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Toward a Better Theory of Very Low Fertility: Lessons from Italy

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Among the world's wealthier countries, few—if any--more important demographic changes have taken place in recent decades than the shift toward levels of fertility well below replacement. This development has tremendous implications for the future economic and social well-being of the people living in these countries, where—barring huge and unprecedented waves of in-migration--fewer and fewer working-age people must support more and more older people. But this historically sudden, and largely unforeseen plummeting of fertility poses a challenge of another kind as well, for it has called into question previous theorizing about demographic behavior. The persistence of sub-replacement childbearing is today leading to a fervid reevaluation not only of theories of fertility, but of theories that seek to account for human behavior more generally.

Embarrassingly, this development also caught scholars by surprise in its geographical distribution, for, contrary to prevailing theory, by the 1990s the world's lowest fertility levels were to be found in Italy and Spain. Total Fertility Rates in both countries reached 1.2, 43% below replacement, levels never previously known in major populations under non-crisis conditions. These rates, sufficiently persistent not to be dismissed as merely a period effect captured by TFR measures, contradicted predictions made by proponents of the two major theoretical approaches to explaining fertility: the economic and the cultural. Rapidly falling fertility in these Western (and a limited number of Asian) countries, scholars of an economic bent had argued, could be explained by the massive entry of women into the extra-domestic labor force. Yet, awkwardly, Italy and Spain continued to be near the bottom of the distribution of rates of female labor force participation (FLFP) in Europe, while Europe's highest FLFP rates could be found among country's having the highest fertility. Other scholars, of a more cultural persuasion, had viewed the family-focused societies of Italy and Spain, at the heart of Catholic Europe, as the least inclined toward the values of individualism and secularization that were deemed responsible for plummeting fertility. That it was two of the countries with the lowest illegitimacy, non-marital cohabitation, and divorce rates that also had Europe's lowest fertility rates ill accorded with those theories.

In the case of economic theory, few theorists confronted by the evidence have abandoned their approach. Rather, a series of other factors have been identified *ex post facto* to be added to the equation (Steinmetz 1999:9). Particularly notable here are the introduction of state- and community-level variables regarding public childcare availability, maternity leave benefits, and the like. The very limits of economic theory, meanwhile, have also kept alive interest in potential cultural explanations for very low fertility, despite the evident inadequacies of second demographic transition theory.

Without an adequate theoretical understanding of very low fertility, researchers find themselves unable to adequately address one of the most important theoretical and

policy questions raised by such low fertility, namely, just how low is fertility likely to go. Demeny (1997) has properly criticized past UN and World Bank population projections for assuming an endpoint of replacement fertility, while Namboodiri & Wei (1998) have lamented the lack of serious theoretical work on the subject.

To date, theoretical work on fertility (and other demographic behavior) has been characterized by approaches that distinguish between economic (and demographic) determinants on the one hand, and cultural determinants on the other. Those who pursue economic approaches—generally linked to rational actor models—often acknowledge a role for cultural difference, but the economic models themselves tend to take them as exogenous, small, or random, and in any case unidentified and unexplained. Insofar as cultural forces are incorporated into the models, they are first reduced to terms that can be entered into equations (e.g., at the aggregate level, such variables as percent Catholic or percent voting for the left; or by using individual-level attitudinal and behavioral data, such as attitude toward women devoting their lives to their careers, or frequency of church attendance). Anthropologists have been critical of these approaches, viewing them as failing to capture the complexities of culture, of reifying a dynamic process, and failing to recognize the key role played by the symbolic construction of reality (Hammel 1990; Kertzer 1995, 1997; Kertzer & Fricke 1997). On the other hand, anthropologists who argue that human behavior is to be understood only through qualitative methods and hermeneutical theory have tended to ignore much important work that has taken place in other social sciences utilizing survey methodologies and statistical analyses.

The theoretical underpinnings of the project reported on here (ELFI: Explaining Low Fertility in Italy) lie in the development of an approach that takes advantage of the valuable theoretical perspectives and methodologies of mainstream demographic, sociological, and economic studies of fertility, while capturing the central role played by culture in demographic decision-making. In this paper we focus in particular on striking differences in fertility patterns across Italy's regions to try to test the adequacy of existing theories of very low fertility and to suggest an alternative approach.

The Current State of Research on Very Low Fertility

Classic demographic transition theorists assumed that fertility would stabilize at replacement levels. By the 1970s, however, it was becoming clear that much lower levels of fertility were emerging in some of the most advanced industrialized states. What was surprising to many, however, was just how low fertility levels were falling. Kohler et al. (2002:641) have distinguished a category of "lowest low fertility" countries, defined as having a TFR at or below 1.3. By the end of the twentieth century, 14 countries in southern, central, and eastern Europe, with a population of 370 million, had such lowest low fertility. What had also become clear by century's end was that rather than the predicted fertility convergence in Europe and other advanced economies, fertility rates showed remarkable divergence in countries of similar levels of economic development.

Many of the countries that today have lowest low fertility were until 1989 part of the Soviet bloc, and the economic and social dislocations of recent years might be thought to explain what could therefore be seen as something of a "crisis" demographic

regime. But the two countries that first entered this category—Italy and Spain, in 1993—cannot be explained in this fashion. As Chesnais (1998:91) pointed out, "No official population forecast, either national or international, had anticipated a total fertility rate of 1.2 for any country, [much] less for Mediterranean countries, which are still commonly viewed as "laggards" and…family-oriented. This outcome is probably the biggest surprise of European demographics at the end of the present century." The longstanding fertility differential between northern and southern Europe was unexpectedly reversed. Countries viewed as traditional, Catholic, and family-oriented now had markedly lower fertility than those that were Protestant, more secular, and had weaker family ties (Chesnais 1996:729). Italy, Spain, and Greece, having among the lowest female labor force participation (FLFP) rates in Europe, also now had virtually the lowest fertility rates (Del Boca 2002:11).

To date, economic theories of various kinds have dominated the theoretical debate on very low fertility. Following Becker (1976) and other neoclassical economists (Mincer 1963), much work has focused on increased female autonomy, the movement of more women into the labor force, and calculations of the direct and indirect costs of childbearing to the family economy. At a more macro-level, Easterlin (1976) and colleagues (Easterlin and Crimmins 1991) have advanced a theory of relative economic deprivation, linking fertility decisions to economic opportunities related to relative cohort sizes and to judgments based on expected levels of economic wellbeing linked to demographic and economic cycles. As noted by Macunovich (1996), neither theory seemed to be born out by the course of fertility in the world's wealthier countries in recent years.

The economic feature that has most attracted theorists' attention has been increasing levels of FLFP. The more women leave the household to enter paid employment, the costlier it becomes for them and their households for them to bear children. Embarrassingly for the theory, however, in recent years the country-level correlation between FLFP rates and TFR has rather abruptly reversed sign. As recently as the early 1980s it was negative, and, in the words of Lesthaeghe and Willems (1999:221; Ahn & Mira 1999:2), it "was seen as one of the most stable relationships in economic demography." Yet by the 1990s the correlation had become sharply positive. In trying to save their theory, demographers have recognized that the relationship between the two must be more complicated. Bernhardt (1993:32), in describing the once well established hypothesized relationship as now "inconclusive," has argued that "Most of the research done in this area is American," while in Europe "the inhibiting effect of work on fertility has been at least partially removed with the help of social and institutional arrangements," citing in particular the provision of publicly funded childcare, maternity leave, and tax benefits (Gauthier 1996). An additional caution not to abandon the female labor force participation theory altogether comes from the observation that during the period where the sign of the cross-national correlation between FLFP and fertility rates reversed, the negative temporal relationship between the two values continued to hold within many countries (Kögel 2004).

More generally, the past few years have seen an avalanche of research aimed at examining how various social and public institutions affect the relationship between women's work and the cost of childbearing and so affect fertility (Engelhardt &

Prskawetz 2004; Brewster and Rindfuss 2000). As Rindfuss et al. (2003:10) recently put it, "Those countries that minimize the incompatibility between roles and facilitate the efforts of women who want to do both are likely to see increasing fertility." However, even here results to date have not been convincing. Engelhardt and Prskawetz 2004:55), looking at trends in OECD countries over time, conclude: "Trends in the variables that would be representative for the role incompatibility hypothesis and the ease in combining work and child-rearing…cannot be related to the trends in fertility."

In addition to economic factors, demographers have also pointed to the possibility that other demographic changes have an impact on fertility. One such hypothesized determinant is the delay in age at marriage that has been witnessed in many of the world's wealthier countries. Yet we now know that increases in mean female age at marriage do not necessarily lead to fertility decline. The Netherlands and the Nordic countries experienced an increase in mean age at first birth in the last two decades of the 20th century comparable to that of Italy without any notable decline in fertility (Billari & Kohler 2002:5). It is now clear that, at the low parity levels found in modern Europe, the orders of magnitude of change in age at marriage and age at first birth (Toulemon 2001:15) cannot explain between-country fertility differences.

In recognition of the limitations of economic and demographic theories to account for very low fertility, a number of scholars have argued that no adequate theory can be developed that does not incorporate an understanding of culture. Most prominent in this regard has been Second Demographic Transition (SDT) theory. Van de Kaa (1987:6), one of the originators of this theory, cites Schmid's observation: "Individualism is the underlying cause of low fertility." Or, as Lesthaeghe & Surkyn (1998:8) argue, "The two most salient features of Western ideational change have been the processes of secularization and individuation." Following the first demographic transition—in which "natural fertility" gave way to birth control and replacement levels of fertility—this theory identifies a second demographic transition, first appearing in 1965-75, in which fertility falls dramatically below replacement. Curiously, where this decline occurred somewhat later—as in Italy, Spain, and Portugal—it was steeper and fertility fell further (van de Kaa 1993:83). Van de Kaa and other second transition theorists attribute this transition to a basic shift toward values emphasizing "the rights and self-fulfillment of individuals" (van de Kaa 1987:5) and away from traditional family-oriented values, citing the dramatic increase in late-twentieth-century Europe in divorce, cohabitation, and nonmarital childbearing. Yet the problem with SDT theory, as McDonald (2001) and others have noted, is that the countries in Europe that currently have the lowest fertility are not those with the most secularization or individualization, but, on the contrary, those showing the strongest commitment to the family, reflected in relatively low divorce, non-marital cohabitation, and illegitimacy rates, and in the propensity of adult children to remain in their parental household until marriage and to live very close to them thereafter.

The alternative cultural approach that McDonald proposes reflects the influence of feminist theory. Mason (1997) has argued that demographic change can only be understood in the context of each society's "gender system," by which she means "the socially constructed expectations for male and female behavior." The gendered

division of labor and of rights implies gender inequalities in power, autonomy, and (at least potentially) well-being. As a fundamental part of the culture, these are resistant (although of course not impervious) to change, even in the face of economic and other changes. McDonald (2000:427-8), citing Mason's work, hypothesizes that "very low fertility in advanced countries today is the outcome of a conflict or inconsistency between high levels of gender equity in individual-oriented social institutions and sustained gender inequity in family-oriented social institutions." From this perspective, the fact that Italy and Spain have such low fertility is explained by the preservation of a traditional gender system in the context of expanding labor force opportunities for women. Put crudely, even if women work full time, their husbands and others around them expect them to do all the traditional female forms of household labor and childcare. This leads to a prediction for countries such as Italy: "Very low fertility rates will persist unless gender equity within family-oriented institutions rises to much higher levels than prevail today" (McDonald 2000:438).

The Italian Case:

Italy's fertility decline in the last quarter of the twentieth century was precipitous, TFR being halved between 1972 and 1993, when it stood at 1.2. In his recent Population Association of American 2003 presidential address, which focused on very low fertility, Morgan (2003:595) takes Italy as his prime case of extremely low fertility, contrasting it to the U.S. with its much higher fertility. While Morgan properly highlights the great theoretical importance of the Italian case, his attempted explanation of the dramatic contrast with the U.S., attributing higher U.S. fertility to a greater "institutional response"--pointing in particular to the greater provision of affordable childcare in the U.S.—has little empirical support, nor does he cite any Italian evidence in support of this argument. By the 1990s over 80% of all Italian children aged 3-5 were in public daycare facilities, virtually all provided by or heavily subsidized by the government.[1]

One thing is clear, Italy's position as having among the lowest fertility levels in Europe does not correspond with a relatively high women's labor force participation rate, as home economic theories would have it, but quite the reverse. In 1990, as Italy was about to reach the lowest fertility rate in Europe, its FLFP rate for the central age group 25-54 was 54%, compared to an EU-15 mean rate of 64%. Neighboring France, with a much higher fertility rate, had a FLFP rate in the same age group of 72%. The UK, similarly, had much higher fertility and a much higher FLFP rate (73%). Since that time, Italy's FLFP rate has risen (to 64% in 2004), but its relative position has not changed much (the EU-15 FLFP rate in the 25-54 age group had climbed to 76% by 2004) and the increased female labor force participation was not accompanied by any decline in Italian fertility (OECD Employment Outlook 2005).

