

Changes in the stratification of contraceptive use at first intercourse in Italy, 1950-2006

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Abstract

This paper investigates inequality in contraceptive use at first intercourse by gender and social background. We use this perspective as a window into social change over time, and specifically for understanding the limits to liberalising sexual behaviour and reproductive rights. Previous research finds stratification of contraceptive use by social background and by gender, but research on trends in these patterns of contraception at first intercourse is limited. We study these links in Italy 1950-2006, a context where regional and class disparities intersect with religion and gender norms in characteristic ways. We analyze data from the “Survey on Italians’ Sexual Behavior” (2006) and a macro-dataset of family centers (consultori), which we compiled to consider institutional contexts. We distinguish three historical periods, the restrictive (before 1967), the transformative (1967-1981) and the liberal period (after 1981). Our analyses confirm a steep increase in contraceptive use over time in Italy, but also reveal a strong and persisting gender gap: men’s probability to use contraception at first intercourse is higher across all periods. We also find evidence for a socially stratified contraceptive behaviour at first intercourse for young women, which developed with increasingly liberal sexuality norms. Interestingly, we do not see that family centres helped reduce any of the differences in use. Although young people in Italy show overall growing individual command over sexuality, young women’s realization of personal sexual autonomy lags behind that of men’s suggesting that individualization is a stratified process and that, in Italy, institutions failed to moderate these inequalities.

Introduction

Contraceptive use at first sexual intercourse is one indicator of the unequal realization of personal autonomy. Young people who do not use technological contraceptive methods, such as the pill or condoms, put up with risks that may be consequential for their life course, such as sexually transmitted diseases or unplanned pregnancy. Previous research has found contraceptive use to be stratified both by social background and by gender, which points to an unbalanced distribution of life course risks among young people.

Contraceptive choice is a gendered process, and the first intercourse is no exception. Contraceptive use is embedded in contexts of trust between sexual partners, and patterns of use indicate the nature of the relationship. Although communication about contraceptives is central to their use, it is difficult to talk about it not least because contraceptives may be associated with stigma or lack of trust. Young women and young men perceive the experience of their first intercourse very differently (Camoletto 2011), and they have conflicting views on their respective responsibilities over using contraception (Brown 2015). Rooted in religion, there is generally a strong value attached to women's stable, exclusive relationships, while men are commonly expected to have more extensive sexual experiences. As a result, contraceptive use at first intercourse varies between women and men (Avery and Lazdane 2008).

Contraceptive use also varies across social backgrounds, which are likely to reflect differences in access to information and contraceptives. For example, adult women and men in lower-status occupations are less likely to use contraceptive methods than those from higher occupational groups (Layte et al. 2007). Similarly, high parental education (Manning, Longmore, and Giordano 2000) and high own education (Buhr and Castiglioni 2017) are positively associated with contraceptive use. However, the extent to which contraceptive use varies by socioeconomic background differs substantially across countries (Singh, Darroch, and Frost 2001). This observation is likely to be explained by differences in access to contraception and in geographical and social-historical contexts.

The socio-historical context is shaped by legal regulations and policies as well as by social and cultural norms. Family planning regulations, such as divorce law and abortion law, provide the legal context for decisions over reproductive behaviour. They set the opportunity structures defining individuals' options and alternatives. Policies have a similar function, but usually have redistributive aims in terms of levelling life chances. Adolescent sexual activity has become a public health issue in many countries (Sprecher, Harris, and Meyers 2008). The implementation

of appropriate policy strategies is however often lagging behind. A recent assessment of policies granting women access to sexual and reproductive health and rights illustrates vast differences across countries and highlights contexts with particular demand (IPPFN 2015).

