

**Social Studies Collection**

No. 36

# **The Fertility Gap in Europe: Singularities of the Spanish Case**

---

Gøsta Esping-Andersen (Editor)

Bruno Arpino

Pau Baizán

Daniela Bellani

Teresa Castro-Martín

Mathew J. Creighton

Maike van Damme

Carlos Eric Delclòs

Marta Domínguez

María José González

Francesca Luppi

Teresa Martín-García

Léa Pessin

Roberta Rutigliano



**Welfare Projects**  
"la Caixa" Foundation

*In celebration of Lucía,  
whose birth on the 15th of March 2013  
coincided so wonderfully with the completion of this book*

**WELFARE PROJECTS. THE SPIRIT OF "LA CAIXA".**

**Social Studies Collection**

No. 36

## **The Fertility Gap in Europe: Singularities of the Spanish Case**

---

Gøsta Esping-Andersen (Editor)

Bruno Arpino

Pau Baizán

Daniela Bellani

Teresa Castro-Martín

Mathew J. Creighton

Maïke van Damme

Carlos Eric Delclòs

Marta Domínguez

María José González

Francesca Luppi

Teresa Martín-García

Léa Pessin

Roberta Rutigliano



**Welfare Projects**

**"la Caixa" Foundation**

**Published by** "la Caixa" Welfare Projects

---

Governing Bodies of "la Caixa" Welfare Projects

WELFARE PROJECTS COMMITTEE

**Chairman** Isidro Fainé Casas

**Deputy Chairman** Salvador Gabarró Serra, Javier Godó Muntañola

**Members** Montserrat Cabra Martorell, Francesc Homs Ferret, Mario López Martínez, Jordi Roglà de Leuw, Josep Joan Simon Carreras, Justo Bienvenido Novella Martínez

**Secretary (non trustee)** Alejandro García-Bragado Dalmau

**Deputy Secretary (non trustee)** Óscar Calderón de Oya

**Managing Director** Juan María Nin Génova

**Executive Director of "la Caixa" Welfare Projects** Jaime Lanaspá Gatnau

---

BOARD OF TRUSTEES OF THE "la Caixa" FOUNDATION

**Chairman** Isidro Fainé Casas

**Honorary Chairman** José Vilarasau Salat

**1st Deputy Chairman** Ricardo Fornesa Ribó

**Deputy Chairman** Salvador Gabarró Serra, Javier Godó Muntañola, Juan María Nin Génova

**Trustees** Eva Aurín Pardo, Victoria Barber Williams, María Teresa Bassons Boncompte, Montserrat Cabra Martorell, José Francisco de Conrado i Villalonga, Josep-Delfí Guàrdia Canela, Monika Habsburg Lothringen, Francesc Homs Ferret, Xavier Ibarz Alegria, Juan-José López Burniol, Mario López Martínez, María Dolors Llobet María, Estefanía Judit Martín Puente, Miquel Noguera Planas, Justo Bienvenido Novella Martínez, Jordi Portabella Calvete, Ana Robles Gordaliza, Jordi Roglà de Leuw, Josep Joan Simón Carreras, Javier Solana Madariaga, Roberto Tapia Conyer, Josep-Francesc Zaragoza Alba

**Managing Director** Jaime Lanaspá Gatnau

**Secretary (trustee)** Alejandro García-Bragado Dalmau

**Deputy Secretary (trustee)** Óscar Calderón de Oya

---

**Publication** The Fertility Gap in Europe: Singularities of the Spanish Case

**Design and production** "la Caixa" Welfare Projects

---

## Publication

Authors	Gøsta Esping-Andersen (Editor) Bruno Arpino Pau Baizán Daniela Bellani Teresa Castro-Martín Mathew J. Creighton Maike van Damme Carlos Eric Delclòs Marta Domínguez María José González Francesca Luppi Teresa Martín-García Léa Pessin Roberta Rutigliano
Design and layout	CEGE

Coordination of publication:

© the authors

© "la Caixa" Welfare Projects, 2013

Av. Diagonal, 621 - 08028 Barcelona

ISBN: 978-84-9900-099-2

D.L.: B. 2426-2014

The opinions expressed in the documents in this collection are the sole responsibility of the authors and do not necessarily reflect those of the "la Caixa" Foundation.

GØSTA ESPING-ANDERSEN is a professor at the Catalan Institute for Research and Advanced Studies (ICREA) at Pompeu Fabra University, where he also directs the Demosoc research unit. Member of the British Academy, the American Academy of Arts and Sciences and doctor honoris causa of the University of Copenhagen, his areas of expertise are family demography and social stratification. His most recent book is *The Incomplete Revolution*, published by Polity Press.

BRUNO ARPINO is a visiting professor in the Political and Social Sciences Department of Pompeu Fabra University and the assistant director of the Research and Expertise Centre for Survey Methodology (RECSM, UPF) at the university. With a PhD in statistics from the University of Florence (2008), his main areas of research are causal inference, social statistics and social demography, with a special interest in the study of intergenerational relationships and the assimilation of immigrants.

PAU BAIZAN is a professor in the Catalan Institute for Research and Advanced Studies (ICREA) at Pompeu Fabra University. His research focuses on family formation and international migration, with a particular emphasis on the study of the institutional factors involved and comparative research.

DANIELA BELLANI is a post-doctoral researcher at Pompeu Fabra University. With a PhD in social sciences from the University of Milan (2010), her research focuses on the family and labour markets. She is a participant in the European Research Council's (ERC) project on «Stratified Family Dynamics».

TERESA CASTRO MARTIN holds a PhD in sociology from the University of Wisconsin-Madison. Formerly working in the population division of the United Nations in New York, she is currently a research professor at the CSIC. Her areas of expertise include the causes and consequences of low fertility and global changes in family dynamics. She is a participant in the European project on «Families and Societies».

MATHEW CREIGHTON has a PhD in sociology and demography from the University of Pennsylvania (2009). Formerly a researcher in the office of population research at Princeton University, since 2010 he has been a professor in the Political and Social Sciences Department of Pompeu Fabra University.

MAIKE VAN DAMME is a professor at The Centre for Population, Poverty and Public Policy Studies (CEPS/INSTEAD) in Luxembourg and a researcher at KU Leuven in Belgium. With a PhD in sociology from Tilburg University (2010), her research focuses on the socio-economic causes and consequences of divorce, the labour market, comparative international research, poverty, and gender inequality.

CARLOS ERIC DELCLOS is a professor at Pompeu Fabra University, teaching classes in labour relations theory, social structures, introduction to sociology, and demography and population. His research focuses on migration, inequality in health care, economic organisation and fertility.

MARTA DOMINGUEZ holds a PhD in sociology from the Universidad Complutense of Madrid and is a member of the Juan March Institute. Her research is

focused on the sociology of the family and gender. She has published numerous papers on couple formation, the characteristics of unmarried couples and the division of household and care tasks. She is currently a professor at the Observatoire Sociologique du Changement at Sciences Po in France.

MARÍA JOSÉ GONZÁLEZ holds a PhD in sociology from the European University Institute of Florence. Her areas of expertise include the sociology of the family, gender inequality and childhood. She is currently a professor at Pompeu Fabra University, participating in the national research project, «Employment and Family Decisions in the transition to the first child in Europe».

FRANCESCA LUPPI is a researcher on the project, «Subjective well-being and fertility» (SWELL-FER) in Turin, Italy and a doctoral student in the field of socio-demography (Demosoc) at Pompeu Fabra University. Specialising in methods of quantitative analysis, her areas of research are family formation, subjective well-being and family and gender policy.

