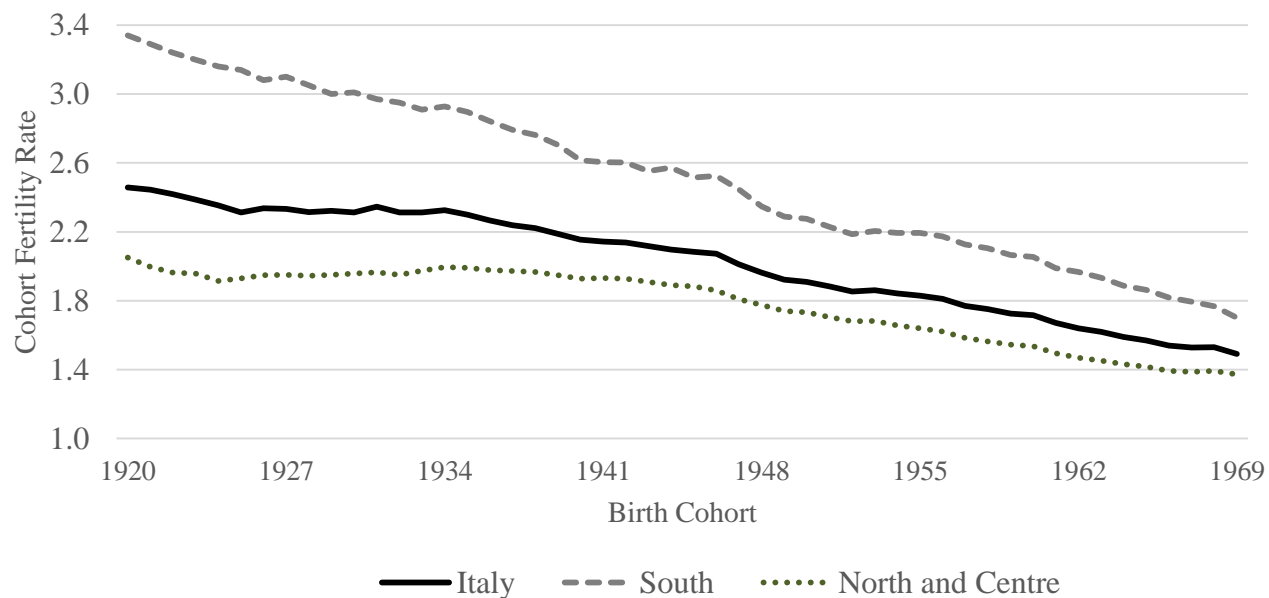
Note: Parents are subsamples of the total sample. Own calculations. Weighted data

Table 2. Women's cumulative probability of being a grandmother at different ages, by cohort, geographical area, and two selected indicators of fertility (total number of children and age at first birth)

North							South					
1920s		1930s		1940s			1920s		1930s		1940s	
<i>Total number of children</i>												
Age	<i>1 child</i>	<i>3+</i>	<i>1 child</i>	<i>3+</i>	<i>1 child</i>	<i>3+</i>	<i>1 child</i>	<i>3+</i>	<i>1 child</i>	<i>3+</i>	<i>1 child</i>	<i>3+</i>
45	5	25	6	28	3	21	10	29	11	39	2	26
50	21	55	17	52	8	45	26	60	19	63	8	48
55	40	79	29	74	20	62	47	77	31	81	19	65
60	55	89	47	88	36	79	57	88	44	88	39	80
65	63	94	57	93	54	87	67	94	56	94	49	87
<i>Age at first birth</i>												
Age	≤ 21	≥ 30	≤ 21	≥ 30	≤ 21	≥ 30	≤ 21	≥ 30	≤ 21	≥ 30	≤ 21	≥ 30
45	47	1	54	1	33	0	54	5	62	3	42	1
50	69	6	72	2	58	1	74	10	82	6	61	3
55	83	21	84	9	77	4	87	23	90	18	79	11
60	89	41	87	26	84	13	91	46	94	27	83	21
65	90	55	92	42	88	33	93	65	96	51	86	37