Italy is an illustrative case for analysing the links between sexual risk behaviour in adolescence, social stratification and socio-historical context. Together with Czech Republic and Romania, Italy ranks lowest among 16 EU countries in the IPPFN report (IPPFN 2015). On the one hand, like many other countries, family planning regulations liberalised in the 1970s in Italy (Spinelli et al. 1993). Divorce was legalised in 1970, the ban on information about birth control was dropped in 1971 and abortion became legal in 1978. On the other hand, Italy remains a country with traditional gender norms and high gender inequality in many areas of social life (OECD 2017). Arguably, this is partially due to the continued influence of the Catholic Church in Italy. The links between social background and contraceptive use have so far mostly been studied in other countries and remain unknown for Italy.

We therefore address two research questions: first, is contraceptive use at first intercourse socially stratified in Italy? Second, how much is explained by individual characteristics, socio-historical and institutional contexts?

Data and methods

We use data from the Survey on Italians' Sexual Behavior (*Indagine sulla Sessualità degli Italiani*, ISI henceforth) on 3,058 individuals 18-69 years old interviewed in 2006. The ISI collected information on a wide range of aspects related to sexual behavior and attitudes towards sex. The results are generalizable to the population using the post-stratification weighting scheme provided by the research team that collected the data (Barbagli, Dalla Zuanna, and Garelli 2010). Focusing on adolescence as a distinct phase in the life course, we study individuals who experienced the first intercourse between age 10 and 24 years (Sawyer et al. 2018). After excluding those who have not had their first intercourse at the moment of the interview, we retain 2,485 individuals. The sample is made up of 1,237 men and 1,248 women.

Logistic regression models are used to estimate the probability of contraceptive use at the first sexual intercourse for men and women separately. The main independent variable is parental education: the highest educational level among parents is used to identify either parents with at most lower secondary education or at least upper secondary education. The effect of parental education is considered in interaction with the socio-historical period when the first intercourse occurred: this variable distinguishes between those who experienced the first sexual intercourse

before 1967 (restrictive context), between 1967 and 1981 (transformative context) and after 1981 (liberal context). During the transformative period several reforms related to access to contraception and abortion were introduced as displayed in Table 1.

[Table 1 here]

We exploit regional variation in the availability of family centers across regions (0; 0.1-1; 1.1-3; 3.1-5; 5.1-7; 7.1-9 per 10,000 women 15-49 year-old). These data are retrieved from the *Report of the Ministry on the implementation of the Law 194/1978 for the social protection of motherhood and legal abortion* compiled (almost) every year from 1979. The number of family centers across regions and over time (1979-2006) can be found in Figure A1 in Appendix A. Details on these data are reported in Appendix B. Moreover, models control for geographical macro-area of residence (North-West, North-East, Center, South and Islands) fixed-effects.

Additionally, the models include controls for: type of relationship with the sexual partner (no relationship, partner, husband/wife), size of the city (up to 5,000, 5,001-10,000, 10,001-30,000, 30,001-100,000, 100,001-500,000, 500000+), age at first intercourse (min.10, max. 40, s.d. 3.1).

[Table 2 here]

Descriptive results

Figure 1 and 2 display the trends in use of contraceptive use at first intercourse by gender and parental education between the 1950s and the 2000s. Both men and women increased their use of contraception over time and the gender gap seems to diminish between 1980-1990. Importantly, at the beginning of the 2000 only 60% of young men and women used safe contraception at first intercourse. Figure 2 shows a less clear pattern with respect to differences by parental background: the overall increase concern youth from families where parents have low and medium or high education. This descriptive picture of young Italian's experience at first intercourse over time does not support existing research reporting stratified patterns of contraceptive use.

[Figure 1 here]

[Figure 2 here]

Multivariate analyses

Figure 3 shows the probabilities of contraceptive use at first intercourse in the restrictive, transformative and liberal contexts by gender. In the first panel, estimates are adjusted for individual characteristics; in the second panel, we further adjust for family centres by 10,000 women in the region; and in the third panel; macro areas are included in order to account for the strong regional differences in overall structural conditions in Italy.