TERESA MARTÍN-GARCÍA holds a PhD in political and social sciences from the European University Institute of Florence (2005) and is a member of the Juan March Institute (2006). Author of various papers on fertility, the process of forming (new) families in advanced societies, delayed life transitions and the interrelationship between educational paths, work and family. She is currently a researcher at the Centre for Human and Social Sciences at the CSIC and a visiting professor at Pompeu Fabra University.

LÉA PESSIN is a researcher in the political and social sciences department of Pompeu Fabra University (UPF). With a masters degree in social and economic sciences from Bocconi University in Milan, she is currently working on her doctoral thesis at UPF under the direction of Lynn Prince Cooke (University of Bath) and Gøsta Esping-Andersen (UPF). Her research focuses on social demography, gender studies and causal inference.

ROBERTA RUTIGLIANO has a masters degree in economic and social sciences from Bocconi University in Milan and is working on her doctorate degree in the political and social sciences department of Pompeu Fabra University. Her research focuses on the study of population, the family and intergenerational exchanges. She is a member of the European Research Council (ERC) project, «Stratified Family Dynamcis».



# Table of Contents

<b>Presentation</b>	11
<b>Introduction</b>	13
The historical context of contemporary fertility	15
An overview of our study	18
<b>I. Why Fertility Matters. Theory and Empirical Research</b>	23
1.1. Fertility as a public concern	23
1.2. Theories of fertility	28
1.3. What does empirical research tell us?	33
<b>II. The Fertility Gap in Spain: late parenthood, few children, and unfulfilled reproductive desires</b>	45
2.1. Introduction	45
2.2. Sub-replacement fertility: from the exception to the norm	46
2.3. A closer look at recent fertility dynamics in Spain	50
2.4. The rising importance of immigration on childbearing trends	61
2.5. The gap between desired and achieved fertility	64
2.6. Social, economic and relational factors driving or inhibiting childbearing	67
2.7. Pathways to higher fertility	78
2.8. Conclusions	80
<b>III. Education, Employment, and Fertility</b>	82
3.1. Introduction	82
3.2. Meta-analysis: a quantitative research review	85
3.3. National context and childbearing: a hierarchical model	91
3.4. Conclusions	100
<b>IV. Is Fertility Influenced by Couple Instability?</b>	102
4.1. Introduction	102
4.2. Theories of Fertility and Relationship Stability	103
4.3. General Trends in Divorce and Fertility: Putting Spain in Context	105
4.4. Research Goals	107
4.5. Differences in stability among cohabiting and married couples	109

4.6. First births	112
4.7. Second births	114
4.8. The risk of divorce and the probability of having children	116
4.9. Conclusions	120
<hr/>	
<b>V. The Diffusion of Gender Egalitarian Values and Fertility</b>	121
5.1. Introduction	121
5.2. Data and methods	124
5.3. Trends in gender equality	127
5.4. Assessing the association between gender values dynamics and TFR	130
5.5. Conclusions	134
<hr/>	
<b>VI. Men Anticipating Fatherhood in Spain</b>	136
6.1. Introduction	136
6.2. Theoretical Perspectives: Fathers, Fatherhood and Fathering	137
6.3. Data and analytical approach	141
6.4. Men's Desire for Fatherhood & Ideal Timing for a First Child	144
6.5. Men's Ideals about Fatherhood and Plans to Care for the Child	147
6.6. Conclusions	159
<hr/>	
<b>VII. Public policies, gender values and fertility across European countries</b>	162
7.1. Introduction	162
7.2. The policy context of fertility	163
7.3. Methods, data and descriptive statistics	169
7.4. Interaction between education, gender equality and policies	172
7.5. Conclusions	176
<hr/>	
<b>Conclusions</b>	178
<hr/>	
<b>References</b>	188
<hr/>	
<b>Index of Tables and Graphs</b>	213
<hr/>	

# Presentation

---

The well-being of society depends to a large extent on its capacity to maintain a level of fertility that will guarantee generational replacement and sufficient economic growth to sustain a welfare state that can respond to the challenges of an increasingly ageing population with increasing levels of dependency. In addition, having children forms part of the life aspirations of a large majority of citizens and is therefore also associated with an important aspect of individual well-being.

The last half century has seen a widespread decline in fertility in the advanced countries, a decline directly related to important social changes resulting from changes in the role of the family and in gender roles. Spain has been no exception to this trend, and although a late arrival to this process, the decline in Spain has happened at a dramatic rate. Having experienced an unprecedented decrease in its birthrate, unlike other countries, it has still not recovered. The reality in Spain is very different from that found in other societies, such as in the Nordic countries or in France, which have achieved a stable balance of around two children per woman.

With the present study, we wish to address growing concerns over the effects of persistently low fertility rates on the well-being of societies such as Spain. To this end, Professor Esping-Andersen has coordinated the efforts of a group of distinguished academics in analysing the different factors explaining Spain's unique situation, comparing it not only with the realities of the Nordic and Anglo-Saxon countries, but also with other Mediterranean countries. Their analysis recognises the multi-dimensional nature of the phenomenon, focusing on educational factors,

characteristics of the labour market and the impact of public policy, as well as the transformation in gender roles and new models of motherhood and fatherhood.

We hope that this new edition of the Social Studies Collection will make a significant contribution to the analysis of the factors triggering low-low fertility syndrome and provide useful data for the design of policies aimed at reversing this trend. Furthermore, the findings presented in this book question the perspective that women with higher education levels and careers, who seek more equal relationships with their partners, have to give up the idea of having a family. Once more, the role of public and social action has been found to be decisive in dealing positively with the challenges of contemporary societies.

**Jaime Lanaspá Gatnau**  
Executive Director of "la Caixa"  
Welfare Projects and Chief  
Executive Officer  
of the "la Caixa" Foundation

Barcelona, December 2013

# Introduction

---

Gøsta Esping-Andersen

Why should we be concerned with fertility and, specifically, with the kind of long-term and persistent low fertility found in a number of countries, including Spain? One of the most cited reasons has to do with a rapidly ageing population. This is indeed a pressing public issue. Another reason evolves from a welfare perspective. The argument is that contemporary fertility falls far short of citizens' ideals and preferences regarding family size and formation. This latter reason is the one that guides the studies you will find in this book.

So, why are fertility rates so low in some societies and not in others? Chapter 1 reveals that fertility is governed by a large number of factors, Although some surely of greater importance than others. Like much recent research, we give particular attention to the impact of changing gender and family roles. Our approach is comparative although we pay special attention to the lowest-low fertility syndrome, focusing on Spain.

The choice of focus is not accidental. We home in on the impact of gender and family change for theoretical motives. Ongoing debates about social transformation, be it among scholars or in the media, have mainly emphasized macroscopic forces such as the globalization of economies, the coming of the information society, and postmodern value change. These may very well be relevant for how we conduct our financial affairs, how we communicate, what kinds of jobs emerge and disappear, or for income distributions. But if there is any link to births and babies, it is bound to be very indirect and therefore also impossible to pinpoint. And as will be discussed in Chapter 1, the postmodern values thesis does not appear to capture contemporary fertility behavior particularly well.