[1] Our calculations from the nationally representative ISTAT survey Family and Social Subjects (FSS) 1998 show 82% of all Italian children aged 3-5 to be in nursery schools, virtually all publicly provided or heavily subsidized.

Reher (1998) places Italy among those European countries that have a strong family system-- in which "traditionally the family group has had priority over the individual"-- a dichotomy dividing European countries that he takes to be many centuries old. Using 1994 data, he contrasts the 21% and 22% of people aged 25-29 living with their parents in the UK and France respectively, with comparable figures of 66% in Italy and 65% in Spain (1998:223). In 1995, 71% of all Italians aged 20-29 were living with their parents, compared to 33% in France and 31% in the UK (Del Boca 2002:12, using Eurostat data). This pattern remains unchanged today. Various post hoc economic explanations have been given for this pattern—high cost of housing, young adult unemployment, etc. (Saraceno 2000)—but none of these are convincing, not least because surveys show that fully-employed young Italian adults say that they find it to their liking to stay in the parental home, where they typically pay almost nothing for their upkeep, have their mother do all their cooking and wash, and can spend money on cars, vacations, and discos instead (Sgritta 2001; Palomba 2001). Similarly, illegitimacy ratios, divorce rates, and nonmarital childbearing in Italy are a small fraction of those found in northern Europe, and the use of modern contraception is much lower in Italy.

After marriage, Italians remain very close to their parents. A 1994 national survey found that, among young wives (aged 25-34), 29% lived in the same home or same building as their parents, another 37% within one kilometer, and an additional 19% in the same town. These figures changed little for older women who had living parents (Cioni 1997:215). Adult Italians appear to have the highest intensity of contacts with parents of any Europeans (Dalla Zuanna & Micheli n.d.:4), and cohort comparisons show that, again contrary to all theoretical predictions, Italians are becoming ever more closely bound to their families (Barbagli et al. 2003:174).

Regional Variation

Italy is marked by important regional variations in demographic, economic, and social patterns of a sort that make the Italian case an especially fruitful one for theoretical exploration of the impact of women's work and cultural values. Replacement levels of fertility were reached in many parts of the north beginning with the 1920 birth cohort, while as late as the early 1980s the TFR in a number of southern regions still stood above replacement, the highest (2.3) found in Campania (capital Naples). At the same time, the TFR had already reached 1.1 in the northeastern region of Liguria, and below 1.2 in Emilia-Romagna in the center (capital Bologna). At the end of the 20th century, while fertility in regions like Liguria and Emilia-Romagna had not declined further, the southern regions showed much lower fertility than they had, with Campania still the highest in Italy, but now having a TFR of only 1.5. Remarkably, Sardinia, known for its economic underdevelopment, rugged terrain, and traditionalism, had, by century's end, attained a TFR of 1.04, the lowest fertility rate in Italy (Dalla Zuanna & Crisafulli 2002:tab. 2). Completed total fertility for women of the 1963 birth cohort was 1.22 in Emilia-Romagna, compared to 2.07 in Campania and 2.08 in Sicily (Santini 1997:tab. 1). (**Figure 1**)

Women in the north are also much more likely to be in the paid labor force. In the mid-1990s, 64% of women aged 20-49 in the northwest, but only 36% in the south did paid work. Even more strikingly, 41% of the southern women had never been in the labor force, compared to only 7% of those in the northwest (F. Bernardi 1999:753). Indeed, the increase in FLFP has been quite modest in the south, with the proportion of women who had ever entered the labor force rising only from 41% among those born before 1929 to 51% in the 1944-58 birth cohort (compared to 84% in the north) and little sign of any increase since then (Barbagli et al. 2003:tab.1.8). Among women with children under age six in the mid-1990s, 62% of the northerners and only 31% of the southerners were employed (Sabbadini 1999:tab. 3.5).

A 1998 national sample survey (Famiglia e Soggetti Sociali, FSS) asked all individuals if they had ever been in the paid labor force. The persistence of strong regional differences, particularly a north-south contrast, is clear (**Table 1**).

Survey data also show more traditional gender norms prevailing in the south compared to the north (Sabbadini 1999: tab. 6.3), and both premarital cohabitation rates and divorce rates are notably higher in the north (1999:tab. 4.7; Barbagli 1990). A good indicator of the kinds of values identified with the Second Demographic Transition Theory is offered by the choice Italians are given at marriage of whether to choose to hold property jointly or separately. The latter is clearly identified with giving married women increased autonomy. The 1998 FSS survey reveals the following regional pattern, contrasting the most "modern" area, the northwest, with the south (**Table 2**). In both regions, historical change toward spousal economic autonomy is clear. Yet the gap between the two regions has only grown greater, a clear indication of substantial cultural difference. By contrast, there are relatively small regional differences in the propensity of young adults to live with their parents (Sabbadini 1999:tab. 5.3).

Given Italy's strong pattern of regional differences--a product of the fragmentation of the Italian peninsula into several separate states, speaking different languages, until Italian unification in 1861—it is instructive to examine the extent to which economic and demographic factors account for regional variations in fertility, either cross-sectionally or over time. We utilize life course data, based on national sample surveys, for this purpose, but before doing so we examine regional level characteristics and their correlations.

Table 3 provides 2003 data on women's labor force participation by macro-region in Italy, looking separately at the key age groups of childbearing—25-34 and 35-44—and also providing the more standard measure for all women aged 15-64. Although this macro-region pattern appears to lend some support for a negative relationship between women's LFP and fertility, an actual look at Italy's 20 administrative regions shows just how modest the relationship is. (**Figure 2**) Totally unpredicted is the fact that the region with the lowest fertility in Italy today is the island of Sardinia, which forty-five years ago had the highest fertility rate in the country (TFR=3.5). Sardinia's 2003 TFR of 1.06 was achieved in a region where only 58% of the women aged 25-34 (and 55% aged 35-44) were in the labor force. By contrast, Trentino, the northeastern region having the second highest fertility rate in Italy (TFR=1.46) had a FLFP rate of 76% among women aged 25-34.

A look at historical trends similarly fails to offer strong support for a tight link between the extent of change in FLFP and the extent of the decline in fertility. We present below the major regions (Italy has 20 regions) representing different parts of the country. In general, of course, over time there has been an increase in female labor force participation and a decrease in fertility, but the link between the two is highly variable. If we compare the two islands that are often lumped together in official Italian statistics, we see, for example, that from 1972 to 1992, Sicily's FLFP rate increased more rapidly than did Sardinia's, yet Sardinia's TFR had declined 58% and Sicily's only 36%. Similarly, a look at Emilia-Romagna shows how little evident relationship there is over the last two decades of the twentieth century between changes in FLFP and changes in fertility rate.[2] (**Table 4**)

One of the most notable features of recent trends in Italian fertility is a tendency toward convergence of fertility rates between the North and South, yet this is not accompanied by any convergence in FLFP rates between north and south. We illustrate these trends below by looking at the three largest northern regions (Piedmont, Lombardy, and Veneto), the largest central region (Emilia-Romagna), the largest mainland southern region (Campania), and the striking case of Sardinia. (**Figure 3**)

If a regional comparison leads to doubts about the adequacy of an explanation focusing on women's work, attempts to link regional level cultural differences of the sort theorized by SDT theorists also lend little support to this alternative. The SDT theory placed special emphasis on secularization and a movement away from religious values and religious identities. In the Italian context, this is best captured by examining the spread of civil marriage. For a couple to choose a civil marriage rather than a religious marriage is to make a strong public statement of their alienation from the Church, one that generally reflects their own family of origin's views. Substantial regional variation in this practice makes this potentially a highly instructive test of SDT theory. Of all marriages in Italy in 2001, 73% were religious, meaning that over a quarter of all marriages were conducted civilly, generally in the local town hall. In Italy's largest northern regions—Piedmont, Lombardy, Veneto, Liguria--the proportion of religious marriages ranged from 60 to 69%. In Emilia-Romagna and Tuscany, in the heart of Italy's red belt, with its anticlerical and left-wing tradition, only 63% of weddings were celebrated in Church. By contrast, in no part of the mainland south was the percentage of religious marriages under 80%, and in the deep south (Puglia, Basilicata, Calabria) it was near 90%.

Yet plotting regional TFR against percentage of religious marriages in 2003 offers little evidence of any link between secularization and low fertility (**Figure 4**). Italy's least secularized region using this measure, and certainly one of its most traditional, was the deep southern region of Basilicata, where only 9% of marriages were celebrated outside a church, yet in 2003 Basilicata's TFR was 1.20, actually below the national average. It is worth noting that Basilicata also had among the lowest FLFP rates in Italy, with only 46% of women aged 25-34 in the labor force.

[2] Clearly the recent increases in TFR in Italy require investigation to determine to what extent they are due to earlier postponement of childbearing and hence, as period measures, obscure the underlying cohort fertility pattern (Bongaarts 1999)

Micro-level, life course analysis

Having failed to find support for the dominant theories of very low fertility through regional-level analysis, we now turn to individual-level data, taking advantage of one particularly valuable panel study. The Italian Longitudinal Family Study (ILFI) is currently the only ongoing prospective social survey in Italy. Based on an original sample of 4,404 households within which all members are interviewed (9,770 individuals >18 years old), ILFI includes detailed fertility histories that make it especially valuable for our analysis. The first wave of the panel took place in 1997 and we here analyze data through the first 3 waves (1997, 1999, 2001). Men and women aged 18-49 constitute about 60% of the initial sample. The dynamic nature of the sample means that at every wave it loses all individuals who a) died; b) migrated abroad; or c) became severely impaired; and it gains individuals who a) reach age 18 and belong to the originally sampled households; and b) enter via union or cohabitation. ILFI is representative of the Italian population nationally. [3]

We examine three crucial life course transitions: transition to marriage, transition from marriage to first birth, and transition from first to second birth for Italian women born between 1941 and 1970. It is in the fertility outcomes of these women – who enter the reproductive years in 1955 and with most fertility occurring between 1960 and 2001 -- that the dramatic and puzzling fall of Italian childbearing is manifest.

Women in birth cohorts 1941 to 1970 are approximately 30 to 60 years old at the time of the ILFI survey. For the youngest cohorts, we cannot observe the full duration of their childbearing exposure, although our models adjust for censoring. For the oldest cohorts, we observe the full exposure window. Premature mortality of selectively differential women could affect our results, although given limited female mortality at these ages it is likely that any such effect is slight.

We analyze each of these three transitions with Cox regression models and introduce a set of covariates designed to capture both predetermined and time-varying traits of the women. Of course, it is only women who experience one of these cumulative life transitions who join the population of women at risk of experiencing the next transition. Thus, we can expect that successive transitions may tap a pool of women who are increasingly selective. We present a preferred model, after having explored a large number of alternative specifications.

Following our interest in weighing the potential value of theories that focus on women's work on the one hand (family economic theory), and secularization (SDT theory) on the other, we pay particular attention to two variables: (1) whether the woman is in the work force, which is lagged by one year so as to capture a possible causal effect; and (2) whether the woman was married in church or in a civil marriage. Just because

[3] ILFI, under the direction of Antonio Schizzerotto, samples a nationally representative fraction of households with a multi-stage design. Sampling fractions are identical across regions, except that Trentino is oversampled. This adds approximately 319 households from this region. We use the data with the filter that includes only the nationally representative portion. Results with the augmented sample show little difference. This also makes it unnecessary to weight descriptive statistics. For further information on ILFI see www.sociologiadip.unimib.it/ilfi/.

civil marriage is a strong measure of secularization, it has the limit for our purposes of being relatively uncommon among the oldest cohorts, civil marriage having become much more common in recent years.