Looking at the first panel, we find a steep increase in contraceptive use at first intercourse for both men and women similar to what we saw in the descriptive graphs. However, we also find a very obvious and persisting gender gap, showing that young women lag behind young men in their probability to use contraceptives at first intercourse. These results indicate that the convergence in young men's and young women's contraceptive use in the descriptive findings disappears once we adjust for individual characteristics and contextual factors in the regression framework.

From the second and third panel we see that neither the availability of information and contraceptives offered in family centres nor the broader structural conditions in the macro areas explain differences in contraceptive use at first intercourse between young men and young women. This implies that the gender gap is similar in regions with more and with less family centres.

[Figure 3 here]

In the next step we estimated the effect of parental education on using contraception at first intercourse across the different socio-historical contexts, looking at men and women separately. Estimates in the first panel are adjusted for individual characteristics; those in the second panel are additionally adjusted for family centres by 10,000 women in the region and for macro area. Our results show that the stratification of contraception at first intercourse is negligible among young men from different social backgrounds, but it appears to grow in the more liberal context albeit not to a statistically significant difference in probability. For women, however, parental education seems to matter more. In fact, there appear stronger signs for class gaps than for men, with young women with low educated parents having lower probabilities to

use contraceptives at first intercourse since the transformative period. A much steeper increase in probabilities to use contraception for women whose parents have higher education exists compared to those with lower educated parents. Adjusting for the structural setting does not change this relationship.

[Figure 4 here]

Summary and preliminary conclusions

Our analyses confirm a steep increase in contraceptive use over time in Italy, but also document a strong and persisting gender gap: men's probability to use contraception at first intercourse is higher throughout, even in the youngest cohorts. We also find evidence for a socially stratified contraceptive behaviour at first intercourse for young women, which developed with increasingly liberal sexuality norms. Interestingly, we do not see that family centres helped reduce any of the inequalities in use.

Although young people in Italy show overall growing individual command over sexuality, at least until 2006 young women's realization of personal sexual autonomy lags behind that of men's suggesting that individualization is a stratified process and that – in the Italian case – institutions failed to moderate gaps between men and women and between young women from different social backgrounds.

Acknowledgments

The authors want to thank Prof. Maria Castiglioni for the access to the data and Martin Gädecke for excellent research assistance.

References

- Avery, L. and G. Lazdane. 2008. 'What Do We Know about Sexual and Reproductive Health of Adolescents in Europe?' *The European Journal of Contraception & Reproductive Health Care* 13(1):58–70.
- Barbagli, Marzio, Gianpiero Dalla Zuanna, and Franco Garelli. 2010. *La Sessualità Degli Italiani*. Bologna: Il Mulino.
- Brown, Sally. 2015. "“They Think It's All up to the Girls”": Gender, Risk and Responsibility for

- Contraception'. *Culture, Health & Sexuality* 17(3):312–25.
- Buhr, Petra and Laura Castiglioni. 2017. 'Family Planning under Financial Constraints: Contraceptive Use among Women Receiving Means-Tested Unemployment Benefits in Germany'. *Advances in Life Course Research* 32:12–20.
- Camoletto, Raffaella Ferrero. 2011. 'Sexual Beginners: Accounting for First Sexual Intercourse in Italian Young People's Heterosexual Biographies'. *Sex Education* 11(3):315–25.
- Elder, Glen H., Monica Kirkpatrick Johnson, and Robert Crosnoe. 2003. 'The Emergence and Development of Life Course Theory'. Pp. 3–19 in *Handbook of the Life Course, Handbooks of Sociology and Social Research*, edited by J. T. Mortimer and M. J. Shanahan. Springer US.
- IPPFN. 2015. *Women's Access to Modern Contraceptive Choice - Barometer 2015*. Brussels: International Planned Parenthood Federation European Network.
- Layte, Richard, Hannah McGee, Kay Rundle, and Collette Leigh. 2007. 'Does Ambivalence about Becoming Pregnant Explain Social Class Differentials in Use of Contraception?' *European Journal of Public Health* 17(5):477–82.
- Manning, Wendy D., Monica A. Longmore, and Peggy C. Giordano. 2000. 'The Relationship Context of Contraceptive Use at First Intercourse'. *Family Planning Perspectives* 32(3):104–10.
- OECD. 2017. *The Pursuit of Gender Equality: An Uphill Battle*. Paris: OECD Publishing.
- Sawyer, Susan M., Peter S. Azzopardi, Dakshitha Wickremarathne, and George C. Patton. 2018. 'The Age of Adolescence'. *The Lancet Child & Adolescent Health* 2(3):223–28.
- Singh, Susheela, Jacqueline E. Darroch, and Jennifer J. Frost. 2001. 'Socioeconomic Disadvantage and Adolescent Women's Sexual and Reproductive Behavior: The Case of Five Developed Countries'. *Family Planning Perspectives* 33(6):251–89.
- Spinelli, A., M. Grandolfo, S. Donati, and E. Medda. 1993. 'Family Planning in Italy'. *Advances in Contraception* 9(2):153–60.
- Sprecher, Susan, Gardenia Harris, and Adena Meyers. 2008. 'Perceptions of Sources of Sex Education and Targets of Sex Communication: Sociodemographic and Cohort Effects'. *The Journal of Sex Research* 45(1):17–26.