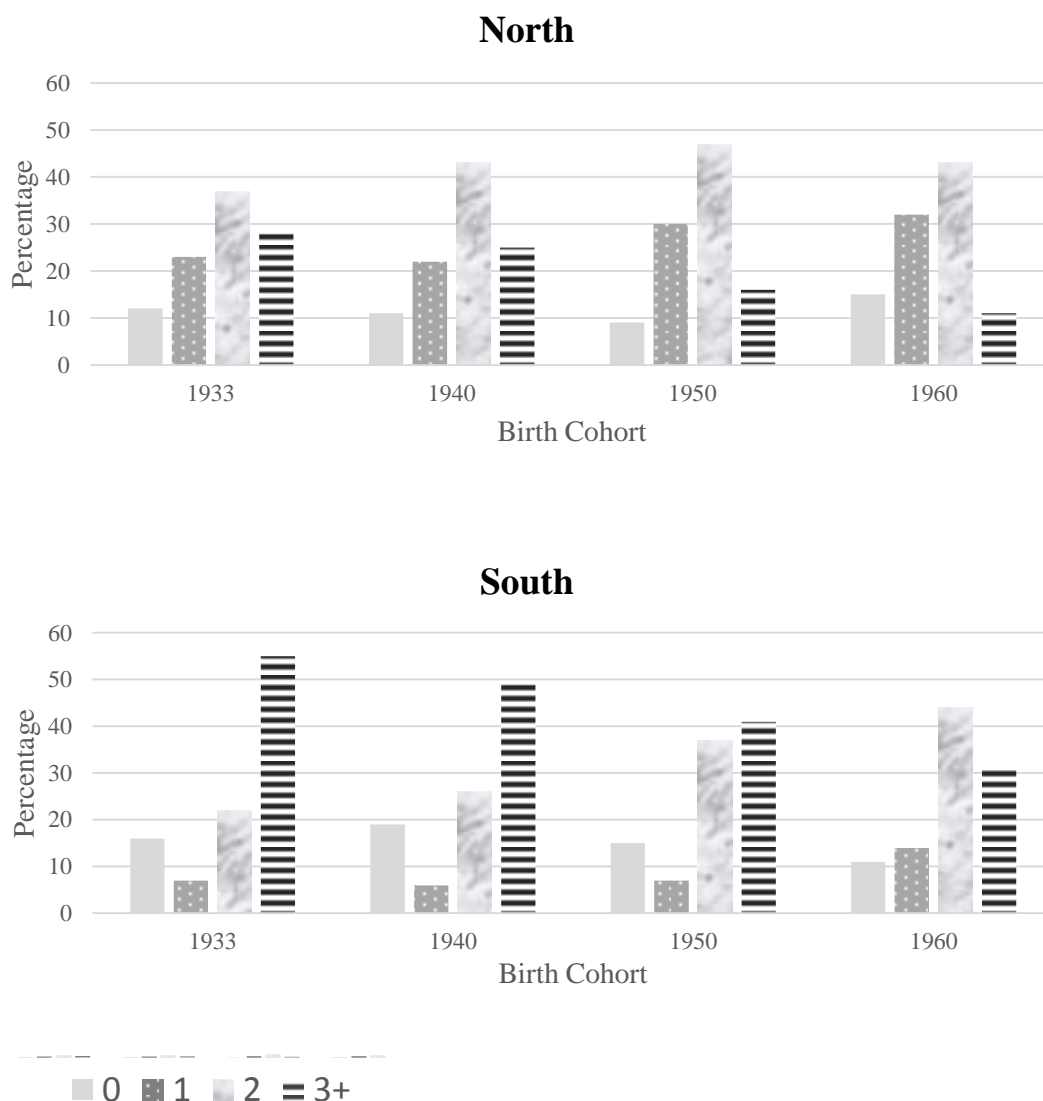
Source: Famiglia, soggetti sociali e condizione dell'infanzia (2009). Notes: Analyses restricted to parents. Estimated probabilities are expressed in percentages. Values are obtained by Kaplan-Meier estimation. For these analyses, we present results for up to the age of 65 in order to allow for equal-sized age intervals across all three birth cohorts under study. Own calculations.