In the case of each transition we begin with descriptive information. Most valuable, perhaps, are Kaplan-Meier nonparametric graphs of the durations to each event. We have developed these separately for the transitions by cohort (three groups) and macroregion (4 groups). These appear in **Figures 5-10.** In addition **Table 5** presents descriptive statistics for values of selected covariates for women who enter the eligible set (risk set) for each of the transitions.

First Union

Our first analysis examines the transition to first union. Following convention, we take age 15 to indicate the onset of risk. We model the duration from age 15 to (age at) first union. Women are censored at the time of the survey if they have not yet entered a union. In this analysis we take only formal unions (civil and religious) to constitute an event ending the spell. Cohabitation is relatively rare in Italy; thus, the sparseness of the events made cohabitation difficult to analyze separately. Furthermore our preliminary analysis suggested that cohabiters may be qualitatively different from those entering formal unions.

KM graphs of transition to First Unions: **Figure 5** presents the survival curves for the duration to first union, drawn separately by birth cohort of the women. Our entire ILFI sample born since 1940 (age 30-60 at time of survey) is represented in these graphs. We observe dramatic differences by cohort. Specifically, the youngest cohort, born in 1961-70, shows a marked slowdown in timing to marriage. Whereas in both the 1941-50 and the 1961-70 cohorts about two-thirds of women had married by age 25 (120 months of exposure), only 39% of women in the youngest cohort had done so by that age. In fact, our Kaplan Meier data indicate that after 20 years of exposure (accounting for censoring) about one third of the youngest cohort had yet to enter a formal union.[4]

Figure 6 plots the same duration information but splits the sample by macro-region. Here we observe only modest differences for the rate of entry into first union. This *lack* of difference in the rate of entry is itself noteworthy, in that our geographic depictions of fertility rates point to significant differences across the four macroregions of Italy.

Cox Regression Models. We extend these descriptive portraits with regression models, in which we test for the relative influence of cohort, region, and several personal traits of the woman. These traits include family background factors – mother's work experience, father's education, death of mother and father, woman's own education, and woman's employment. Our model specifications are successively more inclusive, although we only present selected specifications here. In most cases individual covariates are fairly robust to alternative specification, particularly the addition of other

[4] To the extent that the very youngest members of the youngest cohort have not had this full exposure, their differential behavior (such as more rapid entry into marriage after prolonged delay) will not be represented in these graphs.

traits presumed to be exogenous. We have estimated alternative models (not shown) that include covariates whose causal priority is more questionable. Even when we can establish temporal priority, one can ask whether these characteristics – living with parents, self-classification as a "student" – are not in fact jointly determined with the marriage and family building choices we model. After estimating pooled models, we split the sample by birth cohort and repeat the estimation of the preferred model.

Table 6 presents Cox regression models for the prediction of duration from age 15 to first union. Coefficients are presented in relative risk format, and hence indicate the proportional shift in the baseline hazard due to a unit change in that variable, i.e. membership in that category.

Model 1 includes only cohort and region. We observe appreciable cohort differences, which are to be expected. Women in the youngest birth cohort (1961-70) marry at about 52% of the rate of women in the reference (1941-50) cohort. There are essentially no differences between the two oldest cohorts. Regional differences are very modest and are not significant at conventional levels. Again there is no appreciable difference between the Northwest macroregion (reference)—the area identified with the earliest attainment of very low fertility-- and the Northeast and the Center. Women in the South exhibit a relative risk of 90% although this is not statistically significant.[5]

Our next model introduces the standard set of covariates suitable for the prediction of first union. As mentioned above, these include measures of socioeconomic background, parental mortality, and the woman's own education and employment. (Death of mother, death of father, and woman's employment are all time-varying covariates.) In the presence of these additional personal traits the effect of region and cohort shift modestly. Regional effects become more pronounced (with all regions exhibiting lower relative risks compared to the Northwest once controls are introduced). Women in the South are now shown to have about 20% lower marriage hazard rates (RR=0.818) and this is highly significant. The secular decline in fertility remains, indicated by the significance of the dummy variable for the 1961-70 birth cohort. Its magnitude is reduced, however. The increase in the magnitude of the effect of regional dummy variable for the South upon the inclusion of the employment measure is suggestive of a slightly different employment-marital regime in that region. Once we control for employment, women born in the South are actually even less likely to marry than women in other regions; their lower rate of employment partly masks this.

Several other family background factors are strongly predictive of this first step in family formation. Women whose mother worked (when the woman was age 15) exhibit a marital hazard rate about 12% below those of other equivalent women. Women whose fathers had low or no education enter into marriage at significantly higher rates. We find no effect of parental mortality on union formation.[6] The education of the women is quite strongly predictive of the rate of entry into marriage, and it is a U-shaped relationship. Women with low levels of education have a marriage rate 64% above women with

[5] Women in the South macroregion constitute a fairly large portion of our ILFI sample. Of the 7250 women who initiate spells in our datafile, 35.0% are living in the South at age 15.

[6] By the time of the survey 17.5% of the women had experienced the death of their father and 7.1% the death of their mother.

moderate levels of education. On the other hand, women with high levels of education exhibit a hazard rate for duration to marriage 37% above the middle group.[7]

Employment of the woman herself is of particular interest. Much contemporary theory about very low fertility, as discussed above, would suggest that employment would depress the family building activity of contemporary women. We ask not only to what degree is this true, but also the magnitude of the effect and the extent of its effect across time (birth cohorts) and across the successive family-building event we examine with ILFI.

Model 2 of **Table 6** indicates that on balance women's employment operates to significantly and appreciably reduce the rate of entry into marriage to about 83% of otherwise equivalent women. Clearly, net of these other traits, employment lengthens the duration to marriage. This aggregate result (cohorts pooled) offers support for the view that the decline in fertility commences with lower rates of entry into marriage, in turn, partly driven by women's employment.

Models 3-5 split the cohorts and repeat the analysis; thus, these models allow the effects of traits to differ across the three cohorts of women. Women in the 1941-50 cohort have passed beyond the standard reproductive span by the time of the ILFI 2001 survey wave. Thus information for their union formation (as linked to fertility) and first birth should be complete. Some 88% of this cohort is observed to marry. For these women we find clearly visible effects of region, woman's own education, and employment. Parental background traits do not show through here. Women in the South are less likely to make the transition to first marriage than women from other regions of Italy. (Women in the Northeast and Center show relative risk rates below unity, but these are not statistically significant.) At the same time we find that women whose education is low or high experience more rapid marriage – the U-shaped effect. This statistical result may be worth particular consideration in this cohort, as the apparent inconsistency may point to competing mechanisms linked to some of the overarching processes we identified at the outset. As in the pooled results working women make the transition to marriage less quickly, about 30% below the transition rate of otherwise equivalent women.

Some elements of this nuptiality process change by the time the next cohort, born 1951-60, is observed. In this case, regional differences are muted further, with almost no differential at all among Northeast, Northwest, and Center. The point estimate for women from the South indicates a lower rate of transition into marriage, but this difference is not statistically significant. Personal and parental traits have some predictive value, in a direction mostly consistent with an effect in which higher socioeconomic status retards marriage. Women whose fathers had little education experienced more rapid rates of marriage while children of highly educated fathers experience slower marriage. The woman's own education matters much, and again, a U-shaped pattern is observed: poorly and highly educated women are quicker to marry.

[7] Secular changes in educational attainment across these cohorts may confound these results, esp. if relative education rather than absolute year of attainment points to the mechanism of interest.

The employment effect is statistically significant, although its strength does not match that found in other cohorts. In this middle birth cohort, we observe that employed women enter unions at about 15% lower rates (RRR=0.856) than other equivalent women.

Our final cohort comparison turns to women born in 1961-70, who are age 31 to 41 at the time of the survey. We observe nearly 914 such women and nearly two thirds of them have married as of the survey date. This youngest cohort differs yet again from the older two. Regional differences in rates of marriage transition have moderated considerably. (No coefficients are even marginally significant.) Yet personal background traits are predictive. Women whose fathers had little or no education (a decreasing fraction of the population of women over time) entered into marriage more quickly, while those whose mothers worked made this transition more slowly. Notably the U-shaped effect of woman's own education is visible once again, although the only significant effect indicates that poorly educated women are quicker to marry.

Perhaps most notable in the Cox regression of this youngest cohort is the *lack* of any effect of the woman's own employment. This apparent secular change clearly requires further investigation.

First Birth

KM graphs of transition to First Birth: We turn now to the transition from marriage to first birth. Since cohabitation is relatively uncommon in Italy, and since childbearing outside of a formal union is relatively rare, we exclude cohabiting individuals from the risk set.[8] **Figure 7** presents the survival curves for the duration to first birth, drawn separately by birth cohort of the women. In our sample, some 92% of all women who had entered a formal union experienced a birth by the 2001 wave of the ILFI survey. Akin to the transition into a union we observe differences by cohort in the transition to first birth. Whereas nearly 90% of the 1941-50 cohort experienced a birth within 5 year (60 months) of marriage, only about 80% of the 1961-70 cohort had done so. The first birth transition is also marked by regional differences irrespective of cohort (**Figure 8**). Those in the South have their first child earlier: 92% have a child within 60 months of marriage compared to 83% of women in the northwest.

Cox Regression Models. A simple Cox regression model with regional and cohort covariates alone confirms these graphical differences. **Table 7**, Model 1 points to statistically significant and high rates of childbearing in the Center and South with progressively slower rates of transition across cohorts. Model 2 introduces the standard set of personal covariates into the model. These covariates match those used above for union formation, but add a dummy variable for type of union: civil marriage (vs. religious). Economic theory argues that woman's employment (a time-varying covariate) should serve to decrease the rate of transition to first birth. Education and socioeconomic background should work in corresponding ways, with higher status women slower to make the transition. A strict interpretation would suggest that regional (and cohort)

[8] Alternative analyses, including a dummy covariate for "cohabitation." showed lower fertility (lower than civil union) for this group, but included relatively large standard errors (small N). At the same time qualitative inference for other covariates are not altered by excluding cohabiting women from the model.

differences should be reduced or even eliminated on the basis of these additional controls. Persistent effects not consistent with the standard explanation would suggest that regional differences and marital union type differences would remain, even in this more comprehensive model.

Table 7 presents these results. We find only modest effects of some of the socioeconomic background factors; mother's work, father's education, parental mortality are all non-significant in this model Even the woman's own education offers little additional power to predict first birth transition. In this model regional and cohort effects are reduced only slightly in magnitude from model 1. Thus women in the Center and South make this transition from marriage to first birth at higher rates, while women in recent cohorts are less likely to do so, even after adjusting for other characteristics.

We also include in this model covariates for age at union for the woman. Collectively these five dummy variables (with marriage at age 25-29 as the reference) are highly significant. We observe that women who marry at the youngest ages make the transition to first child more rapidly, all else equal. Women who marry at ages 35-39 make this transition much more slowly than the women in the 25-34 cohorts.[9] There is no evidence of hastening the childbearing transition for women who enter (first) marriage at a later age.

Both woman's employment and marital union type are strong predictors of the progression from union to first birth. The relative risk of first birth transition for employed women is 0.81 and is one of the most powerful predictors in the model. A similar effect (0.73) is indicated for women in a civil union compared to a religious union. Again this effect is highly significant. For a woman who is both employed and in a civil union – together indicators of departure from a more traditional family building style – the relative risk ratio is 0.59 (RRR=0.813*0.728). In other words, for such women their rate of transition from marriage to first birth is less than 60% that of otherwise equivalent women.

We now extend the analysis to stratify by cohort, and estimated coefficients appear in Models 3-5 of **Table 7**. In the 1941-50 cohort we find that women in the Center and South experience higher rates of first birth transition. In the complete model, almost no covariates for background socioeconomic traits are statistically significant. There is no significant difference for women in a civil union (although these are uncommon in this cohort and so our test not robust in this early period.) We still find a strong effect of employment (RRR=0.824), not much different from the model which pools across all three birth cohorts. It is quite clear that employment, even in these relatively early cohorts, is strongly and negatively associated with the transition to first birth.[10] Coefficients for age at union are not particularly consistent or stable. Still there is evidence that women who marry at younger ages (15-24) make the first birth transition more rapidly.

[9] Further work will investigate what role premarital pregnancy may play in explaining the higher rates of first birth among the youngest age groups.

[10] Coefficients for parental traits do not achieve statistical significance at conventional levels when employment and woman's own education are excluded from the model.