However, there are two ongoing revolutions that unquestionably *must* influence childbearing, namely women's exit from housewifery and the adoption of new ways of being partnered and forming a family. The former introduces a whole new set of dilemmas and trade-offs regarding the role of motherhood across women's life course. The latter is also bound to influence men's and women's decisions about parenthood, in particular because it introduces new uncertainties and greater fragility in family life. If the aim is to understand contemporary fertility it is our belief that the revolution of women's roles comes far closer to being the real smoking gun than either globalization or postmodernism.

Our comparative exploration of the Spanish case is not motivated by the simple circumstance that this happens to be 'our' country. We believe that Spain merits close scrutiny for two reasons that make it *theoretically* exciting. First, on several dimensions Spain illustrates behavior that deviates from other lowest-low fertility cases. To briefly mention some:

- Childlessness is comparatively speaking limited. Indeed, the incidence of childlessness is lower than in almost all other countries. The vast majority of Spanish women give birth, but they also stop with the first child.
- Postponement of motherhood is a universal trend, very much driven by higher educated career women. In Spain, however, postponement is quite unrelated to social status. The age at first birth is similarly high among both more and less educated women.
- Spain has experienced a phenomenal rise in co-habitation. This was rare among older generation Spaniards but is now surprisingly widespread within the post-Franco era cohorts. And the evidence suggests that Spanish co-habitation lies close in nature to the Scandinavian logic, namely that it represents a functional equivalent to marriage. A major surprise in our study, as we shall see, is that Spanish cohabiters exhibit fertility behavior that is basically similar to married couples.

The second theoretical reason has to do with the phenomenal speed with which social change occurs in Spain. It is a country which is unquestionably a late-comer on virtually all dimensions of modernization. But once set in

motion, the speed of societal transformation is staggering. Be it women's employment, divorce, or novel family arrangements, it generally takes Spain a decade or two to accomplish what in other countries evolved over half a century. One is tempted to believe that Spanish society must have been – to use an apt metaphor – pregnant with an urge to modernize long before it began to do so. This will be illustrated below.

### The historical context of contemporary fertility

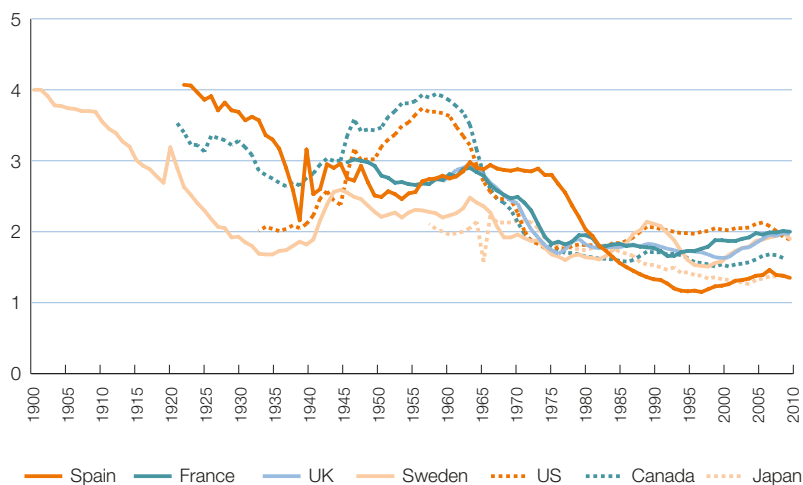
That Spain is a unique case of abrupt and then rapid change is, to begin with, very much evident in fertility data. Figure 1 below depicts comparative fertility rates (TFRs) over the past century. All nations, of course, exhibit a pattern of sharp decline in the 1970s and 1980s, but Spain's drop is truly extraordinary. It starts from a higher plateau and culminates at rock-bottom TFR rates – all within two decades. But there is actually also a *stasis* side to the story: while many other countries embarked on a recovery, that has not yet occurred in Spain. Spain appears to be stuck in a lowest-low equilibrium. We might of course speculate that, once a genuine fertility recovery takes off, Spain's turn-about will be once again extraordinarily rapid. We have at present no way of knowing. The 'welfare gap' discussed in Chapter 1, however, gives credence to such speculation: the two-child norm is clearly very strong among Spaniards.

The sharp decline in fertility seems everywhere to follow the upward trend in women's educational attainment and employment. Table 1 depicts trends for the post-Franco era. The data for tertiary education refer to both sexes and therefore slightly under-represent the female attainment rate.

Table 1 reveals just how rapidly Spain has caught up. Until the 1990s, Spain was far behind the rest of the world both in terms of university education and women's employment. In fact, in 1970 Spain occupied the bottom position within the OECD both in terms of education and employment. On both counts, it has managed to catch up over the past two decades. This does not, of course, mean that Spain has reached Scandinavian or US levels; but educational attainment levels now far exceed those of Italy or Germany.

GRAPH 1

### Trends in Total Fertility Rate (TFR), 1900-2011



Sources: *The Human Fertility Database* <[www.humanfertility.org](http://www.humanfertility.org)> and *National Institutes of Statistics*.

TABLE 1

### Tertiary-level education and female employment, 1970-2008

	1970	1990	2008
% tertiary-level education: Spain	5	10	29
% tertiary education: OECD mean		18	28
Female employment rate: Spain	24	32	58
Female employment rate: OECD mean	35	41	57

Source: OECD (2011), *Education at a Glance*. Paris: OECD; OECD (2002) *Historical Statistics, 1970-2000*; and OECD Employment Database

The rapid modernization of women’s roles is, predictably, concentrated within the younger generations. To illustrate, the employment rate today for Spanish women over age 55 is only 35 percent. Among those younger than 55, the gains have been sharpest among married women and women with children. Over just one decade, 1998-2008, the maternal employment rate jumped from about 40 to 60 percent. This



underscores another facet of the female revolution, *Spanish style*: the level of employment for mothers hardly differs from that of non-mothers.

But if we hold these trends up against the evolution of fertility the correspondence is not as tight as one might imagine. The major decline in Spanish fertility occurred between 1975 and 1985. But this was not a period of massive female employment growth (nor of educational expansion). The real surge in employment (and tertiary education) occurred after 1990, i.e. once the lowest-low fertility scenario had become stable.

When we turn to family structural change we observe, once again, the phenomenon of rapid change. This applies to marriages, divorce and to cohabitation and childbearing outside marriage.<sup>(1)</sup> The crude marriage rate (i.e. the number of marriages per 1000 inhabitants) has, as in most advanced countries, declined over the past decades. But the drop has been especially dramatic in Spain, with the result that Spain now lies at the bottom end in the OECD with a rate of 3.8 compared to the OECD average of 5.0. Interestingly, Italy comes closest to Spain with a marriage rate of 4.0. In effect since the 1970s the Spanish marriage rate has been cut by half.

That Spaniards are losing faith in marriage also emerges from divorce data. The crude divorce rate (measured like the marriage rate) was, in 1970, exactly zero – not surprising given that it was illegal under the Franco regime. It rose to 1.0 by 1990 and has, in the past two decades, shot up to 2.4. This places Spain in the high-divorce group of European countries (on par with the UK and above France and Germany). As we shall see in Chapter 5 cohabitation has, in the past decades, become widespread in Spain. This is of course one reason why marriage rates have fallen so precipitously. One way to illustrate this is to examine data on the percentage of children born outside marriage, which tripled (from 11 to 31 percent) between 1995 and today! To be sure, the rate of non-marital births is still much higher in Scandinavia (roughly half of all births).

(1) The following data derive from OECD's Family Data Base.

However, Spain has now converged with Germany and has a rate that is exactly twice that of Italy.