Figure 1 Cohort fertility rate in Italy and by geographical areas (cohorts born 1920-1969)



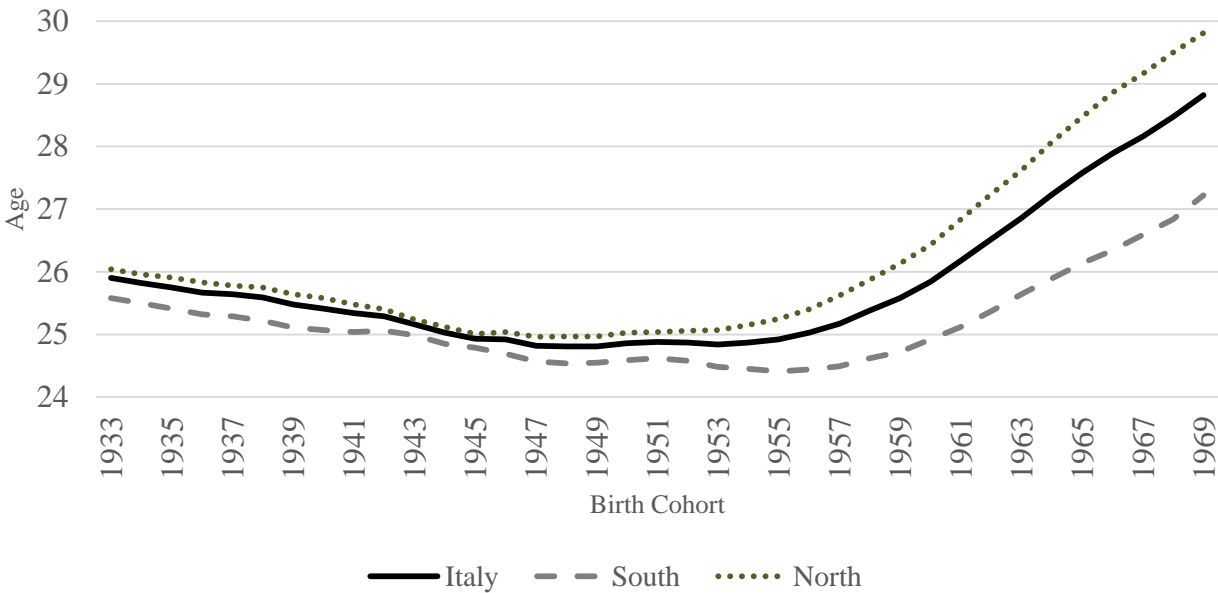
Sources: Own elaboration of data from ISTAT (1997, 2017)

Figure 2. Percentage of women who have completed their childbearing with 0, 1, 2, 3+ children, by birth cohort and geographical area (selected cohorts)