The story for the 1951-60 differs only moderately. Again the background traits of parental characteristics and woman's own education do little to improve prediction in the model. Notably, regional effects are not visible. While women in the South and Central macroregions exhibit somewhat higher rates of transition, the associated coefficients do not achieve statistical significance. (There are 703 women at risk in this cohort.) By contrast, effects for employment and for union status are strong and highly significant. Employed women have a relative risk of first birth about 16% below other equivalent women in their cohort. Women in a civil union have a 33% lower relative risk. As for the pooled sample these two traits in combination (employed women in a civil union) predict a much lower rate of entry into childbearing. Here again, women who marry at an early age (15-24) display a more rapid rate of making the transition to first birth.

The story for the 1961-70 cohort differs in several important respects from the older two cohorts. Again, these 643 women are about age 31-41 in 2001 at the time of the last IFLI wave we use here. They thus have not completed their reproductive span, so that any additional timing shifts anticipated after 2001 cannot be captured by our data. Regional differences re-emerge in this cohort. Notably women in the South (RRR=1.70 $p<0.001$) proceed much more rapidly to their first birth. Women in the Center also progress more rapidly, although this difference is only significant at the 10% level. Parental background traits are again of modest predictive value, although we observe that women with fathers of the highest level of education have lower childbearing rates (RRR= 0.597; $p=0.03$). In this youngest cohort of 583 women, we observe less of an effect of age at first union. What does show through is that women who marry as teens have much higher transition rates than those who marry in their twenties and early thirties. Here though the impact of bridal pregnancy may weigh heavily.

Being employed and in a civil (vs. religious) union once again exert strong downward effects on predicted fertility. Employed women exhibit hazard rates some 30% below non-working women. As was the case with previous cohorts the combination of working and being in a civil union serves to lower the predicted rate of transition from union to first birth appreciably, here by over one half.

Second Birth

KM graphs of transition to Second Birth: Our third and final element of the event history analysis focuses on second birth. In our ILFI sample of women in the cohorts born between 1941 and 1970, some 1855 commence a second birth spell (i.e., have a first birth) and of this group 1330 (72%) go on to bear a second child within the observation period. Not only is this a (necessarily) smaller sample than the number of women at risk of first union and first birth, it is more selective as well. That is, if women – especially in the younger cohorts whose reproductive career has yet to finish – possess further heterogeneity on characteristics we do not observe, our models may misestimate some aspects of the reproductive path for younger women. We present results in the same sequence as above: descriptive graphs followed by regression models both pooled and by cohort.

Figure 9 does not identify pronounced differences across cohort in the transition to *second* birth, although it is evident that the 1941-50 cohort made the transition from

first to second birth more rapidly than succeeding cohorts. (Tabulations of the survivor function point to 5-year transition fractions of 59%, 51% and 53% for the cohorts successively.) The youngest cohort is initially slow to make the transition for about 4 years, but after that point, transitions more rapidly to where it reaches a crossover with the other two cohorts within a decade of exposure (certainly sufficient time.) It is worth recalling that the underlying sample for **Figure 9** contains more women in each of the older two cohorts than in the youngest, since the youngest cohort is least likely to marry and have a first birth, requisites for being in the risk set for this transition. Regional differences are noteworthy. While **Figure 10** shows no discernable differences across Northeast, Northwest, and Central for the first 60 months of time since first birth, women in the South make this transition much more rapidly.

Cox Regression Models. **Table 8**, Model 1 points to statistically significant and somewhat higher rates of childbearing in the Northeast and the Center, compared to the Northwest. The relative risk for the South is nearly double that for these other two regions and close to three times the rate found in the Northwest. Cohort effects are present, with both 1951-60 and 1961-70 cohorts displaying a hazard rate about 15% below that of the reference group of women in the 1941-50 cohort. The fact that the 1951-60 cohort differs little from the 1961-70 cohort in second-birth transition but not in first birth transition (above) suggests that restriction of fertility at higher parities (even 2nd) had begun to make its way into family building practice in this middle cohort, who where themselves passing through key years of the reproductive span in the 1970s and 1980s.

Model 2 includes the standard set of covariates as in the models above. Addition of these individual-level traits does virtually nothing to attenuate either the regional or the cohort effects. Women from the Northeast and the Center display hazard rates that are 21% and 23% higher than women in the Northwest, while again, strikingly, women from the South experience the second-child transition at two and a half times the rate of women in the Northwest, even controlling for all of these individual-level traits. Women whose mother worked when the women were age 15 show higher rates of second birth transition. While this might be seen as contrary to expectation it may reflect an intergenerational pattern of scheduling work and reproductive careers in which the second birth is hastened by the existence of a maternal role model balancing work and reproduction. Father's education and that of the woman herself carry little predictive value in this model. Those who have their first child at an earlier age also made the transition from first to second child more quickly. In rough terms women who bore their first child before age 25 moved on to the second child at about 25% higher rate than women whose first birth occurred when they were aged 25-34. As in the case of both other transitions considered above, employed women and those in civil marriages exhibit dramatically lower second birth transition rates, with the combined effect of lowering the hazard rate by about 40%.[11]

[11] An alternative model tested (via dummy variable interaction) whether employed women in the South behaved differently from other women. This had no additional predictive power. Small numbers of women are in a cohabiting union or not in any union during some of the time exposed to the risk of a second birth. Models which included dummy covariates for these two traits indicated significantly lower relative risks for such women. Since other coefficients were robust to these alternatives, we have used the simpler specification for ease of exposition.

As with the models reported for the previous two transitions, models 3-5 here repeat the analysis by cohort. In the 1941-50 cohort regional differences are quite pronounced, with the South relative risk about 2.5 times the Northwest and the other two regions intermediate and non-significant. For this cohort of 681 women, about 75% of whom experience a second birth, those with father's education at the low or high end of the distribution are shown to have slower rates of progression to the second child. Women with limited education show no difference from women with middle-range education, but women with high educational levels have much lower second birth rates (RRR=0.648). Employment continues to have much the same effect as before, lowering predicted fertility by about 20%. The point estimate for civil union indicates reduced fertility, but the estimate does not achieve statistical significance.

In the 1951-60 cohort regional effects are similar to those found in the older cohort. Women in the South bear their second child at rates about 2.5 times those in the Northwest; women in the other regions are intermediate and their differences are not statistically different from the reference region. No parental or personal traits for education or parental loss are statistically significant for this cohort of 666 women, some 72% of whom bear a second child. Working women exhibited rates of childbearing reduced by about one fifth (RRR=0.811, p=0.036). There were no statistically significant differences by union status or by age at first birth, although the presence of these latter group of dummy variables does alter other coefficients.

In our youngest cohort, 1961-70, we have 508 women who initiate a spell with a first birth, and 65% of them are observed to go on to a second birth. Here the regional rankings are similar to earlier cohorts, but we observe particularly depressed fertility among women in the Northwest. Southern women have rates of second birth almost four times as large as those in the Northwest (RRR=3.73, $p<0.001$). Rates for the Northeast and Center are about double the Northwest.

Few personal and parental background traits help predict this fertility transition, save one: women's own education. Women in the highest education category exhibit transition rates 65% *above* other women. This may represent a conscious fertility compression strategy for such highly educated (and professional) females. Working depresses the rate of transition to the second birth; its effect is significant and larger in magnitude than for previous cohorts.

Discussion

Taken together these results point to significant effects of standard background traits, microeconomic circumstances, and more culturally identified factors on the family-building transitions of first union, first birth, and second birth. In many cases we find that parental and personal socioeconomic background (father's education, mother working at woman's own age 15, woman's own education) influence marriage and childbearing in ways we would expect. That is, women with advantaged socioeconomic backgrounds (greater parental education as well as their own) and whose mothers worked in their youth, are on balance more likely to delay entry into marriage and delay their subsequent childbearing transitions. This is not true in every case, however, as we found in looking

at highly educated women in the most recent cohort who move on to their second child more rapidly.

Regional effects are generally very pronounced, and they do not recede much upon the introduction of socioeconomic controls. This suggests that these regional differences are tapping contextual effects that may be rooted in social networks, provision of local public services, availability of kin, and sociocultural norms regarding family building. The dramatic size of these regional effects offers strong evidence of the need to look beyond traditional economic, social, and demographic factors in explaining declines in fertility.

That said, employment is quite powerful throughout all our analyses. In general working women are less likely to marry – or marry at a slower rate – although this differential disappears in the youngest cohort, born in 1961-70. The effect of women's participation in the labor force on their childbearing is consistent and powerful. Women who are working are on the order of 35% less likely (in hazard rates terms) to make transitions to first and second birth. While this effect is very strong and consistent, it is noteworthy that controlling for a woman's work history does not remove the effect of other traits, most notably region and having a civil marriage.

The Culture of Reproduction and the Striking Case of Sardinia

With neither existing economic/demographic theories nor second demographic transition theories emphasizing a move from familism to individualism proving adequate to the task of explaining Italy's very low fertility, Massimo Livi Bacci has offered an alternative view. Like SDT theory, Livi Bacci recognizes the crucial role played by the cultural system, but, provocatively, he turns SDT theory on its head. Italy, in Livi Bacci's somewhat playful term, is marked by "too much family" and it is just this excess of family ties that leads Italians to have so few children (Livi Bacci 2000, 2001). He argues that the intense interdependence between generations is leading to a perennial status of child in the younger generation, and that this leads the younger generation to avoid, postpone, or in any case limit their assumption of parental responsibilities and commitments. There is room for ambiguities in the *'too much family'* argument. While an intense intergenerational interdependence could explain why we observe an comparatively long period of cohabitation between parents and adult children and the postponement of the transition to parenthood, there is no need that this postponement should lead couples to have fewer than two children. Once the transition to parenthood is made at age 30-35, what is hindering family enlargement in a context where family is rather a resource in terms of child care and economic support? A *familistic* interpretation of low fertility posits that strong family ties would not only define relations and commitments in the private sphere among family members but also alter the functioning of the labour and housing markets in such a way that limiting family size to the minimum becomes the only rational choice to make (Dalla Zuanna 2001).

In the following we investigate the *too much family* thesis empirically by analyzing the very interesting case of family formation in Sardinia, where puzzlingly a strong emphasis on family solidarity is paralleled by a rapid postponement of parenthood and a rise in women's active role in the labor market in the space of only one generation. Indeed, the Sardinian case could scarcely be more striking given that its fertility has fallen from Italy's highest to its lowest in less than half a century. We take advantage of the ethnographic portion of our research to analyse the interviews and the field observations, which consistently portray a family model based on a strong sense of family and intergenerational interrelations. In US family research the role of the consanguineal family is being rediscovered as a positive secondary effect in time of growing incidence of divorce (Bengston 2001). The weakening role of the non-co-resident paternal and marital figure means the re-evaluation of the relationships with grandparents, mother and siblings, which had lost salience in comparison with the ideal image of the self-sufficient nuclear family and the creation of independent individuals. On the contrary, in Sardinia strong extended kin ties and the nuclear family have gone together for a long time (Oppo1991) and constitute an important aspect of the local culture of reproduction today which is at odds with the individualistic model of SDT theory.

Our brief examination here is based on interviews with women aged 22 to 45 who are residents in Cagliari as well as on the notes collected during ethnographic fieldwork in the city. [12] Due to space limitation here we concentrate only on two emerging central themes: (1) the intensive attachment to family-provided care; and (2) and a strong emphasis on organization and discipline both in daily life and more generally as an outlook on life. We examine desires, imaginations and behavior related to family formation and relations which reflect the underlying culture of reproduction in this setting. Independently of the particular behavioral realizations of the individuals who give them voice, basic beliefs, values, expectations and perceptions constitute the context in which reproduction acquires meaning. They express the norms apprehended during early socialization as well as the more implicit and dynamic enculturation process produced daily through practices and family relations.

