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**WHY NOT HAVING ANOTHER CHILD?
THE ECONOMICS OF FERTILITY INTENTIONS
FOR INDIVIDUALS AND COUPLES IN ITALY:
A MIXED-METHOD APPROACH**

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Se varrò qualcosa più in là, la valgo anche adesso,
perché il grano è grano, anche se all'inizio veniva scambiato per erba.

(Vincent Van Gogh, 1853-1890).

Contents

	Page
Motivation of the Thesis	1
- Chapter 1 - Fertility Intentions of Employed Mothers in Italy: Does the Choice of Public <i>versus</i> Private Sector Matter?	7
1.1. Introduction and Motivation	8
1.2. Theoretical Background and Empirical Evidences	11
1.2.1 <i>The Economic Theory of Fertility and Becker's Model</i>	12
1.2.2 <i>The Potential Role of Employment Protection Legislation, Job Security and Family Friendly Policies</i>	13
1.2.2a The Public Sector in Italy	
1.2.3 <i>A Gender Approach to Explain Low Fertility and Female Labour Force Participation</i>	20
1.3. Source of Data and Data Selection	22
1.4. Empirical Strategy	27
1.4.1 <i>Exogenous Sector Choice: The Ordered Probit Model</i>	28
1.4.1a Model Description	
1.4.1b The <i>Ordered Probit</i> Results	
1.4.2 <i>Endogenous Sector Choice: The Conditional Multi-Equation Mixed-Model</i>	39
1.4.2a Model Description	
1.4.2b The <i>Cmp</i> Results	
1.5. Concluding Remarks and Further Research	49
Appendices	53
References	75
- Chapter 2 - Fertility Intention for a Second Child Within the Italian Couples: A Bargaining Process Approach	85
2.1. Introduction	86
2.2. Demographic Background and Theoretical Framework	89
2.3. Method of Analysis	94
2.3.1 <i>The Multinomial Logistic Model</i>	94
2.3.2 <i>Probit Model with Sample Selection</i>	95
2.4. Data	97
2.5. Variables and Hypotheses	100
2.5.1 <i>Hypotheses</i>	100
2.5.1a Female's Employment Status and Education	
2.5.1b Quality of the Relationship	
2.5.1c Individual Values	
2.5.2 <i>The Analytic Model</i>	103
2.6. Main Findings	107
2.6.1 <i>Determinants of Couples' (Dis)Agreement on the Intention for a Second Child</i>	107
2.6.2 <i>Determinants of Females' Contrasting Attitude towards her Partners' Positive Fertility Intention for a Second Child</i>	118
2.7. Summary of the Results and Concluding Remarks	122
Appendices	127
References	135

- Chapter 3 -	A Qualitative Analysis of the Role of Paid and Unpaid Job in a Lowest Low Fertility Context: the Puzzling Intention for a Second Child	141
3.1.	Introduction	142
3.2.	Fertility Context	144
3.3.	Qualitative Approach and a Note about Mixed-Method Design	148
3.4.	Cagliari as a Case Study	153
3.4.1	<i>Data Collection and Sample Selection</i>	156
3.5.	Coding and Comparing Procedure	159
3.6.	Analysis and Investigation	163
3.6.1	<i>Women's attitude towards paid job and fertility</i>	164
3.6.2	<i>Women's attitude towards unpaid work and fertility</i>	174
3.6.3	<i>Intention to have a Second Child</i>	178
3.6.3a	Categorization of fertility intentions	
3.6.3b	Women's attitude towards paid and unpaid work by fertility intention for the second child	
3.7.	Conclusion and Discussion	195
Appendices		199
References		210
Conclusion of the Thesis		217