Tables and Figures

Table 1. Socio-historical contexts and reforms

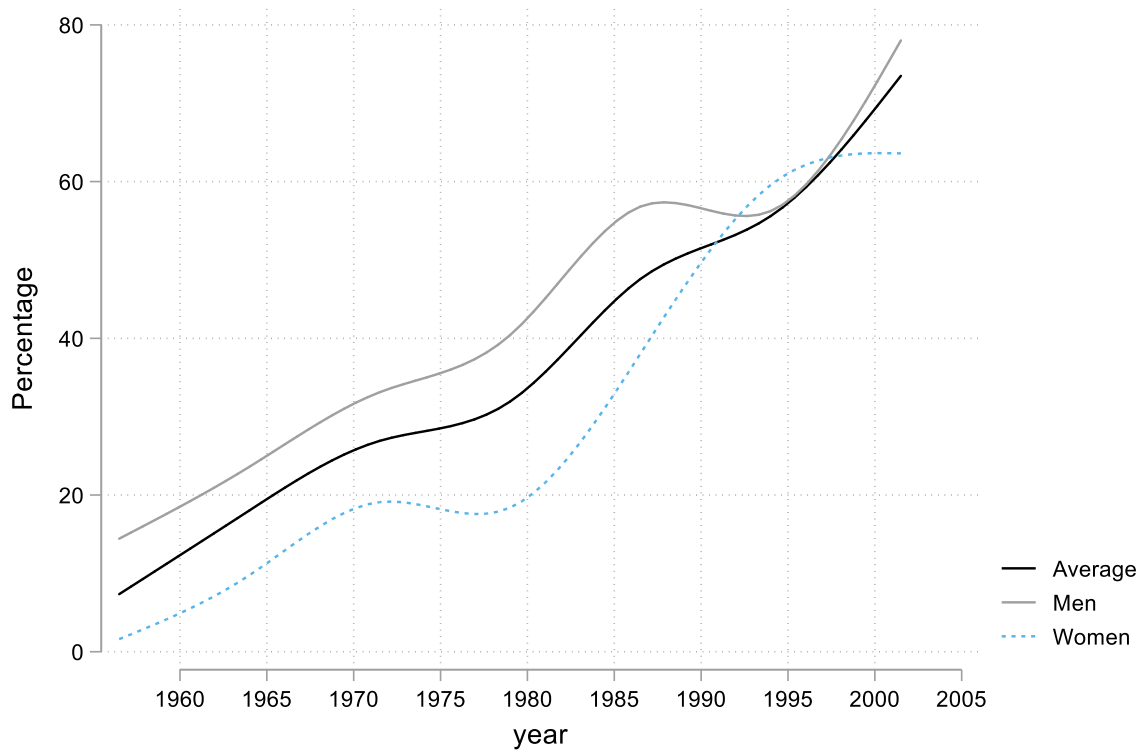
Period	First intercourse...	Reforms
Restrictive	Before 1967	
		1967 Pill (medical)
		1970 Legal divorce
Transformative	1967–1981	1976 Pill (everyone)
		1978 Legal abortion & family centres
		1981 Abolition shotgun wedding/honour killing
Liberal	After 1981	