The creation of 'familyhood' through intensive caring. Regular exchange of care services and more general reciprocal collaboration among family members are expected as a taken-for-granted obligation unless specific circumstances, like geographical distance, physical handicaps or a break in normal social relations, make institutional and professional care necessary. Care services extend from childcare to elder care. These services are mostly provided by women, a web of daughters, sisters, mothers and grandmothers. Fathers are also often actively involved, especially in care for children under two, and their engagement is highly appreciated. Public and private infant and maternal school care services receive positive connotations, at least for children beginning at age three. This is particularly the case for the younger women

[12] Cagliari, with a population of 155,000, is both Sardinia's regional capital and its largest city. A substantial percentage of residents consists of immigrants from inland areas of the island. In most cases these are migrants of first or second generation with family networks extending over a large spatial dimension (X_C_2004). Interviews were conducted by project associates Vladimira Desogus and Francesca Melone, and the ethnographic fieldwork plus interviews were conducted by project collaborator Rosa Parisi. We thank them for their contribution to this research.

and those with more education. Children are said to learn to socialize and share in such settings. A key factor in women's attitudes toward care situations is their regularity. Children who are left with different care givers are perceived as being physically and emotionally '*sballottati*' ("tossed around") and '*lasciati come un pacco*' ("left like a package"). This is one of the reasons why babysitters are called in as a last resource, unless they are kin. But there is also negative feeling about hiring a single non-kin caregiver linked to a discomfort with the possibility that children could build family-like relations with someone who "*does not belong to the family*." Working mothers, who most often resort to non-family care, justify the choice in part by constructing the argument of a trade off between quality and quantity of time spent with the child. The idea is that the child needs to have the best from the mother and that her work-related absences may contribute to this because mothers engaged in other activities are more willing and able to *dedicarsi completamente, esserci al 100%* ("dedicate themselves completely, be there for the child 100%") when they are with them. These mothers will enjoy the time with their children and will not be tired and bored of their presence as housewives may. This argument is perfectly in line with a culture of reproduction based on family relatedness and family care, and does not manifest an expression of individualistic attitudes. Mother's work does not simply mean less time and energy to care for the children, but it also a better quality of parental care due to a smaller gender gap between parents (and their better mutual understanding) and a smaller generational gap between parents and children.

Care services are loaded with meanings which go beyond their mere functional support. They are a means of constructing the sense of family itself, a daily channel for transmitting affection, discipline, habits, and knowledge to the children. When respondents say that at least one child is necessary to *fare famiglia* "to create a family"), they express more or less consciously two aspects of family making. On the one hand children are the *completamento* ("fulfilment/completion") of individuals, couples, as well as the larger family group because without them there are no uncles, aunts and grandparent figures. On the other hand, and more importantly for our argument, they express the intensive meaning of caring time as a time for family creation. The term *familyhood* or, in Italian, *famiglianza*[13] well expresses the sense of identity provided by being part of a social group of relatives. *Far from being an abstract* construction, *famiglianza* depicts the concrete consequences of the interdependence created by family practices, beginning with caring and shared daily activities.

The idea of intensive childcare time well expresses how in interpersonal and interfamilial relationships a mix of dependency and independency is expressed at the level of values as well as the level of behavior. Although claims for economic independence are frequent among young and educated women, interdependence with the family of origin is not perceived as a threat but rather accepted, or better actively

[13] The term familyhood (*famiglianza)* introduced by Alessio Colombis is a reaction to the thesis of the *amoral familism* theorized by of Banfield. Familihood is rather 'il sentimento di appartenenza comune derivante dale relazioni interne al nucleo familiare' and it brings together concepts like the feeling of being attached to the family and the availability to sacrifice for the family and to reciprocally exchange help services. (Colombis 1997:402)

practiced and positively evaluated via frequent family visits and exchange of services, including childcare. The same mix can be seen in childrearing practices and ideals incorporate both elements of dependence and autonomy. These stress the role of parental control and authority more than permissiveness in family discipline and at the same time relate this 'strict education' to the possibility of conducting an independent life as an adult.

Self-discipline and organization. The cohort of our respondents' mothers grew up with several siblings and had themselves 3 to 4 children on average. This meant that organization, planning and educational rules—in short, family discipline--were crucial, independently of whether the woman was employed or not. The myth of the efficiency of some women is well expressed by the memory of one respondent: 'Niente poteva essere lasciato al caso' ("Nothing could be left to chance").[14] Discipline, rules and tidiness were and are highly valued and mostly women's responsibility. Women, who were prevalently at home in the past, were the providers of a 'private education' on the virtues of organization and planning for all members of the household. The most vivid and recurrent image of what their mother was like and how they see themselves as mothers, is that of the *madre severa e dolce* ("mother both strict and sweet"), essential qualities to make everyone *rigare dritto* ("keep to the straight path") and at the same time create that sense of relatedness and familyhood by following the same clear-cut rules. The daughters of these women, who are on average more active in the labor market, are still proud when they can claim to have inherited such virtues from their mothers. Their partners appreciate them and praise them for these presumed qualities, and those who feel they do not measure up voice their regret and are more uncertain of their role. The emphasis on organization and tidiness is visible in the way the households and shops are kept[15].

It is easy to see a parallel between this sense of order and discipline in the organization of daily life and the practice of long-term planning for union formation. Very long engagements—engagements of five or ten years or more-- are a common experience for young people in Cagliari. They are the frame in which the couple's cohabitation and parenthood projects can develop in the appropriate form and comply with all necessary conditions for it. Articulations of the necessary conditions for having children go without too much reflection for our respondents. As a condition for childbearing women seek to complete their education and, for those interested in a career, establish themselves in their profession, or at least obtain some financial

[14] This need for organized routines is strongly impressed in the childhood memories of a respondent whose mother was a teacher and mother of 4. She recalls the smell of frying onions at 6 in the morning invading the house before breakfast because the mother was preparing the meal for all, a meal preparation that non employed mothers would have probably been working on for a substantial part of their days. This is another expression of how the time spent to care for family members, through food, creates an intense sense of *famiglianza*.

[15] Rosa Parisi, our research collaborator in Cagliari, observes the following describing a Saturday morning in the daily market of San Benedetto, one of the study area in Cagliari: "I am strucked by the care with which they display their products: fruits and vegetables are carefully stacked in pyramids, red paprikas are piled up one over the other and separated from the yellow ones, hanging vegetables and oranges cut in two are used as decorations, cheese is set carefully on salad leaves, meat is nestled in *mirto* branches, fresh fish displayed in figures and cans are organized in *vimini* baskets. In the houses I was allowed to enter there was the same taste for details, for the display of colourful compositions and wood objects."

stability. They also expect to obtain a well furnished, sufficiently comfortable independent housing as a precondition for marrying. Childbearing outside of marriage is unacceptable. Parenthood is the last step in this organized life course.

This sense of sequencing is very evident in the analysis of some of the contradictions related to parenthood postponement. When asked about her intentions to have children, a young married woman in her thirties said that she would not like to become pregnant now because she had not yet realized her plans with regard to her job and she perceived a child as an obstacle to such plans. On the other hand when asked whether she was using any contraceptive she said that she had actually interrupted her use of the pill a few months before because she and her husband could take care of a child. This woman seems not to be able to formulate her intention to become pregnant in a positive way but acts in a way to allow her to become pregnant. In this case she will not have chosen to have a child, the child will have simply arrived.

Long engagements in this context generally end in marriage and are often labelled as '*projects'*. When a marriage is not in the visible future, the explanation given is either that the relationship is negatively perceived as lacking a *progettualità* (a clear plan), or it is not a central issue in the respondent's life since priority is given to other projects (*troppi progetti, troppe cose* "too many projects, too many things to do"*).* Not only are these family projects in the sense that family formation is their aim, but they are also family projects in the sense that they involve relationships with both partners' families of origin. Parents consider their daughters or sons' future spouses as part of the family years before they actually marry and years before their children leaves the parental home to actually marry. Eating at future in-laws homes even without the partner present is not unusual, as is the feeling that one is being treated as a daughter or as a son by the partner's parents. This last aspect is asymmetrically skewed towards the family of the woman ('*quando c'e' un matrimonio la famiglia della sposa acquista un figlio, quella dello sposo ne perde uno,*' "when there's a marriage the bride's family gains a son, the husband's family loses one"). If the constitution of the nuclear family is a family project it is easier to understand why family resources are mobilized to help realizing it, either by helping them financially or when this is not possible allowing the adult children to continue living at home to save money.

To come back to the too "much family argument", the hypothesis of a strong interdependency between relatives is certainly confirmed. However, it does not seem that *much family* is *too much* in the sense of discouraging parenthood. A reading of Livi Bacci's thesis as portraying a pathological situation overlooks the extent to which family members' interdependence is perceived as a positive base for planning an independent living and a stable source of resources to support these plans (material support and psychological certainties). This support counteracts the negative effects of economic and professional instability of the younger generation. Young couples in their late twenties and thirties face hardships in planning their family life due to the particularly difficult labor market prospects in the island where unemployment is relatively high. In this context women enter the labor market whether job realization is or not a life priority for them[16]. The strong emphasis on ordered life courses, tidy housing and financial independence of each nuclear family defines an appropriate family

[16] From the field observations, it seems clear that many more women than those officially registered are active in non-structured and flexible sectors like domestic work, social assistance, restaurants etc.

formation path and a reason for postponing marriage more than the desire to delay the moment of commitment. We are indeed very far from a pathological generation of 'peter pans,' childlike adults who are spoiled by their parents and living at their parents' home. Often young couples are engaged and committed to each other right after school if not before and continue to be for a decade, working and saving for their future life as a married couple, sustained and supported by their families. Counterfactuals are not empirically testable, but it is worth asking whether there would be even fewer children born if this intergenerational dependency was not ensured by strong family ties? Would the number remaining childless, currently rather low, increase dramatically as a consequence of a more relaxed and less committed image of parenthood and adulthood?

Conclusions

Our micro-level life course analysis offers some support both for economic theories of low fertility and for some form of second demographic transition theory. Yet it is also clear that fully satisfactory theory must address more fundamental questions of the culture of reproduction. While, for example, Italian women who work are less likely to get married, less likely to have a child following marriage, and less likely to have a second child following the first, none of these data offer an explanation for why Italian working women have fewer children than working women in the United States or Britain, for example, where there has yet to be shown any greater government support for reconciling women's work and fertility. Similarly, while those having civil marriages in Italy have lower fertility rates than those having religious marriages, by any measure of religiosity Italians are much more religious than the French, Swedes, or various others who have substantially higher fertility rates than they do.

All this suggests the limits of either an economic or a second demographic transition approach. The theoretical rationale for this position is bolstered by concerns that are all too rarely raised in the demographic literature about the direction of causality. A good example of this is provided by the link between public childcare (nursery schools) and fertility. Attempts to rescue economic theories that would hypothesize a negative relationship between women's work and fertility in cross-national comparisons have sometimes taken the form of suggesting that "institutional" factors are important intermediating variables. Hence, if country A has lower fertility than country B despite also having a lower FLFP rate, it must be because the state offers programs that make women's work and childbearing more compatible. Offering public childcare programs is perhaps the foremost of these government programs. But a look at the Italian case shows the perils of seeing such an explanation as "structural" when it might better be described as "cultural." As mentioned above, throughout Italy, the vast majority of children age 3-5 go to publicly supported nursery schools, a proportion as high as, or higher, than that found in many other European countries having higher FLFP rates. Yet, comparatively few Italians send their smaller children, aged 0-2, to public childcare. One might be tempted to make an argument that this supports the causal link between failure of the government to provide fertility-supporting programs and lower fertility. But every indication shows that behind the failure of Italians to send their smallest children to public daycare is a strong cultural bias against such a practice. In 1998, only 8% of Italian children 0-2 went to public daycare (source: calculations from FSS98). This did not mean that their mothers did

not work. A 2002 national survey found that of all the women then in the work force who had given birth between July 2000 and June 2001, 56% had their babies cared for when they worked by the babies' grandparents (ISTAT Rapporto Annuale 2002, p 292). Here the "failure" of the Italian state to provide public daycare for very small children can itself best be seen as a result of a certain kind of culture of reproduction.

While serious examination of culture is key to understanding the decline in Italian fertility, it is clear that the now traditional link of a move from familism to individualism of a sort posited by Second Demographic Theory is not the sort of culture change that can explain Italy's low fertility. We are still at the early stages of an attempt to explore more adequately just what this culture of reproduction consists of, how it has changed, and what the nature of its links are to the variety of economic and structural factors that doubtlessly play a role in influencing fertility behavior.