List of Figures

		Page
- Chapter 1 -		
Figure 1.1	Cross-country relation between female employment rates and total fertility rates, 2006.	10
- Chapter 2 -		
Figure 2.1	Public spending on family benefits in cash, services and tax measures, in per cent of GDP, 2005.	88
Figure 2.2	Cross-country relation between female employment rates and total fertility rates, 1982-2006.	90
- Chapter 3 -		
Figure 3.1	Total fertility rate, 2003 and change between 1960 and 2003.	145
Figure 3.2	Age-specific profiles of fertility rates for Italy, 1970-2005.	146
Figure 3.3	Analytical procedure for qualitative research.	150
Appendix 3.1 Figure	Mean age of women at birth of first child around 2004.	199
Appendix 3.3 Figure 3a	The Theory of Planned Behavior (Ajzen, 1991).	202
Appendix 3.3 Figure 3b	A model of fertility decision-making based on Ajzen (REPRO).	203

List of Boxes

- Chapter 2 -		
Box 2.1	Effects of Educational Levels -of individuals and couples- on couples' fertility intentions.	108

List of Tables

	Page
- Chapter 1 -	
Table 1.1	9
Table 1.2	26
Table 1.3	33
Table 1.4	44
Appendix 1.1 Table	53
Appendix 1.2 Table	54
Appendix 1.3 Table	56
Appendix 1.4 Table	60
Appendix 1.5 Table	62
Appendix 1.6 Table	64
Appendix 1.7 Table 7a	66
Appendix 1.7 Table 7b	67
Appendix 1.7 Table 7c	69
Appendix 1.7 Table 7d	70
Appendix 1.7 Table 7e	72
Appendix 1.7 Table 7f	73
- Chapter 2 -	
Table 2.1	99
Table 2.2	105
Table 2.3	116
Table 2.4	121
Appendix 2.1 Table	127
Appendix 2.2 Table 2a	129
Appendix 2.2 Table 2b	133
- Chapter 3 -	
Table 3.1	157
Table 3.2	158
Appendix 3.2 Table	200
Appendix 3.5 Table	207
Appendix 3.6 Table	208

Abstract of the Thesis

The thesis is a contribution to the study of the economic implications of fertility intentions and desires and of the economic aspects of the fertility decision making process. Precisely, it is based on three autonomous chapters and it aims at understanding: a) for women and for individuals within the couples the interplay between fertility and labour market preferences (with a particular focus on the role of women's sector of employment), and the influences that the (un)balanced division of domestic duties play on the intentions of becoming parents for another time in Italy; b) for couples living together the determinants of their (dis)agreement about the intention of becoming parents again; and c) for couples that disagree on future fertility plans, the determinants of female's contrasting attitude towards her partners' positive fertility intention.

The dissertation uses a mixed-method design- a strategy based on survey data analysis as well as in-depth interviews analysis: this approach allows investigating the topic from different perspectives, by means of both quantitative and qualitative research methods in order to provide new insights into the phenomenon of interest.

Key-Words: Fertility Intentions, Paid Job, Unpaid Work, Fertility Decision Making Process, Couple's Bargaining, Mixed-method Design

Abstract della Tesi

La presente tesi è un contributo allo studio delle implicazioni economiche delle intenzioni di fecondità e all'analisi degli aspetti economici legati ai processi decisionali riproduttivi. Precisamente la tesi, composta da tre capitoli indipendenti e basata su dati Italiani, si focalizza su donne, su individui che vivono in coppia e sulle coppie.

In particolare lo studio mira a comprendere: i) l'interazione esistente tra il mercato del lavoro (con un focus particolare sul ruolo del settore occupazionale femminile) e le preferenze per la formazione della famiglia; ii) le influenze della ripartizione dei ruoli domestici all'interno della coppia sulle intenzioni riproduttive; iii) le determinanti (all'interno delle coppie) dell'accordo/disaccordo circa l'intenzione di diventare genitori una seconda volta, e -per coppie che registrano un disaccordo- iv) le determinanti che spingono una donna a contrastare l'intenzione positive del suo partner per un secondo figlio.

La tesi utilizza il mixed-method design, una strategia basata sull'analisi quantitativa dei dati nonché sull'analisi approfondita di interviste: questo approccio consente di studiare l'argomento da diverse prospettive e -grazie ai due metodi di ricerca -quantitativo e qualitativo-, di approfondire le conoscenze del fenomeno di interesse.

Parole chiave: Intenzioni riproduttive, Processo Decisionale, Negoziazione all'interno della coppia, Lavoro Pagato, Lavoro non pagato, Metodo di ricerca Quantitativo, Metodo di ricerca Qualitativo.