An interesting aspect of cohabitation – as previously mentioned – is its ‘Scandinavian character’. Whereas in many countries, cohabitation is typically viewed as a temporary bridge into subsequent marriage (or end of the partnership), in Spain it appears as a stable functional alternative. This is revealed in fertility data. There is hardly any difference at all in the probability of a (first) birth between the two (data from the early 2000s show that 28 percent of married and 25 percent of cohabiting couples have one child). In short, Spain has been a late-comer on the modernization scene. But once in motion, its transformation has been truly revolutionary over a surprisingly short period of time. Virtually all the indicators, be they related to women’s status or to family life, demonstrate that Spain’s modernization unfolded over the past two decades. This implies, once again, a puzzle in terms of timing, because the big fall in fertility preceded these changes.

### **An overview of our study**

To repeat, our primary focus is on the link between changing gender roles, family transformation and fertility. We approach these issues from a number of different angles in the chapters to follow.

Chapter 1 serves to place our study in the broader context of contemporary fertility research. As pointed out, there are two perspectives on why persistently low fertility should be a public concern. One is that low fertility produces very rapid population ageing. The other is that low fertility is a welfare issue in the sense that the number of children born falls far short of citizens’ actual desires. Chapter 1 explains why our study opts to focus on this latter perspective.

As a prelude to the more analytical and explanatory chapters we decided, in Chapter 2, to provide readers with a detailed overview of trends in family and fertility behavior over recent decades. We hope this will aid the reader in gaining a general picture of what has actually occurred in recent times. Chapter 2 also aims at challenging a number of widespread beliefs with actual trends.

One such is the thesis that fertility rates should recover once postponement has become stabilized. If this thesis were correct, we should expect to see a return to higher fertility. And, yet, as far as Spain is concerned this has so far failed to happen. A second belief is that fertility should rise – like it did in France and Scandinavia – when cohabitation becomes functionally the equivalent of marriage. What will surprise many readers, however, is that Spanish cohabitation is indeed similar, and yet, this does not appear to have influenced overall fertility levels.

From the data examined in Chapter 2 certain clear characteristics emerge that are quite unique, comparatively speaking. In contrast to other lowest-low fertility countries, childlessness is marginal in Spain. Basically Spanish women have one child. Spain belongs to the lowest-low group mainly because few women manage to progress to higher parities. A second feature that is quite unique to Spain is its profile of fertility postponement. The typical pattern found virtually everywhere is that late motherhood is concentrated among highly educated women. In Spain there are very small differences by education: postponement is a universal feature.

In Chapter 3 we move the focus to education-specific differences in fertility. Fertility levels were traditionally much higher among less educated women, but in a number of countries we have witnessed a reversal so that higher educated women now have more children. This is especially the case in Scandinavia, but a similar trend has been observed for North America as well.

That the less educated would have more children is not surprising. The causality can go both ways. On one hand, you would expect that women who mainly prioritize motherhood will hesitate to invest much in education. On the other hand, the economic opportunity cost of motherhood should be much lower among the less educated. The educational gradient of fertility has not changed in Spain – at least not yet. But since the rise in women's educational attainment has been very sharp over the past decades and women now typically outpace men, especially at the higher tiers of education, it is clearly important to understand the precise logic that governs the education-fertility link. One finding in Chapter 3 is that *type* of education probably matters much more than *level* of education. Higher educated women who also display

high fertility tend to be biased towards more ‘feminine’ educational branches – like teaching, social work or health related studies. This suggests, in turn, that these women self-select themselves into what can be called soft-economy jobs, primarily in the public sector – that is, into jobs that are comparatively more mother-friendly. It may therefore be that Scandinavia’s fertility recovery and its reversal of the educational gradient are both related to the huge and highly feminized welfare state labor market.

Partnerships are becoming more multifaceted and also more unstable, and here Spain is clearly rapidly following international trends. This is the starting point for Chapter 4 which aims to identify how rising divorce risks and the surge of cohabitation influence fertility behavior. Due to data limitations this study compares only a handful of European countries, but, on the positive side, these are countries that well-represent variations in fertility: Norway and the Netherlands (with comparably high fertility), Germany and Austria (low) and Italy and Spain (two lowest-low Mediterranean countries with strong familialist traditions). This study produces quite surprising findings, as hinted at earlier. We discover not only that cohabitation has emerged with force in Spain, but also that cohabitators basically behave similarly to married couples as far as fertility is concerned.

Chapter 5 explores the role of gender egalitarianism on fertility by focusing on values regarding gender roles. The key hypothesis we aim to test is that positive fertility effects are only likely to emerge if two conditions are met: One, the overall level of gender egalitarian values in any given society must be high and, two, such values must be diffused broadly within the population – among both women and men and across different levels of education. We compare trends in these values over the past two decades and across a large number of countries. Our analysis indicates that, indeed, fertility is positively related to both the level and the diffusion of gender egalitarian values.

These chapters, like fertility research more broadly, have focused almost exclusively on the dilemmas, obstacles and preferences associated with maternity. The role of fathers in the entire process of family formation is

like the proverbial black box. Chapter 6 seeks to remedy this shortcoming by exploring the emerging new fatherhood model. Is men's participation in childbearing undergoing change? Are we leaving behind the conventional passive and remote father role? And if contemporary fathers exhibit a much more active involvement in raising their children, will that not provoke yet additional opportunity costs of parenthood?

Our earlier research, comparing Denmark, Spain and the UK, has shown that male involvement in child care as well as domestic work more generally may be far more extensive than is generally assumed (Esping-Andersen et.al. 2010). This has also been found in other studies (Sullivan, 2011), although national differences are huge. The average Danish husband contributes almost half (43 percent) of the time the parents devote to domestic tasks while, as expected, male involvement in Spain remains more marginal. In any case, all indications are that men are indeed adapting to women's new roles. Unlike the other studies in this book, Chapter 6 pursues a qualitative line of research, basing itself on narratives that come from in-depth interviews with couples in Spain.

In recent years, fertility scholars have very much homed in on the influence of public policies (McDonald, 2000; Esping-Andersen, 2009; Gauthier and Hatzius, 1997; OECD, 2002). In fact, the OECD has, over the past decade, launched a massive research program dedicated to the influence of family-friendly social policies. Our final study, in Chapter 7, attempts to identify the relative importance of social policies and how these interact with prevailing gender norms within societies. The study pays special attention to the possibility that similar policies may have a very different effect depending on the type of couple. A number of clear conclusions emerge, and they fit quite well with the results of other studies. Firstly, the positive fertility effects come primarily from policies that directly address difficulties of reconciling parenthood and careers rather than family well-being more generally. In other words, child care provision and shortened working hours appear to have a beneficial effect on fertility. But that is not the case for general family benefits schemes. Secondly, the effect of such policies on childbearing is clearly much more positive among highly educated couples.

The latter finding brings us back to the theme explored in Chapter 4, namely fertility differences across the educational gradient. Spain has experienced quite heated debates related to family policy over the past decade. To an extent, governments have responded. We have seen a move at the local level to expand the provision of child care for the under-3s. And we saw, under the last socialist government, an attempt to reward fertility via the 3000 euro baby-check – subsequently abolished. What the results of Chapter 7 suggest is that the Spanish government erred in its strategy of using monetary rewards. It would have been more effective to use the financial resources to build more day care centers. Our results also suggest that a reform of the work-day is becoming an urgent priority.