Table 1: distribution of the dependent and independent variables

	Full sample	Among those who had first sex
<i>Gender</i>		
Men	51.18	50.97
Women	48.82	49.03
<i>Contraception</i>		
No	55.07	61.87
Yes	33.94	38.13
No 1st sex	10.98	
<i>Parental education</i>		
at most lower sec.	73.82	74.14
at least upper sec.	25.49	25.23
missing	0.69	0.63
<i>Type of relationship with sexual partner</i>		
No relationship	24.04	24.47
Cohabiting/marriage	13.25	13.88
Partner	57.22	60.78
missing	5.49	0.87
<i>Age at 1st sex</i>		
Min.10-Max.24, S.D.=2.61	16.9	16.9
<i>Geographical area</i>		
North-West	26.74	26.77
North-East	19.19	20.06
Center	19.61	19.75
South and Islands	34.46	33.43
<i>Context</i>		
Restrictive (before 1967)	20.04	19.18
Transformative (1967-1981)	33.14	33.97
Liberal (after 1982)	46.82	46.85
<i>Number of family centers per 10000 women in the region (after 1978)</i>		
Min.0.1-Max.5.6m, S.D.=0.87	1.58	1.59
<i>N.</i>	2,811	2,517

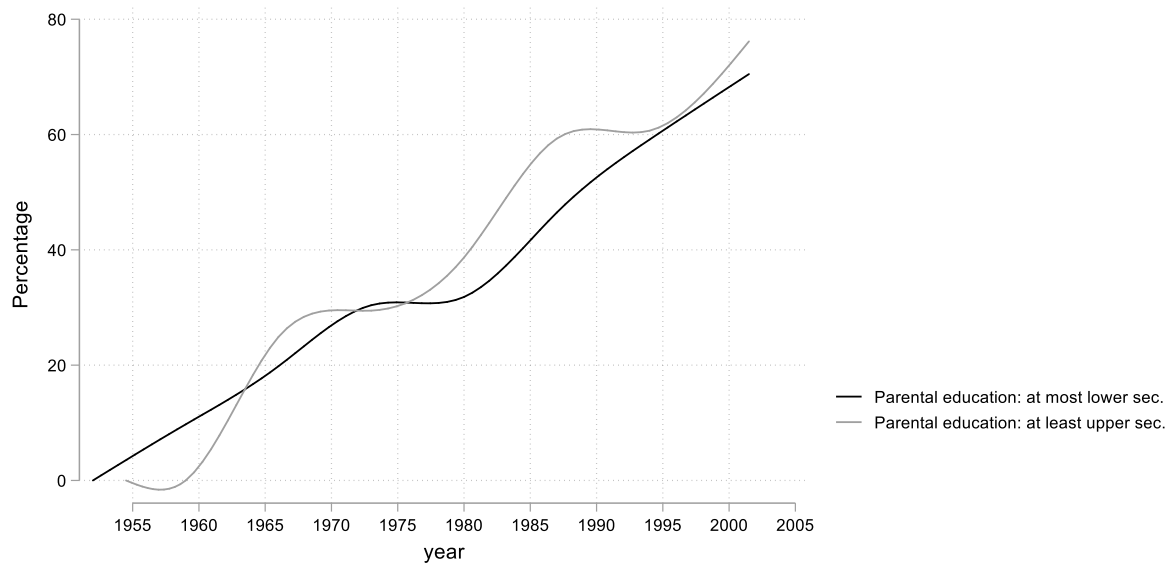
Source: ISI 2006, authors' calculations.