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Figure 1:

Total Fertility Rate in Italian political regions, 2003

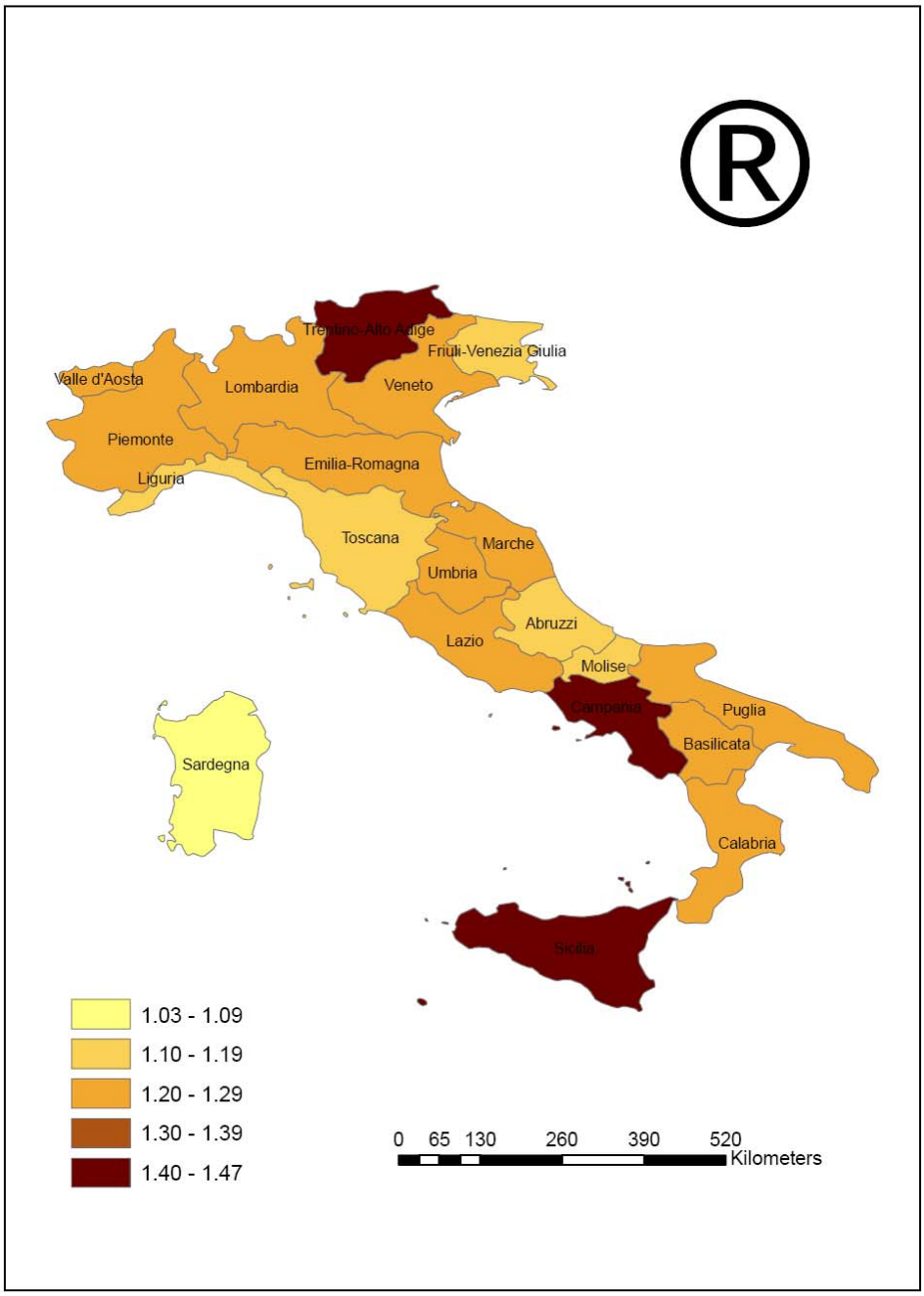

Figure 2: Regional distribution of FLFP and fertility

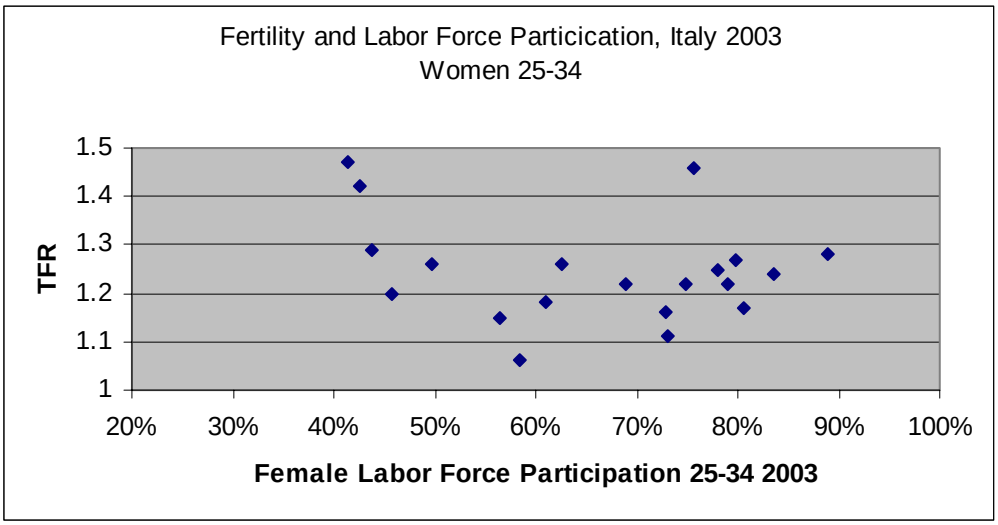

Figure 3

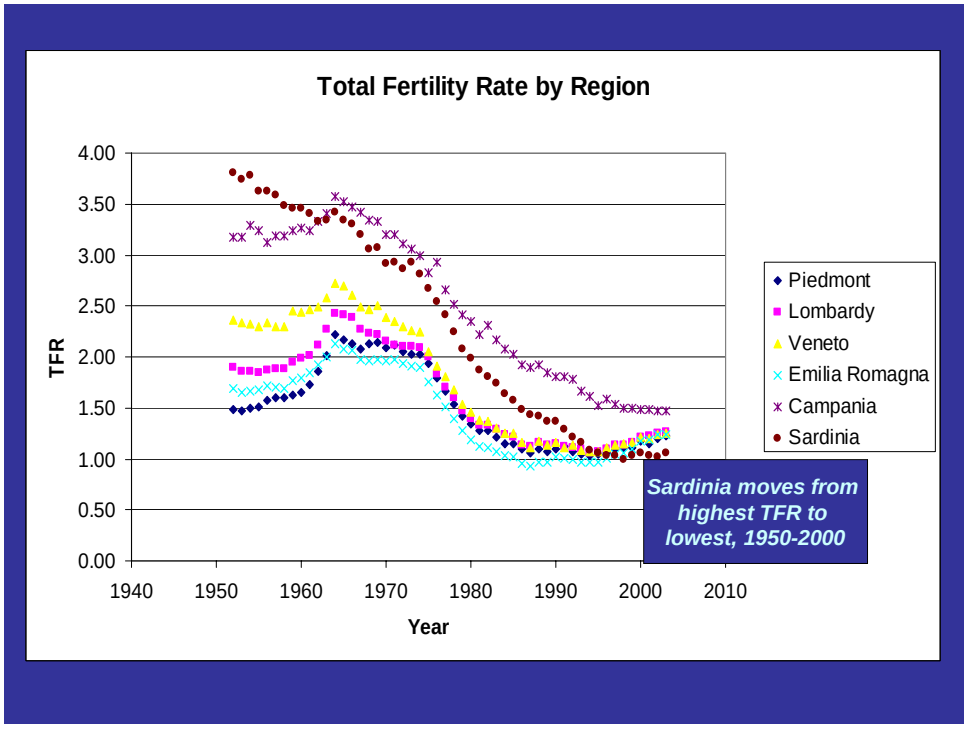

Figure 4 Italian fertility and percent religious marriages, by region

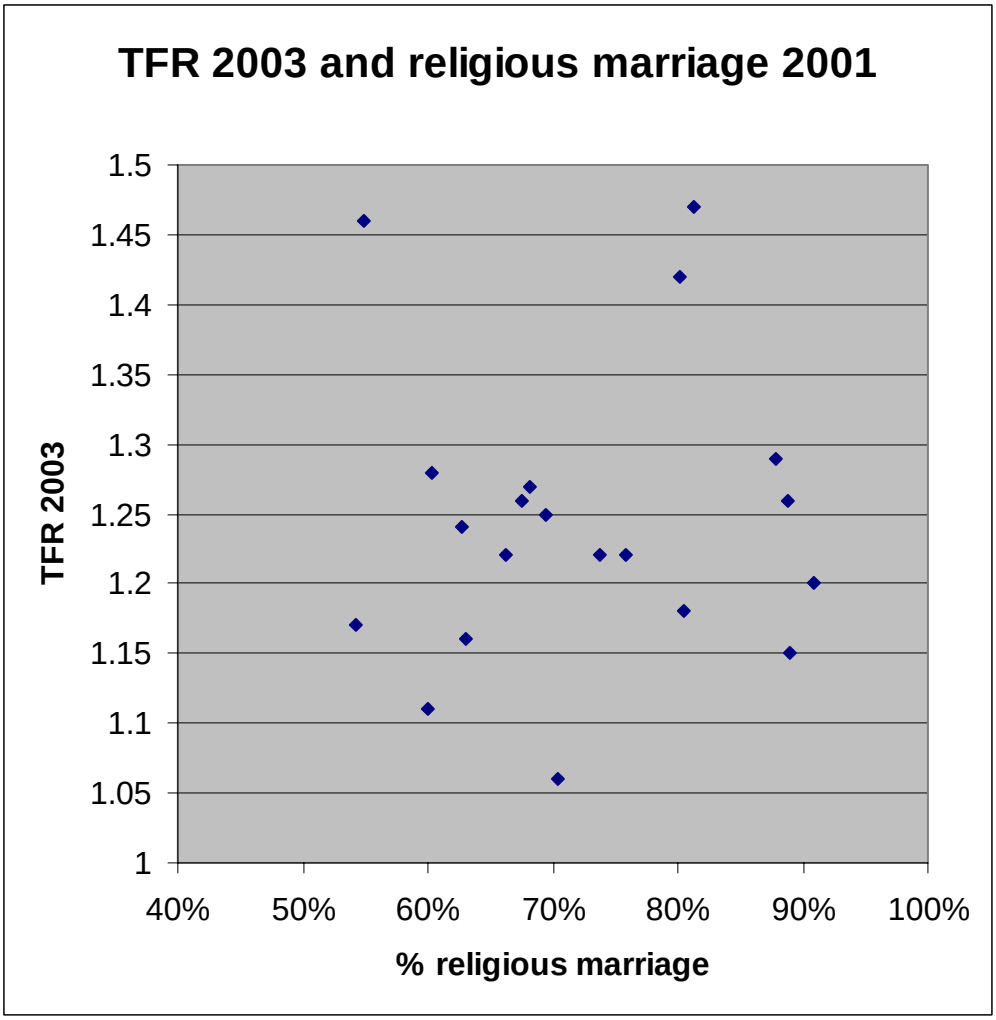

Fig 5. Duration to Union by Cohort

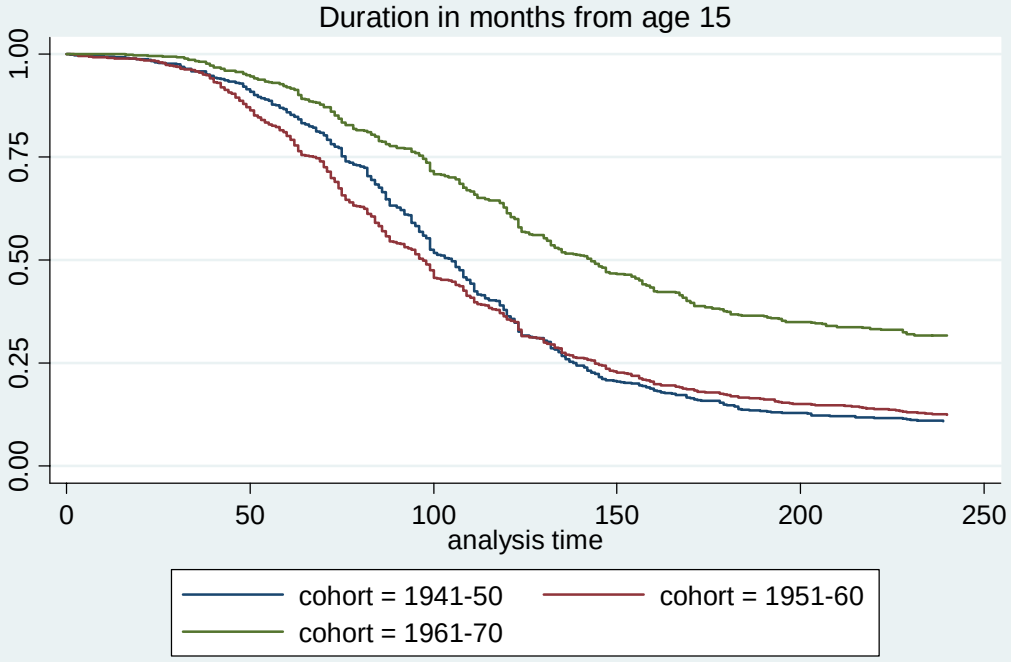

Fig 6. Duration to Union by Macroregion

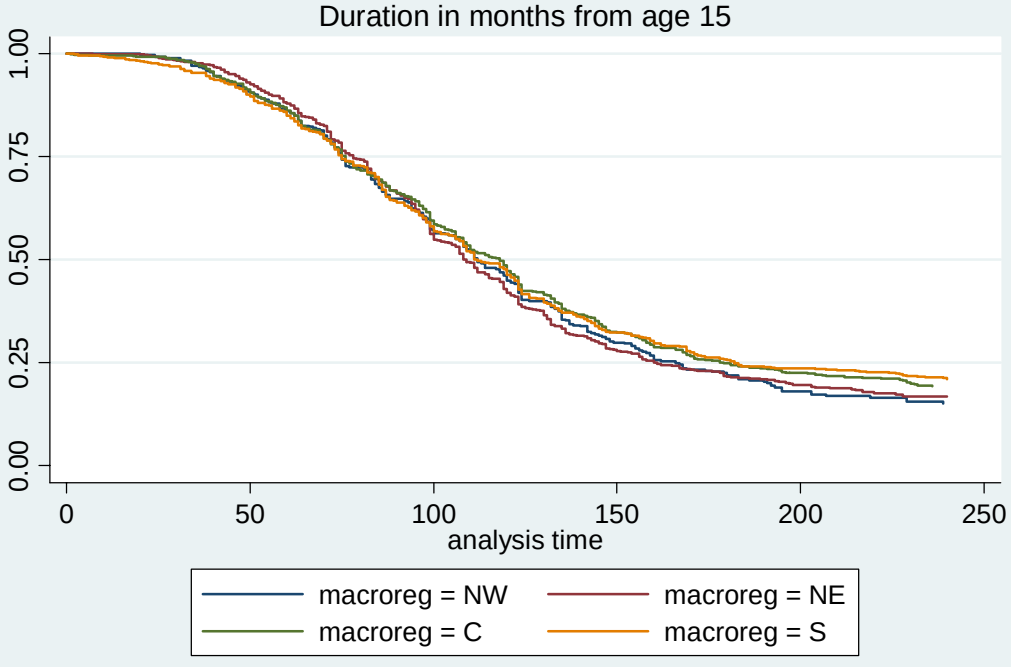

Fig 7. Duration to First Birth by Cohort

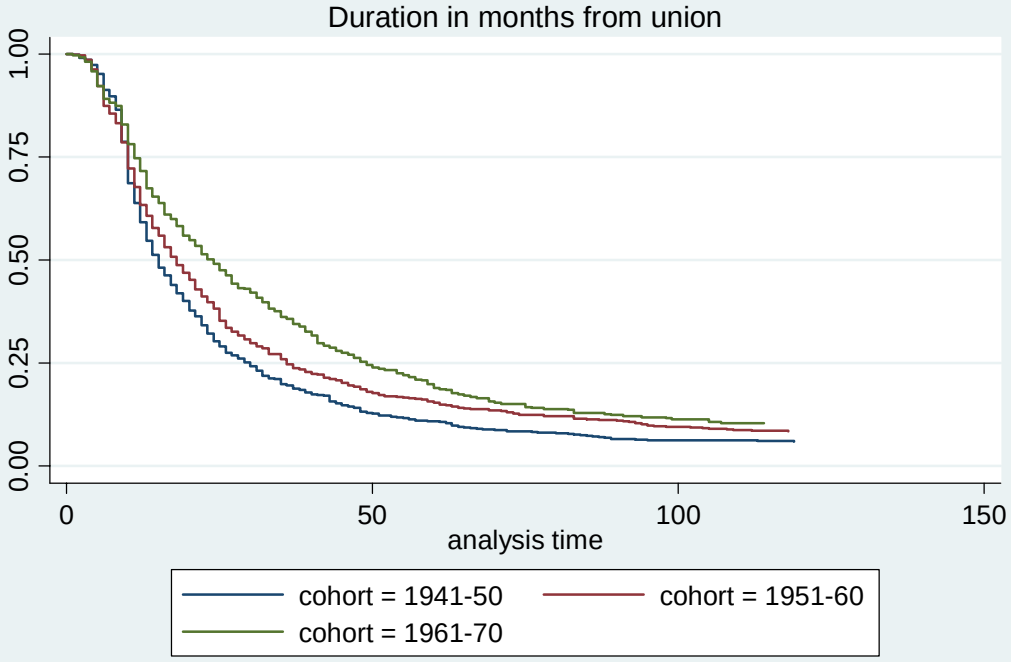

Fig 8 Duration to First Birth by Cohort by Macroregion

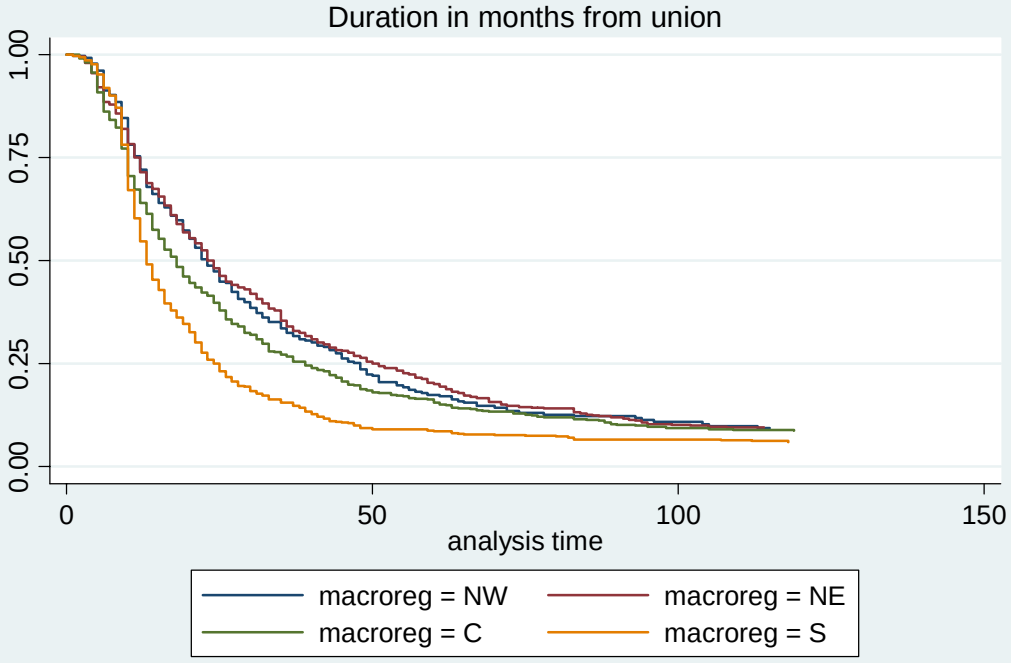