# I. Why Fertility Matters: Theory and Empirical Research

---

Gøsta Esping-Andersen

## 1.1. Fertility as a public concern

Why should we worry about fertility? Aren't couples' decisions about family life a private matter? The answer to this question is essentially no. Since the birth of modern civilization, fertility has been a major public concern. But the way we have defined the issue has changed quite significantly throughout modern history.

In antiquity, Plato's writings reveal that he worried about there being enough bodies for the Athenian armies, and that they would be of sufficiently high human caliber. As we shall shortly see, Plato anticipated Gary Becker's famous economic theory of fertility quantity and quality by several thousand years. In the Middle Ages, landlords actively promoted procreation among the peasantry to ensure abundant and cheap labor.

Moving the clock forward a few centuries, we then find fertility to be considered a menace. This view was most famously articulated by Malthus in his *An Essay on the Principle of Population* (first published in 1798). His theory of population growth predicts that fertility will rise in response to rising income and wealth. Malthus feared that this would lead to overpopulation, which, in turn, would trigger famine and disease – a bad trade-off if ever there was one.

Fortunately for humankind, Malthus' theory was eventually contradicted by events. Since the mid-1800's, there has been no connection between societal wealth and fertility – to the contrary, as nations have become richer their fertility rates have declined (Guinnane, 2010; Jones and Tertilt, 2008). It is also evident that fertility levels influence economic

growth. There is, however, a clear pro-cyclical response: birth rates fell dramatically during the 1930s depression, and this is now being repeated in the post-2008 crisis.

Fertility has frequently been promoted for pro-natalist reasons, often connected to nationalistic ideals of *grandeur*. Such ideologies emerged very strongly in France with its century-long quest to become the leading European power. And, not surprisingly, pro-natalism was also prominent in Nazi Germany and other fascist regimes. Here we find an echo going back to Plato. To be sure, pro-natalist policies were not limited to bellicose power-seekers. They emerged as a strong political theme in many nations in the aftermath of World War I and then in the 1930s. Even social democratic Sweden promoted pro-natalism in the inter-war decades, in part because it had lost a large population due to emigration prior to World War I, and in part due to a sharp decline in births during the 1930s. In fact, a pioneering scientific analysis of low fertility was Gunnar and Alva Myrdal's 1934 book, *Kris i Befolkningsfrågan* («Crisis in the Population Question»). Their main solution to induce more births was to strengthen the welfare state and, especially, family policies. We shall return to the Myrdals later. Pro-natalism has continued to resurface, most recently in Putin's Russia.

In any case, birth rates have continued to fall. Since the 1970s, basically all advanced societies have seen fertility fall below replacement level. And in a sizable number of countries we are now witnessing an historically unique phenomenon – what demographers term ‘lowest-low’ fertility (Billari and Kohler, 2004; Kohler et.al., 2002).

Ignoring the effects of migration, a society can only reproduce its population size if the average number of children per woman exceeds 2.1. If this does not happen over prolonged periods, there will be two problematic outcomes: The population will age, and this will mean, of course, that an ever-smaller number of young people will have to care for an ever larger number of aged citizens; and the total population size will shrink. This will not be visible in the short or medium-term; but in the long-run, the effects of persistent low fertility can be truly dramatic.



Consider the following forecasts: if a society can sustain a fertility rate of 1.9 children per woman, its population at the end of this century will have declined by about 15 percent. If, however, a society is stuck with persistent ‘lowest-low’ fertility, defined as less than 1.4 children per woman, its total population at the end of the century will be only 25 percent its present size (McDonald, 2002). Spain exemplifies a lowest-low fertility syndrome. and If this persists, Spain would by the year 2100 boast a population of only 10-15 million people. (It should be remembered that these forecasts do not take into account any population change caused by immigration or emigration.) Moreover, the pace of decline will have direct effects on the old age dependency ratio. For example, in low-fertility Spain, it will jump 138% by 2050, compared to a modest 36% increase in higher-fertility Sweden.

These dire scenarios have spurred a novel set of arguments in favor of stimulating more births: we need higher fertility to ease the coming elderly care burden and also to promote more economic growth. Indeed, the magnitudes are substantial. The OECD has estimated that the combination of ageing and population decline will lower GDP growth in the EU by 0.7 percentage points over the coming decades (Sleebos, 2003). This confirms once again that we live in a world governed by a logic that is the exact opposite of Malthus’ scenario.

### **A welfare perspective on fertility**

The preceding arguments are pitched at the macro-level of countries. And they unquestionably address (societal-level) welfare issues in one form or another – be it economic prosperity or a nation’s ‘greatness’.

We can also define fertility as a well-being or *welfare* issue at the micro-level of individuals and families. As a matter of fact, having children is one of the fundamental ingredients in the pursuit of well-being and life satisfaction, and this is supported by data. A number of studies have found that having children produces a significant happiness dividend (Aasve et.al., 2012; Kohler, 2005). This dimension has, quite inexplicably, received remarkably little emphasis in policy debates. It was, however, the leading theme in the Myrdals’ advocacy of active family-friendly policies.

Examining data on what citizens view as the ideal family size one is struck by a number of surprising facts. The first is that men *and* women have very similar notions about what is the ideal family size. The second is the continuity of preferences across many decades and cohorts. Indeed, it appears that the 2-child norm is as strong today as it was in our grandparents' era. In countries as diverse as France, Italy, Sweden and the UK the stated ideal number of children (ca. 2.2-2.4 on average) for the most recent cohort (born after 1977) is the same as it was for the pre-1947 cohorts. Admittedly, there are a few cases, notably Austria and Germany, where child preferences have declined (data from the 2006 Eurobarometer; see also Kohler et.al., 2002; Scott and Braun, 2006; Sleebos, 2003; Testa, 2006).

The third surprise is that the very high fertility rates (i.e 5+ children per woman) obtained up to the 19th Century probably exceeded peoples' true preferences. Shorter's (1973) review of historical research concludes, in fact, that a 2-3 child model was probably closer to the true ideals. This is similarly highlighted by Guinnane (2010). Recall that child mortality in the 19th Century was very high. As Livi-Bacci (1986) notes, major improvements in contraceptive techniques (and a drop in mortality) towards the late 1800s was associated with a significant decline in the number of births. Perhaps this well-being or *welfare gap* in days long gone was one of too many children.

Contemporary studies attempt to identify the welfare gap by examining the distance between preferences and realized fertility. This is usually done by comparing stated ideals against the total fertility rate (TFR). Today there is a group of countries, like Britain, France, the United States, Canada and the Scandinavian countries, where the TFR lies close to 2.0 per woman. Here the welfare-fertility gap seems rather minor; but for countries that are mired in persistent lowest-low fertility, i.e. below 1.4, the gap looks huge.

Total fertility rates may actually not be the best yardstick since they simply represent the average number of births in any given year divided by the number of women in childbearing ages. They can be very misleading if an increasing number of women delay childbirth (which is very much the case in recent times). We should perhaps instead measure the gap with

data on completed fertility rates (CFR) for the cohorts of women whose childbearing years have ended (conventionally defined at age 40-45). To obtain an idea of today's welfare gap, we should therefore study women born around 1965-67. Here we find that Swedish rates (1.95) come quite close to the preferred number. Spain, however, demonstrates yet again a substantial welfare gap since its completed fertility rate is only 1.6 (Bongaarts and Sobotka, 2012).