Figure 1. Young adults using contraceptive at first intercourse, men and women, 1960-2006



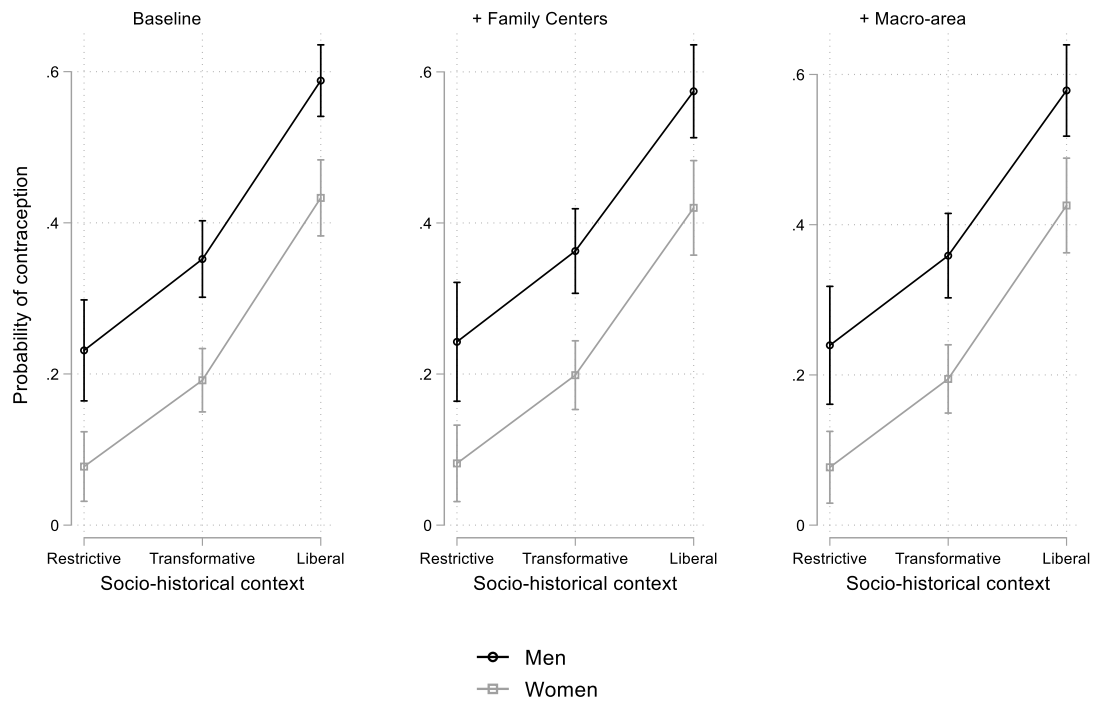
Source: ISI 2006, authors' calculations.

Figure 2. Young adults using contraceptive at first intercourse by parental education, 1960-2006