Motivation of the Thesis

As the title of the whole dissertation suggests the present work deals with the economic implications of fertility intentions and with the economic aspects of the fertility decision process. Precisely, it aims at understanding -for women and for individuals within the couples- the interplay between fertility and labour market and which are the influences that the (un)balanced division of domestic duties play on the intentions of becoming mother (or father) for another time in Italy.

Actually Italy was in the early 1990s one of the first countries to reach and maintain lowest-low fertility levels that means a fertility level below 1.3 children per woman as stated by Kohler et al. (2002). Moreover, in Italy the mean age of women at first birth increased from 25.0 to 28.7 years between 1980 and 1997 and the mean age at childbearing rose from 27.7 to 30.3 between 1980 and 2004 as reported by the Council of Europe (2001, 2004), but the interest in analyzing the Italian situation is to find in other recent statistics: they state that in 2003 the desired number of children in Italy was on average¹ more than two children per woman (2.1), but the recorded Total Fertility Rate for the same year² was 1.26 children per woman (ISTAT 2006) and most importantly for my purposes, the cohort completed fertility rates for women born in 1960³ was 1.4 children per woman. These data indicate that fertility would increase considerably, up to levels around replacement⁴, if the desired family size, be it measured by the ideal or the expected number of children, were actually realised. Hence the gap reflects the existence of unrealised fertility and my goal is trying to understand the determinants of fertility intentions in order to contribute to the growing debate about fertility intentions and the way to link them to subsequent realization.

¹ Considering a more precise geographic distribution, in the Southern part of Italy the desired number of children is 2.3 children per woman, for what concern the Islands it is 2.2 children per woman and in the North of Italy it is about 2 children per woman.

² For 2010, preliminary statistics report a TFR of 1.41 per woman (ISTAT 2010).

³ This cohort has been chosen because it is the average cohort of the women I have in the datasets employed in the dissertation.

⁴ «The level of fertility at which a couple has only enough children to replace themselves, or about two children per couple», Population Reference Bureau.

In addition, the title of the work anticipates the use of a mixed-method, a strategy based on both survey data analysis as well as qualitative in-depth interviews, employed to investigate a phenomenon from different angles, using both *quantitative* and *qualitative* research methods.

Referring to the choice of adopting the mixed-method in this framework, the principal reason stands in the kind of dependent variable I decided to use for the whole investigation.

Childbearing is usually planned during the life course and reproductive intentions are receiving growing attention in human and demographic studies given that they are considered a salience of purposive human behaviour and an important variable in the analysis of fertility trends (Bongaarts 2001). For that reason the fertility intentions (about whether and when) could -in this respect- be treated as dependent variables. Nevertheless, a potential limitation of the dependent variable is that it is a dichotomous measure of intentions (intend to have *versus* not intend to have further children), so from the quantitative perspective, there is no way of distinguishing between a weak aspiration and an uncompromising determination.

In order to overcome the former and the latter possible restrictions, I thus decided to employ the mixed method approach, using not only the quantitative method but also the qualitative one.

In this sense, what my qualitative "case study" methodology amounts to do is using the material from open-ended interviews to check the assumptions and results of conventional quantitative theory that do not always seem to be sufficient in order to explain the way that leads to some decisions in the process of shaping the fertility intentions.

Before proceeding with an overview of the thesis and with the entire investigation, it is important to clarify the meaning of fertility intention and the difference that the term *intention* has with respect to the term *wish* and the meaning that we give to *desire* starting from the theoretical framework proposed by Miller et al. in 2004. The difference between wishes and intentions is akin to the difference between what one

would like to do (or liked to do) given the absence of situational constraints and what one actually plans to do given the reality within which one ordinarily operates.

Furthermore and at a more general level, when we refer to fertility desire we intend it as an abstract sum of the number of children actually born (resulting from a precedent precise intention transformed into realization) and the number of children one intends to have. Of course, when the fertility intention is null, it means that the target fertility has been reached.

Outline of the Dissertation

The dissertation is divided into three Chapters aimed at understanding how the fertility intentions of having another child are shaped.