Another way to capture welfare gaps is to focus on parity distributions. It is again evident that the 2+ child preference is overwhelmingly dominant. In the EU as a whole, those who desire no children (4 percent) or a maximum of one (10 percent) are a minority – much smaller than the proportion who prefer 3-plus children, which is about 26 percent (Testa, 2006: Table 5). From this perspective we observe, once more, some huge welfare gaps. For the most recent cohort, the percentage of women today who remain childless ranges from 20 in Italy to around 12 in Spain and Sweden. This is three or four times larger than would be expected were reality to match preferences. And this applies also to those who end up with only one child. In this regard Spain displays rather unique features. It boasts relatively modest childlessness but at the same time has an unusually large percentage (around a third) of women who end up with only one child (detailed data will be presented in Chapter 2). This tells us that the main welfare gap in Spain must lie in the difficulty of progressing beyond the first child.

Incidentally, this very same phenomenon also characterized the fertility collapse during the 1930s depression. As Jones and Tertilt (2008) show, the sharp drop in births in the U.S. at that time was primarily due to a higher proportion of childless women and, especially, to limiting fertility to one child.

As we shall see in the chapters to come, there are many possible explanations for this: women postpone maternity (although this is occurring everywhere), they face difficulties reconciling motherhood with career ambitions, welfare state support for families is inadequate, or couples hesitate to have children because of uncertainty – be it economic or social: Spain has suffered from comparatively high unemployment

over the past decades, in particular among younger workers, and has also witnessed a spectacular rise in divorce rates and co-habitation.

## 1.2. Theories of fertility

Fertility research has been strongly influenced by two theoretical traditions. One comes from the field of economics and especially from the contributions of Gary Becker. The other can perhaps best be labeled as a 'postmodern' version of the Second Demographic Transition thesis.

### Economic theories

Becker's theory of fertility is a basic demand model applied to family decision making (Becker, 1960; 1981). Here the demand for children should rise in tandem with wealth and income because this implies that the relative cost of an additional child will decline. As economists put it, rising prosperity will ease the family's budget constraint. But this positive effect may be cancelled out for two reasons. One, the family's demand function depends on the price of having children relative to other goods (maybe Dad prefers a new car over an additional child). Two, when people's earnings increase so do the opportunity costs associated with having children (kids are time demanding). The perceived opportunity cost should be especially high for people with a strong earnings potential. The upshot, then, is a shift in demand away from children.

A variant of this logic applies to how parents decide on the timing of births (what demographers call the *tempo effect*). As is well-known, the earnings curve rises most sharply in the early career years, and thereafter it begins to flatten out. The curve is especially steep for highly skilled workers. Based on Mincer's (1963) classical 'age-wage curve' model, this would lead us to predict that: a) women will delay first births until the couple has reached a stable and predictable income trajectory; b) for an employed woman, the opportunity cost of giving birth (and interrupting her career) will be especially high in the phase when her earnings curve is steepest. This implies that women with a high earnings potential are more likely to postpone motherhood than are women with low earnings potential (see also Moffit, 1984).

In Becker's theory, parents face a basic trade-off. The cost of children depends not only on the quantity, but also on the quality of their children – i.e. investing in children's skills, health, or education. The theory predicts that parental child investments will increasingly favor quality as the returns to skills and education increase –, another reason why fertility is likely to decline (Becker and Lewis, 1973).

This theoretical framework has been hugely influential, not least because it seemed to fit hand-in-glove with observed trends. Let us return to historical change. Up to the mid- late-1800s, child labor was widespread. To illustrate, in England during the 1830s, 25 percent of 10-14 year old children worked for pay. As child labor was increasingly restricted (and obligatory schooling spread) from the middle of the century onwards, children became an expense rather than a source of family revenue. This shift, as Becker would predict, was associated with a clear decline in fertility (Guinnane, 2010; Jones and Tertilt, 2008).

Moving one century forward, there is little doubt that the surge in female education and employment has contributed to fertility decline. We find that higher educated women generally postpone births far more than the lower skilled women (or women outside the labor force), and they are also likely to have fewer children and be more prone to childlessness. There is also substantial evidence that women's increased earning power leads to fewer children (Hotz and Miller, 1988; Heckman and Walker, 1990). In addition, there is ample evidence that the rising returns to education in the knowledge economy have spurred a shift in parental time and financial investments: the emphasis is increasingly toward quality rather than quantity. We have, for example, witnessed a remarkable increase in the time parents dedicate to their children in recent decades (Esping-Andersen, 2009).

All in all, the Becker theory predicts a long-term steady decline in fertility, in particular following the transformation of women's economic status. However, here is where the theory seems to fall short. Changing patterns of fertility over recent decades seem, in fact, to contradict the theory head-on. For one, it is clear that the correlation between levels of female employment and fertility has been reversed. It was negative in the 1960s-1970s, but now it has turned positive (Ahn and Mira, 2002;

Myrskylä, Kohler and Billari 2009; OECD, 2011). Indeed, fertility rates have recovered the most in those countries like France, the Scandinavian countries, or the US, where female employment has become the norm. And the lowest-low fertility syndrome tends to be concentrated in countries like Italy or Spain, with relatively low female labour market participation. Secondly, as we shall examine more closely in chapter 4, in a number of countries we now also see a reversal of the educational gradient of fertility: a drop among lower educated women and a rise among the higher educated.

This certainly fits poorly with the economic opportunity cost thesis. It does, however, fit well with the welfare perspective, namely that citizens continue to adhere to the 2-child norm. The rise in births among higher educated women in countries like those of Scandinavia tells us therefore that conditions in these societies and for these women are favorable in terms of preference realization. A clue to why this is so emerges in a study by Datta Gupta and Smith (2002). They show how Danish career women who prioritize motherhood move from higher paid, hard-economy jobs to less paid welfare state jobs around first births. The facilitator is, of course, the ample supply of welfare state sponsored ‘soft economy’ jobs. But this pattern of job migration nonetheless elucidates a wholly different logic than Becker would predict: the value of having children outweighs the monetary dimension in these women’s opportunity cost calculus.

Easterlin has proposed a rival economic theory to Becker’s (Easterlin, 1966; Easterlin et.al., 1980). Both share a similar starting point, namely the key influence of income. But Easterlin’s model stresses the influence of *relativities*. The basic idea is that citizens’ aspirations are defined in relation to their main reference point, which is primarily the parental generation. The next generation will aim to do better than, or at least match, their parents’ living standards. Since small birth cohorts are likely to enjoy greater job opportunities (and earn more), they will more readily form families and have many children. This means, however, that the subsequent generation will be large – think of the post-war baby-boomers. Members of such large cohorts will face tougher competition for jobs and are less likely to achieve living standards that match their aspirations. They will therefore respond by marrying later, increasing wives’ labor

force participation, and will also be more divorce-prone. The net effect is lower fertility, and this should explain the subsequent baby bust cohorts of the 1970s-1980s. In turn, as these small cohorts become adults they, like their grand-parent generation, will benefit economically from their small size and improve, relatively speaking, their well-being compared to their parents' generation. So they, too, should revert to more traditional family behavior and have more children.

Easterlin's cyclical model of fertility has, interestingly, some similarities with the Malthusian theory: prosperity promotes more fertility, which then boomerangs in the subsequent generation. At first glance it seems to fit empirical trends over the past half century quite well. But it remains controversial and most recent fertility developments seem not to square well with the theory. This is most evident for the 'lowest-low' fertility countries, like Spain, where small, baby bust cohorts seem to fail on all the key dimensions: their propensity to marry is in evident decline, their risk of divorce has surged, and their fertility remains very low.