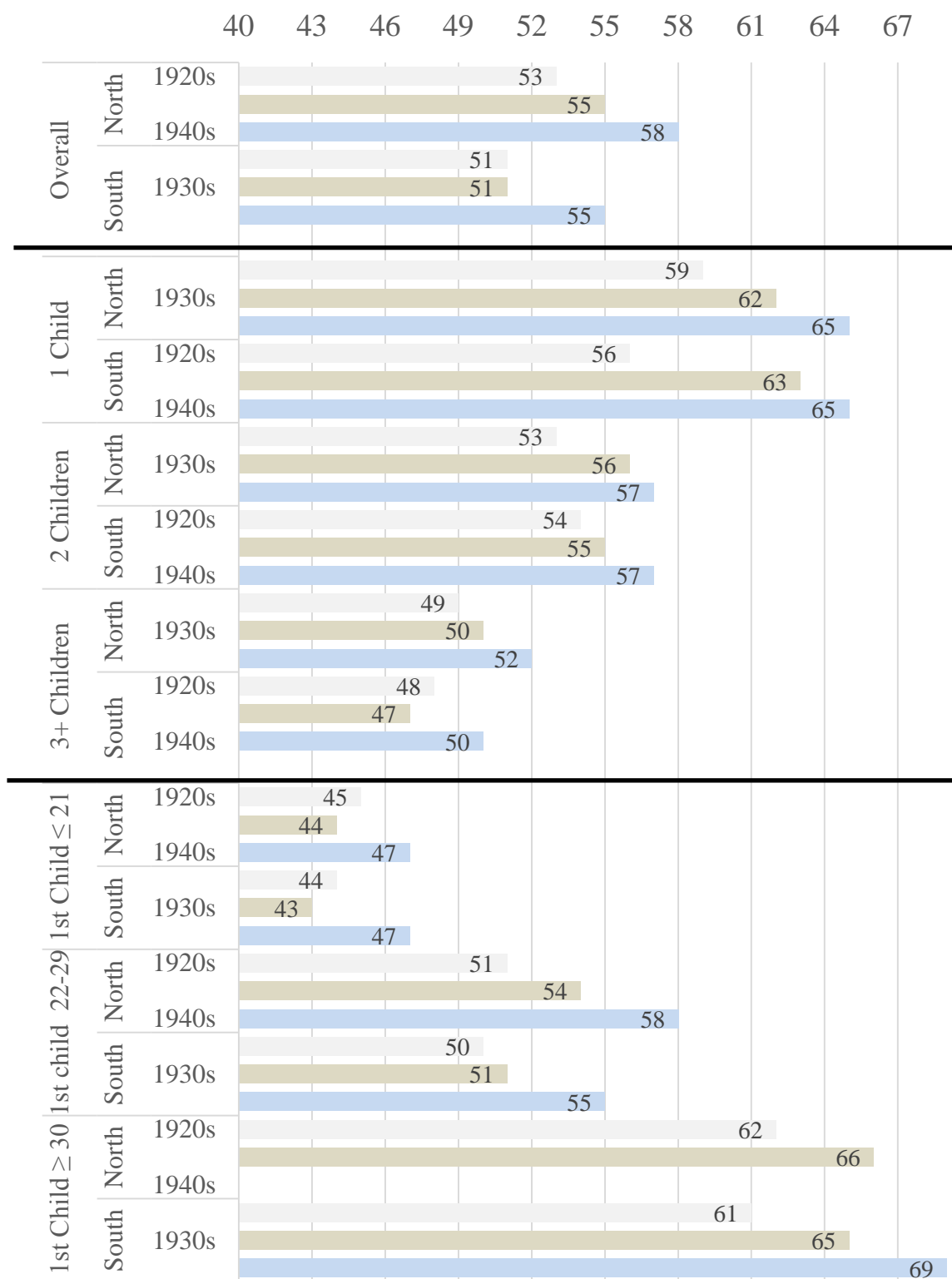
Source: Own elaboration of data from ISTAT (2017).

Figure 3. Mother's average age at first childbirth in Italy and by geographical areas (cohorts born 1933-1969)



Source: Own elaboration of data from ISTAT (2017)

Figure 4. Trends in median age at grandmotherhood by geographical area, cohort, and selected indicators of fertility



Source:

Famiglia, soggetti sociali e condizione dell'infanzia (2009). Notes: Analyses restricted to mothers. No data available for the 1940s Northern mothers whose first child was born after the age of 30 as less than 50% of this cohort had experienced grandmotherhood before the interview date. Own calculations, weighted data.