The first Chapter deals with the fertility intention (starting from the desired number of children) for another child around childbearing, using the "Birth Sample Survey" carried out by the Italian National Statistical Institute (ISTAT) in 2005 on a sample of women who experienced the birth of one child in 2003 and it follows a quantitative approach. Given the nature of the dataset, I will adopt women's perspective and the main interest will stand in understanding if and in which sense working in the public sector influences or shapes women's childbearing intentions for another child and if the sector's choice for employed women is endogenous or not to the fertility decision process. Actually, specified the peculiarities of the Italian public sector that are supposed to increase fertility levels thanks to the higher degree of employment protection, but highlighted the current attempt to reduce public expenditures through a contraction of the public sector (especially in terms of employment), one key component to consider is the interplay between working women's career-orientation/sector choice and women's familiar attitudes.

The Second paper has again a quantitative approach and it is devoted to the study of interactions between individuals -in particular within the couples- and their outcomes in shaping the fertility intentions for a second child. Precisely, after having analyzed in the first Chapter woman's fertility intentions and in particular the relation that occurs between the decision about the employment sector and fertility choices, we

will move to couples' intentions to investigate the role of individual within the household. Actually, the majority of the studies of household fertility decisions ignore the potential importance of men and women having different preferences regarding the number of children and they are primarily based on the views of women. Thanks to the use of the "Family and Social Subjects"⁵ survey carried out by ISTAT in 2005 and administered separately to both members of the couples we will be able to investigate individual fertility intentions within the couple.

The last paper, after having offered a note on the mixed method approach will present a case study using the qualitative method trying to understand how the fertility intentions are related to attitudes and beliefs with reference to paid and unpaid job.

Precisely, its main goal is the one of deepening the whole investigation through an achievement of complementary results and a validation of the quantitative findings. This will be possible thanks to the use of data collected in 2004 and 2009 within the framework of the REPRO project - "Reproductive decision-making in a macro-micro perspective" - financed by the European Union⁶.

Finally, in the Conclusion Section a brief summary of the main results is presented along with comments on the convenience of having employed a mixed method approach⁷.

⁵ The survey is part of the international "Generations and Gender Programme", <http://www.unece.org/pau/ggp/Welcome.html>.

⁶ "Reproductive decision-making in a macro-micro perspective" (REPRO), in the Seventh Framework Programme under the Socio-economic Sciences and Humanities theme. (Grant Agreement: SSH-CT-2008-217173).

⁷ Chapter 1 has been written under the supervision of Professor Massimiliano Bratti, Chapter 2 under the supervision of Professor Alessandro Rosina and Chapter 3 under the supervision of the Independent Research Group CURE (Culture of Reproduction), Max Planck Institute of Demographic Research. They helped me with advice, criticisms, and encouragement. All remaining mistakes are my own. Chapter 1 of this thesis has been presented in its preliminary version at Bocconi University of Milan, Chapter 2 has been presented in its preliminary versions at the University of Louvain, Vienna Institute of Demography, European Population Conference, Catholic University of Milan, Turin (Collegio Carlo Alberto), while Chapter 3 has been presented in preliminary versions at the Max Planck Institute of Demographic Research and Catholic University of Milan. I'm indebted to seminar participants for helpful comments and suggestions.

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Chapter 1

Fertility Intentions of Employed Mothers in Italy: Does the Choice of Public *versus* Private Sector Matter?

This work aims at understanding whether and the extent to which the intention of having other children is influenced by aspects related to the employment sector chosen by “new” mothers (the ones that already have one child less than 3 years old).

Using Italian data from the Birth Sample Survey conducted by the Italian National Statistical Institute (ISTAT) in 2005, this work models new mothers’ preferences for family formation and for working conditions taking into account the potential endogeneity of the sector choice.

Working in the public sector, which benefits from stronger employment protection, tends to influence -in particular to increase- the desired and the realized fertility of working mothers. This could be due to the existence of a lower level of wage discrimination compared to the private sector, to the higher level of job security and to the existence of family friendly policies.