### Postmodernism and the second demographic transition

The demographic transition framework distinguishes two historical turning points. The *first* transition evolved from the 18th century onwards (Davis, 1945; Chesnais, 1993). Its primary characteristics are falling birth rates driven primarily by declining mortality. This was thanks to major improvements in health and sanitation via cleaner water, more abundant food supply and, later, the introduction of vaccines (for example, against smallpox).<sup>(1)</sup> Since child mortality dropped so rapidly, the second-order consequence was rapid population growth. Subsequently, citizens adjusted by reducing the birth rate. The core theoretical argument is that fertility change in this era was primarily caused by changes in mortality.

The *second* demographic transition, as argued by Laesthaeghe (1995; 1998) and Van de Kaa (1987), arrives in mid-late 20th Century. The cornerstones of the transition include a drop in fertility to below

(1) Due to health improvements, deaths caused by infectious diseases fell from 11 per 1000 to 1 per 1000 inhabitants in England. Guinnane (2010: 13) reports that 30 percent of all children died in early childhood around 1800.

population replacement levels, increased voluntary childlessness, postponed marriage, rising marital instability, and the spread of cohabitation. Both Laesthaeghe (1998) and Van de Kaa (2001) promote a postmodern theoretical interpretation of the second transition. The argument is that falling marriage rates, more unstable partnerships, and few children all represent the diffusion of values that promote individualistic life-style orientations, identity-seeking, and self-realization over long-term binding commitments, religiosity, or submission to conventional norms. Interestingly, the postmodern transition theory ends up predicting trends that echo Becker's, namely a sustained trend toward 'less family' in general, and fewer children in particular.

There are, to be sure, critics of both the demographic transition thesis and its postmodern version. As many claim, it is hardly a theory at all but little more than a descriptive identification of correlations: yes, fertility did respond to falling mortality, but there were other crucial changes occurring at the same time that with equal plausibility could have been the root cause of fertility decline (Guinnane, 2010). One was increased productivity in agriculture, which increased incomes; another was the march of lower-class women into paid labor (the take-off of the textile industry), and a third was urbanization and the cost of housing, which imposed restrictions on family size. Additionally, as mentioned, the economic benefit of having children declined when child-labor ended and children became a net cost to parents (Caldwell, 1982).

And, as with Becker's economic theory, recent demographic shifts also seem to contradict the postmodernism theory. On almost all key family markers we see a reversal of the 'less family' scenario. This is especially evident in those same societies that spearheaded the postmodern transition to begin with, especially in North America and Scandinavia, where fertility has recovered over the past decades. In contrast, the latecomer nations like Italy, Poland or Spain are now the prototypes of a 'less family' trend. It is quite difficult to imagine why Swedes would suddenly abandon postmodernism or, for that matter, why the Italians and Spaniards have come to position themselves in the global vanguard of



postmodern values.<sup>(2)</sup> The validity of the theory is also questionable when we recall that in some countries fertility and marital stability are now rising among the higher educated, professional classes, while declining among the least educated. It is difficult to imagine how postmodern ideals would be strongest within the lower social strata, while losing ground among the educated elites.

As Esping-Andersen and Billari (2012) argue, the ‘less-family’ prognosis that both theoretical perspectives present stems from a basic failure to see that the erosion of marriage and fertility since the 1960s marks a transitory phase and *not* a permanent new trajectory. Their alternative argument is that couple instability and low fertility are the by-products of the revolution in women’s roles. Once societal institutions (especially the welfare state and labor markets) and couples (more gender symmetric relations) adapt themselves to women’s new life course preferences, we should see the emergence of a novel and more equitable family model. This, in turn, should stabilize marriages and induce more fertility (see also McDonald, 2000).

### 1.3. What does empirical research tell us?

The main correlates of fertility are quite different if we focus on the macro-level of societies and nations or on the micro-level of individual behavior.

#### 1.3.1. Macro-level correlates<sup>(3)</sup>

##### **Prosperity and fertility**

In the ongoing debate on economic growth and fertility, the Malthusian hypothesis has been firmly disproven. But there exists substantial evidence

(2) In fact, the entire notion of postmodernism lacks empirical foundation. As Scott and Braun (op.cit) show, such value changes are only in real evidence for issues related to sexuality. Not only have child preferences remained unchanged, but data from the World Values Surveys show that only a small minority of citizens agree that «marriage is out of date». To illustrate, in ‘vanguard’ countries like Denmark, Norway and the US, the percentage who agree is only 10-15 percent.

(3) For a more exhaustive review, see Balbo et.al. (2012) and Sleebos (2003)

of a pro-cyclical correlation: economic downturns are associated with falling fertility and vice versa.

Recession-induced lower birth rates can reflect two very different logics. Evidence from the Great Depression shows that the drop in US fertility in the 1930s was not due to postponement but was, instead, a once-and-for-all lowering of birth rates across-the-board (Jones and Tertilt, 2008). This, however, does not seem to be true in contemporary society: lower fertility in economic downturns is now primarily due to postponement of childbearing until conditions improve (Adsera, 2010; Kohler et.al., 2002; Sobotka et.al., 2011).

An interesting variant on the economic growth-fertility link emerges in a study by Myrskala et.al. (2009). While they confirm the lack of any correlation between GDP and TFR rates, they demonstrate that countries' ranking on HDI (human development index) is significantly related to fertility: at low or medium levels of HDI, fertility tends to be low; high HDI scores are, however, associated with higher fertility. These findings, we must note, pertain only to the advanced societies.

### **General Trust**

Measures such as the HDI capture development characteristics of society that are not just narrowly economic. One reason why it correlates so positively with fertility may be that it implicitly also captures levels of general trust in a society. We have surprisingly little research on this, and yet its influence may be substantial, in particular in societies where most women work and where parents must place their faith in external institutions such as child care. Additionally, we should expect that general trust increases in salience the more our fertility intentions shift from the quantity of children to the quality of children.

There is some evidence that levels of trust have a positive effect on fertility. But it depends very much on which spheres of trust are involved. In societies where trust is limited to family relations and the local community, as is very much the case in Southern Europe, the effect is clearly negative. Livi-Bacci (2001) makes the point very clear when he

argues that familialism has now become counter-productive to family formation... «too much family, too few babies».

A study by Yamamura and Andres (2011) finds that a one point increase in generalized trust yields a 0.01 increase in the TFR. Spain and Italy score quite low on the trust measure while the Nordic countries score highest. Here we can engage in a little thought experiment: Spain's trust rate of 32, compared to Sweden's 60, implies that if Spain were to enjoy Sweden's high trust environment, its TFR would exceed replacement fertility!

Aassve et.al. (2012) make a similar argument, but add two very important points. Firstly, their analyses help explain a basic puzzle, namely, why we find high fertility in both the Nordic and the Anglo Saxon countries. Secondly, they show that levels of trust interact with the surge in women's education: high levels of female education lead to more fertility in countries where trust is pervasive, whereas in low-trust contexts the effect is exactly the opposite. This is indeed an important finding because it helps us understand some of the key preconditions for why the educational gradient of fertility has been reversed in both Scandinavia and in North America. This is a line of research that clearly needs to be developed much further, and it is unfortunate that we, are unable to pursue it in this book.