Fig 9. Duration to Second Birth by Cohort

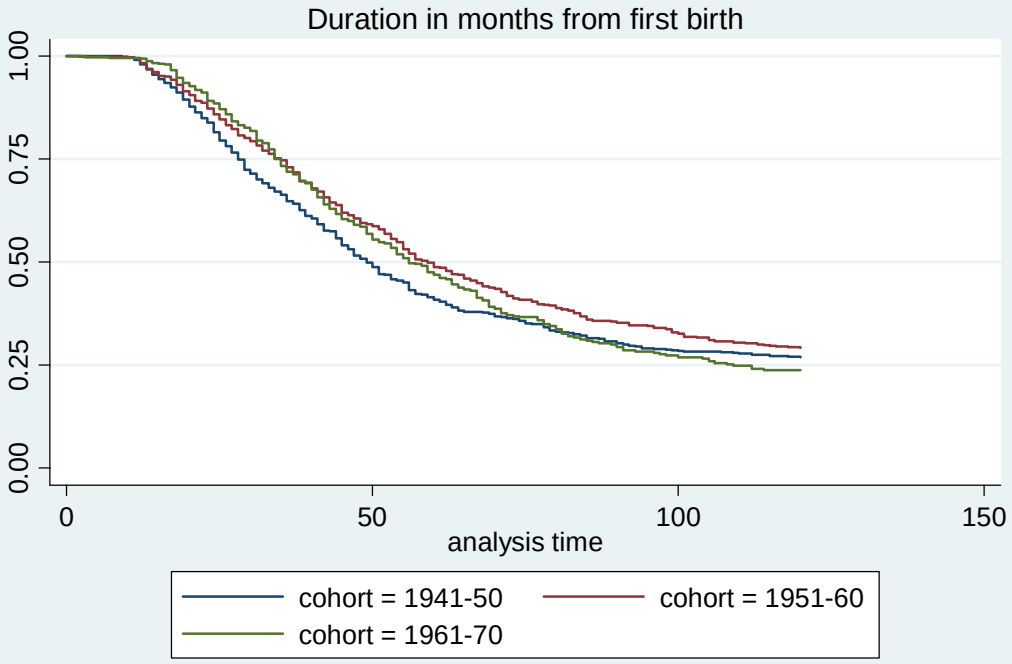

Fig 10. Duration to Second Birth by Macroregion

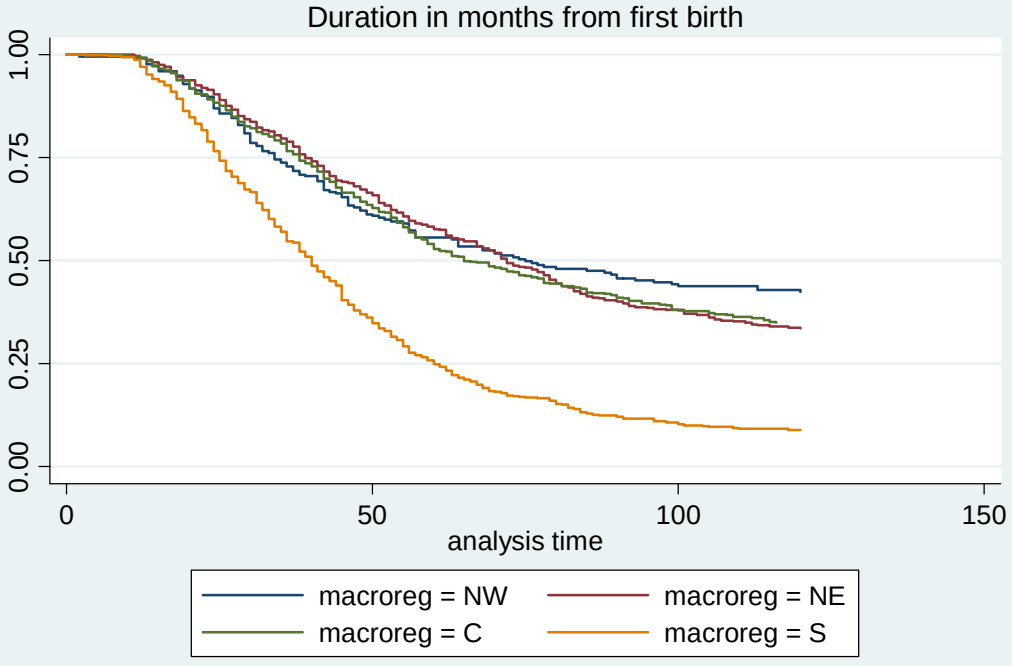

Table 1: Percentage of women who have never entered the labor force as of 1988				
Cohort	Northwest	Northeast	Center	South
1941-50	20	20	32	50
1951-60	14	10	21	47
1961-70	12	9	24	54

Table 2: Percentage of married women holding property separately from husband		
Cohort	Northwest	South
1941-50	20	6
1951-60	28	9
1961-70	44	12

Source: Our analysis of FSS 1998

Table 3: Female labour force participation rates (in %) and TFR, Italian Macro-Regions, 2003		
Region	FLFP age 25-34	FLFP age 35-49
Northwest	79	75
Northeast	80	75
Center	68	69
South	46	46
Italy	65	64

Source: Our analysis of FSS 1998.