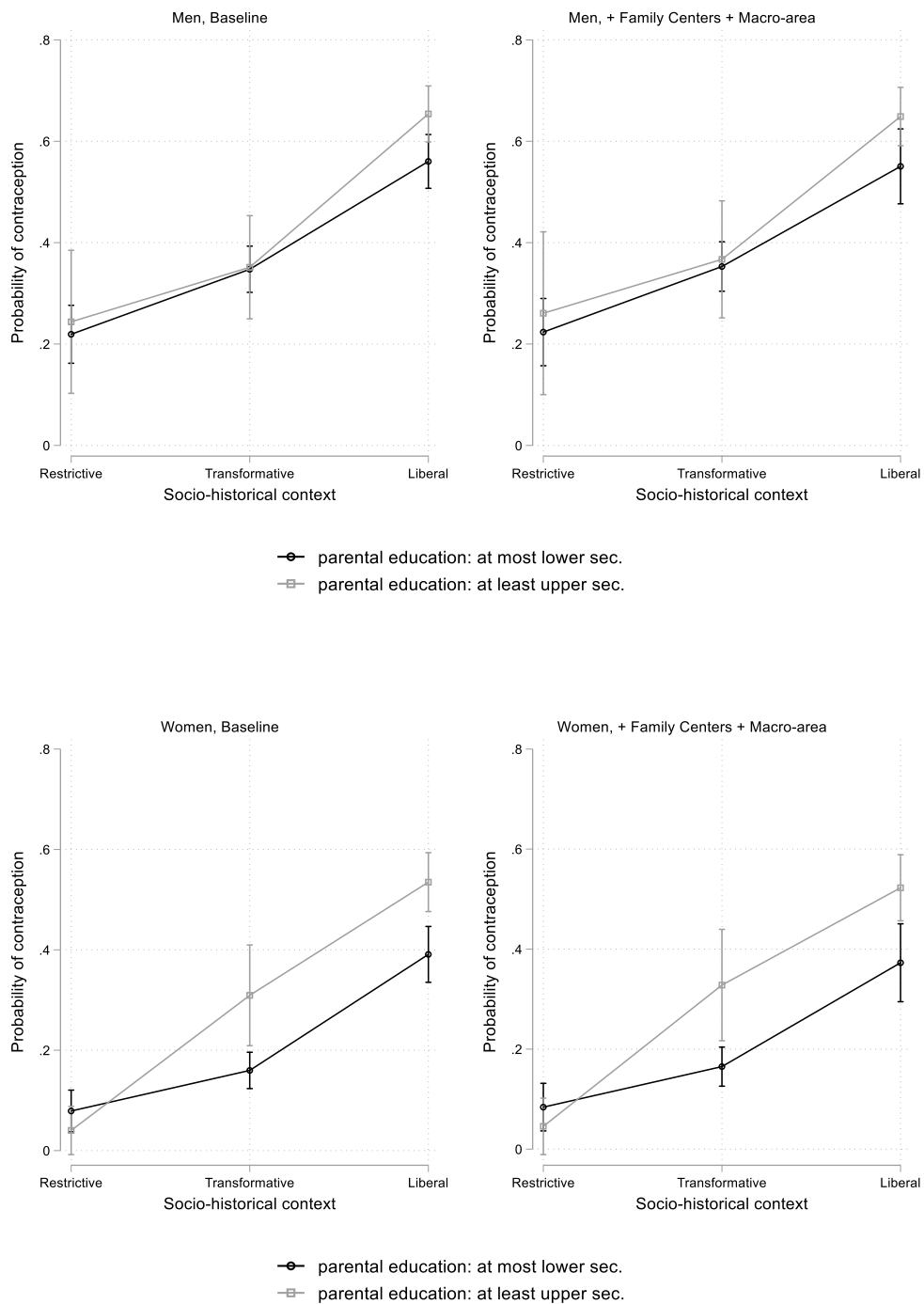
Source: ISI 2006, authors' calculations.

Figure 3. Probability of contraception at first intercourse over time: by gender



Source: ISI 2006, authors' calculations. Models estimated separately for men and women. Controls include: geographical macro-area of residence, type of relationship with the sexual partner, size of the city, age at first intercourse. 95% confidence intervals. Weighted results.

Figure 4. Probability of contraception at first intercourse over time by social background and gender