However, the choice of the working sector could be endogenous. Actually, once the selection effect is taken into account and the choice of working sector and the desired fertility are modelled together, the correlation among unobservable women’s characteristics affecting the two choices is found to be negative: women who desire more children seem to be less likely to self-select into the public sector. This last finding could be the result of more productive women’s working strategies: given that they are those more work oriented (and less family-oriented), they tend to enter into the public sector, a less gender discriminated sector.

We comment on the interplay between employment sector, fertility intentions and realized fertility.

Keywords: Desired Fertility, Working Mothers, Public-Private Sector, Seemingly Unrelated Regression models.

Chapter 2

Fertility Intention for a Second Child Within the Italian Couples: a Bargaining Process Approach

Using household-level micro-data from the "Family and Social Subjects" survey carried out by the Italian National Statistical Office in 2003, this paper aims at understanding the determinants of couples' childbearing intentions for a second child by the explicit use of a bargaining process approach.

The analysis uses two different econometric strategies: the first one is based on multinomial logit models, while the second one is based on sample selection models and it is employed mainly in order to understand which the determinants that induce a woman to contrast her partner's positive intention for another child are, secondly in order to check the robustness and the general validity of the multinomial findings.

The main hypothesis is that in Italy the couples' intentions to have more than one child are particularly exposed to a partners' conflict i) if the woman works or ii) if she has the highest level of educational attainment within the couple or iii) -regardless of the level of education or of the employment status- if she is unsatisfied about the gender division of family chores.

The analysis finds out that the level of educational attainment of the female partner is not necessarily an obstacle for the second childbearing. However, couples where the woman holds a University degree have a more prudent attitude towards the possibility of becoming parents a second time. Moreover, the working conditions of the female partner are an important element shaping the fertility intentions. The quality of the relationship and the individual values are considered as well. In order to expand the investigation in the field, the second part of the study deals with the determinants of woman's contrasting attitude towards her partner's positive intention for another child: when within the couple the female partner is more educated, she contrasts less her partner's positive intention. If we deal with the job-related features, the probability that the female contrasts her partner's positive fertility intention is higher when she is unemployed, when she is employed but she experiences a lack of provision of childcare and if she perceives that another child might jeopardize her career. The age itself plays an interesting role.

Key-Words: Fertility Intentions, Second Child, Bargaining Approach, Paid job, Unpaid Job, Multinomial Logistic Regression Model, Probit Model with Sample Selection.

Chapter 3

A Qualitative Analysis of the Role of Paid and Unpaid Job in a Lowest Low Fertility Context: the Puzzling Intention for a Second Child

Over the past decades the process of family formation dramatically changed in Europe. Even though similar trends have been observed across the continent there are still important differences between countries.

In the exiting literature about fertility intentions, large attention has been devoted to individual's intention on having the first child (Von der Lippe and Fuhrer 2003, Strauss and Goldberg 1999), but less consideration have been dedicated to the intention for reaching higher of parity levels, and in particular on becoming mother for the second time and its relationship with the labour market and the domestic sphere. The interest in analyzing the intention of having a second child is due to the fact that in Italy the desired number of children is on average 2.1 children per woman but the recorded Total Fertility Rate in 2006 was 1.26 children per woman (ISTAT 2006) and the cohort completed fertility rates of women born in 1960 is 1.4 children per woman, so the low level of fertility should mainly depend on the transition to the second child.

Using the theoretical approach and conceptual items given by Ajzen's (1991) Theory of Planned Behaviour without applying its empirical model, the main focus of the present paper is on the way in which paid job and women's attitudes towards it influence the decision of having a second child. The study uses a qualitative method approach, by mean of the investigation of in-depth interviews with 27 women in reproductive ages in Cagliari, one of the lowest-low fertility contexts in Italy. Mothers were divided into six different groups on the basis of their approach to childbearing intentions for a second childbearing.

The results demonstrate that the theoretical framework is able to highlight substantial differences in attitudes and perceived behavioural controls among the women with different intentions about a second childbearing.

Key-Words: Fertility intentions for the Second Birth, Theory of Planned Behaviour, Qualitative research method, Paid job, Unpaid Job.