Table 4: TFR and FLFP by selected Italian regions, 1972-2003								
	TFR				Women in LF/Total labor force			
	1972	1982	1992	2003[?]	1972	1982	1992	2001
Regions								
Northwest								
Piedmont	2.05	1.28	1.08	1.22	30	36	38	42
Northeast								
Lombardy	2.1	1.33	1.12	1.27	29	35	38	40
Center								
Emilia-Romagna	1.93	1.11	0.99	1.24	31	36	40	43
Mainland south								
Campania	3.11	2.31	1.78	1.47	25	30	28	29
Islands								
Sicily	2.76	2.07	1.78	1.42	16	22	26	29
Sardinia	2.87	1.81	1.21	1.06	20	25	29	34

Table 5: Descriptive Statistics for ILFI Sample

Variable	Mean		
	Union	1st Birth	2nd Birth
Individual Traits (TV=time-varying)			
Northwest (TV) [Ref]	0.12	0.15	0.14
Northeast (TV)	0.25	0.30	0.26
Center (TV)	0.27	0.28	0.28
South(TV)	0.36	0.27	0.32
Cohort 1941-50 [Ref]	0.31	0.34	0.37
Cohort 1951-60	0.33	0.36	0.36
Cohort 1961-70	0.36	0.30	0.27
Mother Worked	0.36	0.34	0.34
Father's Education elementary	0.66	0.70	0.72
Father's Education middle	0.13	0.13	0.12
Father's Education high school [Ref]	0.10	0.09	0.08
Father's Education post-secondary	0.11	0.08	0.08
Father Died (TV)	0.05	0.17	0.16
Mother Died (TV)	0.02	0.08	0.06
Education of Respondent secondary or less	NA	0.56	0.59
Education of Respondent high school [Ref]		0.34	0.33
Education of Respondent post-secondary	NA	0.10	0.08
Employed (TV)	NA	0.56	0.52
In a Civil Union (Religious Ref)		0.07	0.05
Entered Union, Age 15-19		0.16	
Entered Union, Age 20-24		0.51	
Entered Union, Age 25-29 [Ref]		0.27	
Entered Union, Age 30-34		0.05	
Entered Union, Age 35-39		0.01	
Entered Union, Age 40+		0.00	
Age at First Birth, 15-19			0.09
Age at First Birth, 20-24			0.42
Age at First Birth, 25-29			0.34
Age at First Birth, 30-34 [Ref]			0.12
Age at First Birth, 35-49			0.04
N Women (at spell onset)	3400	2916	1914

NA= Few women have completed education or been employed at the onset of risk (age 15) for union; subspells incorporate changes to these variables.
Time varying covariates are lagged 12 months

Table 6: Cox Regression Models for Union Formation

2001 ILFI Survey (All women 15+)

	Model 1		Model 2		Model 3		Model 4		Model 5	
	Pooled Sample with Controls for Region and Cohort Only		Pooled Sample with Standard Controls		Cohort born 1941-50		Cohort born 1951-60		Cohort born 1961-70	
Variable	**Estimate**	**Standard Error**	**Estimate**	**Standard Error**	**Estimate**	**Standard Error**	**Estimate**	**Standard Error**	**Estimate**	**Standard Error**
Individual Traits (TV=time-varying)										
Region (vs. Northwest)										
Northeast (TV)	1.017	0.074	0.993	0.072	0.877	0.100	1.149	0.149	0.960	0.142
Center (TV)	0.925	0.067	0.957	0.070	0.860	0.098	1.107	0.143	0.957	0.140
South	0.900	0.064	0.819 **	0.060	0.616 ***	0.070	0.824	0.110	1.139	0.164
Cohort (vs. 1941-50)										
Cohort 1951-60	1.006	0.053	1.128 *	0.060						
Cohort 1961-70	0.519 ***	0.029	0.617 ***	0.036						
Mother Worked			0.878 **	0.042	0.966	0.080	0.932	0.074	0.765 **	0.067
Fathers Education (vs. Diplome)										
Father's Education none-primary			1.513 ***	0.128	1.337 #	0.201	1.290 #	0.186	1.912 ***	0.276
Father's Education secondary			1.335 **	0.132	1.205	0.221	1.126	0.191	1.651 **	0.272
Father's Education post-diplome			0.756 *	0.083	0.860	0.164	0.627 *	0.117	0.787	0.158
Father Died (TV)			1.009	0.068	1.181	0.126	0.958	0.111	0.852	0.117
Mother Died (TV)			0.933	0.093	1.078	0.156	0.790	0.145	0.984	0.210
Respondent's Education (vs. diplome)										
Education of Respondent primary or less			1.645 ***	0.088	1.598 ***	0.157	1.651 ***	0.145	1.670 ***	0.154
Education of Respondent post secondary			1.371 **	0.125	1.473 *	0.247	1.446 *	0.222	1.217	0.194
Employed (TV)			0.827 ***	0.040	0.701 ***	0.057	0.854 #	0.071	0.989	0.089
N Women	2,526		2,526		788		824		914	
N Observations	10,912		10,912		3,197		3,508		4,207	
N Events	2,039		2,039		715		725		599	
Log-likelihood	-14,573.326		-14,449.322		-4,183.165		-4,302.324		-3,728.474	

***** = p < 0.001, ** = p < 0.01, * = p < 0.05, # = p < 0.10**

Table 7: Cox Regression Models for First Birth

2001 ILFI Survey (All women in a formal union)

	Model 1		Model 2		Model 3		Model 4		Model 5	
	Pooled Sample with Controls for Region and Cohort Only		Pooled Sample with Standard Controls		Cohort born 1941-50		Cohort born 1951-60		Cohort born 1961-70	
Variable	**Estimate**	**Standard Error**	**Estimate**	**Standard Error**	**Estimate**	**Standard Error**	**Estimate**	**Standard Error**	**Estimate**	**Standard Error**
Individual Traits (TV=time-varying)										
Region (vs. Northwest)										
Northeast	1.029	0.080	1.013	0.079	1.141	0.135	0.864684	0.119027	1.052062	0.179919
Center	1.208 *	0.093	1.204 *	0.093	1.214 #	0.142	1.067998	0.147233	1.313018	0.223883
South	1.583 ***	0.120	1.447 ***	0.114	1.409 **	0.168	1.293169 #	0.185966	1.697596 **	0.287017
Cohort (vs. 1941-50)										
Cohort 1951-60	0.856 **	0.047	0.862 **	0.049						
Cohort 1961-70	0.696 ***	0.041	0.716 ***	0.044						
Mother Worked			1.043	0.052	0.924	0.079	1.144058	0.096366	1.132029	0.107778
Fathers Education (vs. Diplome)										
Father's Education none			1.036	0.094	0.924	0.145	1.175802	0.187526	0.965217	0.155771
Father's Education low			1.018	0.109	0.893	0.172	1.178688	0.218141	0.950158	0.176501
Father's Education high			0.931	0.110	1.097	0.216	1.052784	0.210045	0.596514 **	0.142434
Father Died (TV)			1.019	0.067	1.030	0.107	0.941105	0.11046	1.106071	0.144152
Mother Died (TV)			0.969	0.097	0.848	0.123	1.079797	0.190702	0.992993	0.225294
Respondent's Education (vs. diplome)										
Education of Respondent low			1.012	0.059	0.990	0.103	0.972154	0.095613	1.049738	0.106942
Education of Respondent high			1.103	0.105	1.029	0.179	1.048239	0.159791	1.292515	0.233949
Employed (TV)			0.813 ***	0.042	0.824 *	0.070	0.83918 *	0.073999	0.738016 **	0.073753
5In a Civil Union (vs. religious)			0.728 **	0.080	1.130	0.281	0.673017 *	0.106727	0.605742 *	0.125718
Union formation vs Age 25-29										
Entered Union, Age 15-19			1.494 ***	0.120	1.210	0.163	1.692308 ***	0.23003	1.722518 **	0.275347
Entered Union, Age 20-24			1.299 ***	0.077	1.396 **	0.136	1.275314 *	0.138879	1.18653	0.127909
Entered Union, Age 30-34			0.905	0.111	1.208	0.246	0.782157	0.162588	0.757273	0.182466
Entered Union, Age 35-39			0.290 ***	0.093	0.216 **	0.099	0.459472	0.236167	1.180857	1.200093
Entered Union, Age 40+			1.670	1.201	1.971	1.450				
N Women	1,986		1,986		700		703		583	
N Observations	2,777		2,777		958		993		826	
N Events	1,832		1,832		674		657		501	
Log-likelihood	-12,386.092		-12,325.493		-3,814.328		-3,741.430		-2,764.664	

***** = p < 0.001, ** = p < 0.01, * = p < 0.05, # = p < 0.10**

Table 8: Cox Regression Models for Second Birth

2001 ILFI Survey (All women with a first birth and in a union)

	Model 1		Model 2		Model 3		Model 4		Model 5	
	Pooled Sample with Controls for Region and Cohort Only		Pooled Sample with Standard Controls		Cohort born 1941-50		Cohort born 1951-60		Cohort born 1961-70	
Variable	**Estimate**	**Standard Error**	**Estimate**	**Standard Error**	**Estimate**	**Standard Error**	**Estimate**	**Standard Error**	**Estimate**	**Standard Error**
Individual Traits (TV=time-varying)										
Region (vs. Northwest)										
Northeast	1.199 #	0.122	1.211 #	0.124	1.166	0.169	1.044	0.189	1.866 *	0.515
Center	1.211 #	0.121	1.229 *	0.125	1.093	0.157	1.086	0.198	2.192 **	0.590
South	2.721 ***	0.262	2.561 ***	0.252	2.484 ***	0.338	2.492 ***	0.448	3.727 ***	0.986
Cohort (vs. 1941-50)										
Cohort 1951-60	0.843 **	0.054	0.819 **	0.053						
Cohort 1961-70	0.832 *	0.060	0.797 **	0.058						
Mother Worked			1.130 *	0.066	1.083	1.052	1.211 #	0.118	1.211 #	0.141
Fathers Education (vs. Diplome)										
Father's Education none			0.884	0.099	0.640 *	0.116	0.998	0.193	1.089	0.240
Father's Education low			0.869	0.113	0.587 *	0.128	0.963	0.214	1.104	0.276
Father's Education high			0.774 #	0.111	0.573 *	0.128	0.833	0.212	0.996	0.295
Father Died (TV)			0.944	0.067	0.980	0.108	0.853	0.105	1.007	0.156
Mother Died (TV)			0.904	0.097	0.908	0.140	0.937	0.183	0.968	0.243
Respondent's Education (vs. diplome)										
Education of Respondent low			1.016	0.070	1.015	0.120	1.018	0.117	0.951	0.123
Education of Respondent high			1.126	0.125	0.648 *	0.139	1.311	0.233	1.653 *	0.333
Employed (TV)			0.762 ***	0.045	0.810 *	0.078	0.811 *	0.081	0.683 **	0.081
5In a Civil Union (vs. Religious)			0.791	0.116	0.878	0.295	0.791	0.168	0.909	0.248
First Birth Timing vs. Age 30-34										
Age at First Birth, 15-19			1.300 *	0.170	1.741 *	0.408	1.003	0.203	1.604 #	0.429
Age at First Birth, 20-24			1.260 *	0.132	1.435 *	0.269	1.197	0.200	1.234	0.257
Age at First Birth, 25-29			1.089	0.115	1.326	0.252	0.897	0.155	1.181	0.235
Age at First Birth, 35-49			0.383 ***	0.098	0.277 **	0.115	0.596	0.213	0.659	0.674
N Women	1,855		1,855		681		666		508	
N Observations	3,168		3,168		1,204		1,175		789	
N Events	1,330		1,330		516		482		332	
Log-likelihood	-9,123.244		-9,088.709		-3,014.994		-2,819.885		-1,798.008	

***** = p < 0.001, ** = p < 0.01, * = p < 0.05, # = p < 0.10**