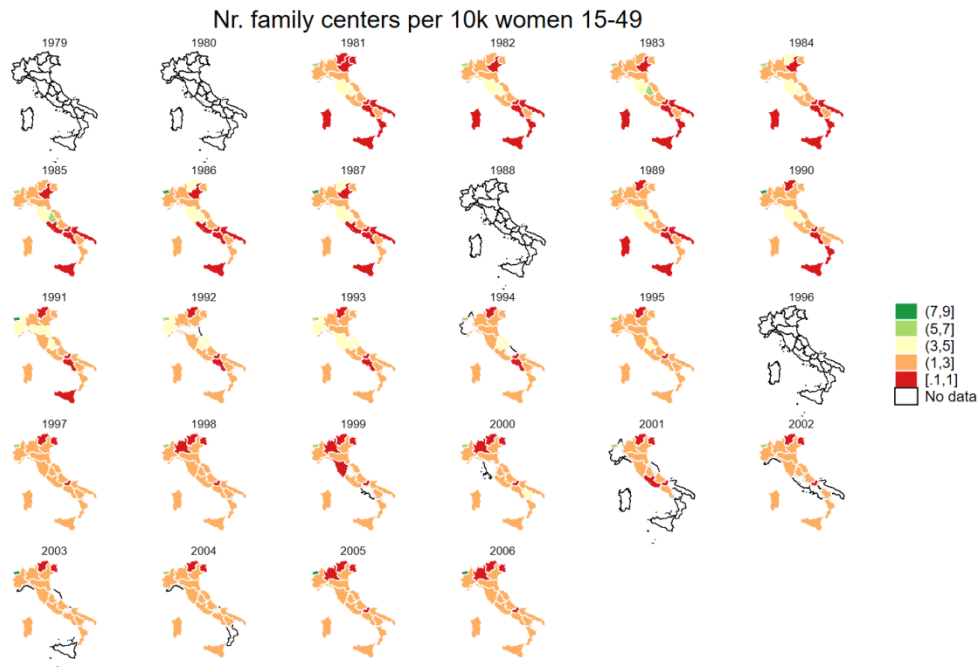


Source: ISI 2006, authors' calculations. Models estimated separately for men and women. Controls include: geographical macro-area of residence, type of relationship with the sexual partner, size of the city, age at first intercourse. 95% confidence intervals. Weighted results.

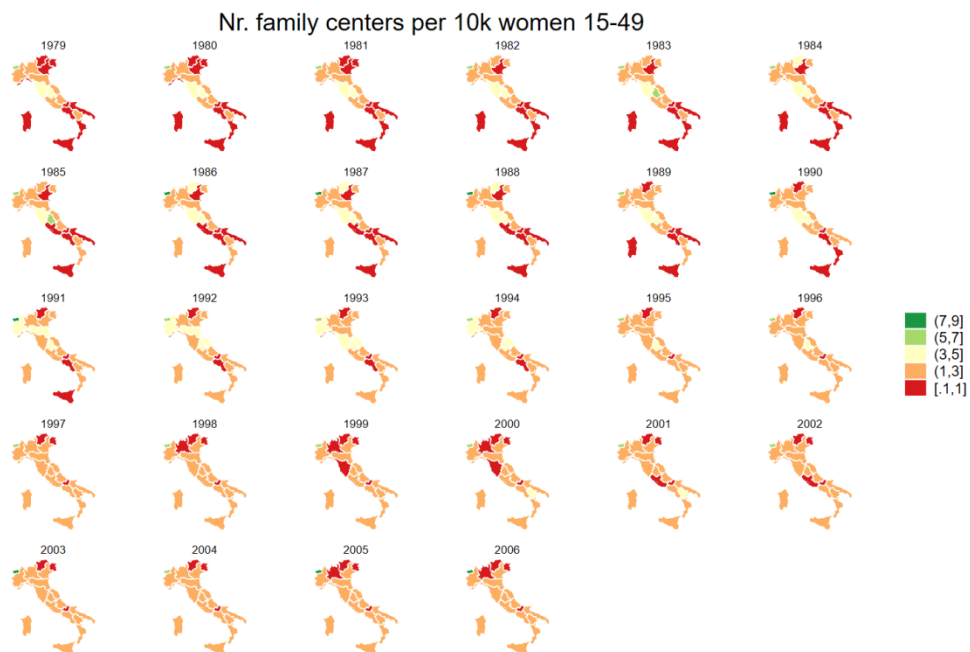
Appendix A

Figure A1. Family centers per 10,000 women between 15 and 49 year-old across regions and over time.

(a) Missing information on selected regions/year



(b) Imputed missing information



Source: Report of the Ministry on the implementation of the Law 194/1978 for the social protection of motherhood and legal abortion (1979-2006) and ISTAT.