### **Value Change**

Very few studies have examined the link between fertility and value change of the postmodern variety, mainly because it is clearly difficult to pin down such changes. There is some evidence that such values may have an indirect effect via fertility postponement (Liefbroer, 2005; Bernhardt and Goldscheider, 2006).

### **The Welfare State**

The welfare state is a third macro-level factor that has received much attention. The evidence that links social policies to fertility is, however, rather mixed. Gauthier and Hatzius (2007) provide one of the most detailed analyses and find relatively minor effects. For some policies, like child allowances, the effect is basically nil. The evidence is stronger,

however, as regards family-work reconciliation policies such as parental leaves and, especially, child care provision (Castles, 2003; Sleebos, 2003). Del Boca (2002) finds a positive effect (a 0.2 point increase in the TFR from a 10% rise in child care coverage) for Italy. Rather similar effects have been identified for Norway (Kravdal, 1996) and, more broadly, for the OECD countries (Sleebos, 2003: Figure 21). In the Sleebos study, child care provision emerges as a surprisingly strong factor, explaining almost half of the entire cross-national variance in fertility. But other studies find no significant effects at all. Hank and Kreyenfeld (2001), for example, conclude that it has no impact in Germany. This may be because: a) day care coverage in Western Germany is so marginal to begin with; and b) in Germany there are unusually strong normative pressures for mothers of small children to remain at home.

Here we can also try a thought experiment. If we were to apply the kinds of effects found by Del Boca and Kravdal, what might be the fertility gain in Spain? At present, Spanish day care coverage is a bit above 20 percent for 1-3 year olds. If Spain were to overnight, so to speak, reach Danish levels (about 80 percent) this would push the Spanish TFR up 1.6 points.

Research focusing on the role of the welfare state tends to find stronger effects when examining the timing (tempo) of births. This was, for example, found for the UK (Ermisch, 1988) and for Austria (Hoem et.al., 2001). Research on Sweden shows that parental leaves produce a 'speed-premium' so that women are more likely to have higher order births in quick succession (Andersson et.al., 2006; Hoem (2005).

All told, the empirical case for welfare state effects does not appear overwhelming. But this may be deceptive for two reasons. Firstly, family-friendly policies are hardly exogenous with regard to citizens' (and voters') preferences and demands. They are therefore likely to emerge when pressures for reconciliation are already strong. Two, as underlined in McDonald's (2002) thesis, fertility recovery is only likely to occur when *both* institutions and couple relations align themselves with the new role of women.

### 1.3.2. Micro-level correlates

Given the influence of Becker's framework, it is hardly surprising that empirical research has focused so much on the links between income and fertility. Quite naturally, this implies that we should examine the influence of human capital more generally.

A second stream of research focuses on the impact of other aspects of working life, unemployment and job-insecurity in particular.

A third line of research, closer to demography, examines the links between changing partnership behavior (co-habitation, delayed marriages, higher risk of divorce) and childbearing.

And in recent years we have witnessed a surge in research that attempts to connect fertility decisions to gender equalization.

#### **The role of income and human capital**

Traditionally, fertility research took women's economic dependency for granted and, as a consequence, the analytical focus was primarily on how the *male's* education and earnings status explained fertility decisions (Hotz et.al., 1997). In more recent research, however, such male characteristics are relatively irrelevant. As female careers have become the norm, it is primarily women's earnings, education, and labor supply that matter (Sleebos, 2003; Stier et.al., 2001). Research on the timing of maternity focuses mainly on the opportunity costs of birth-induced career interruptions. Studies of the low-fertility phenomenon very much emphasize the influence of women's job insecurity, unemployment risks, and difficulties of reconciling work and motherhood (Adsera, 2004; Kohler et.al., 2002; Kreyenfeld, 2010).

The revolution in women's roles came late to Spain but, once under way, it evolved with extraordinary speed. One telling statistic is the employment rate of mothers with pre-school age children, which basically doubled over a decade: from 28 percent in 1994 to 53 percent in 2007 (OECD's Family Data Base). This places Spain pretty much on par with Germany. But Spanish women encounter difficulties not shared by women in most countries: restricted possibilities for part-time employment, very long

and family-unfriendly working hours and a high incidence of precarious temporary jobs.

In the Becker framework, if children are a normal good, theory would predict that the quantity should increase in tandem with income. The fact that it generally does not is therefore a puzzle. Gary Becker sought to align theory to empirical reality with his ‘quantity-quality’ argument, namely that parents will shift their cost-calculus from family size to the quality of their offspring. This means that the parental income effect is mainly to be found in how much they invest in children’s skills.

A second reformulation defines income as the shadow price of time. Most parents soon discover that children are very time consuming. This implies a wage opportunity cost that is especially steep for high-earning parents (Mincer, 1963; Willis, 1973). Empirical studies typically demonstrate the strong negative effect of women’s earnings on fertility. However, the opposite actually seems to hold for men’s wages, although the male wage effect is rather small, confirming the growing irrelevance of men’s economic status (Heckman and Walker, 1990).

Not surprisingly, education has very similar effects to income. Higher educated women have fewer children, and childlessness is most pronounced among women with very high levels of education (Schultz, 1986). But contrary to the income-effect, men’s education seems to also influence fertility negatively (Preston and Sten, 2008).

A large number of studies conclude that the income or education effect is mediated via postponement, firstly, of partnering and, secondly, of childbearing (Joshi, 2002; Lappegaard, 2002; Martin, 2000). Higher educated people delay marriage and/or opt for co-habitation, and both should reduce the likelihood of having a first child (Baizan et.al., 2003; 2004). And in line with Mincer’s logic, higher educated women will seek to minimize opportunity costs by delaying maternity.

Nevertheless, the educational gradient of fertility is turning upside-down, most clearly in North America and Scandinavia (Hazan and Zoabi, 2011; Kravdal and Rindfuss, 2008; Esping-Andersen, 2009). This apparently holds also for wages, since recent evidence suggests that high-earning women, at least in Scandinavia, may explicitly forego

income in the interest of motherhood (Datta Gupta and Smith. 2002). A straightforward economic opportunity cost explanation is therefore problematic.

### **Insecurity**

One explanation for this may lie in the incidence of labor market uncertainty. To begin with, higher educated women are more likely to enjoy job and earnings stability, at least once they have settled into their careers. The findings of Datta Gupta and Smith (op.cit), in fact, highlight how Danish career women explicitly seek to maximize security when embarking on motherhood, even if this entails a wage sacrifice.

A second explanation may be found in the profile of women's education. As Martin-Garcia and Baizan (2006) have shown, women whose education is in 'soft' fields (nursing, teaching and the like) are more likely to have children early. In some countries, and in Scandinavia especially, women very much select themselves into such fields, and this may help explain why levels of education are now positively correlated with births.

Thirdly, the reversal in the socio-economic gradient of fertility may, ironically, have something to do with rising male precariousness. The reversal reflects, in part, a drop in low educated women's fertility and, in part, a recent rise in births among high status women. One explanation for the former focuses very much on the deteriorating marriage market for less educated women, since low-skilled men experience heightened unemployment risks and eroding wages (McLanahan, 2004). In addition, there is growing evidence that gender egalitarianism is becoming a precondition for fertility. Since such practices are much more widespread among the higher educated, this can help explain why high status women now have more children.

Finally, Aassve et.al.'s (2012) finding that trust may be a precondition for higher fertility among educated women may also offer an explanation for why the educational gradient of births has been reversed in some countries and not in others.

A different kind of insecurity stems from difficulties in the transition from school to work. This is an especially acute problem in Southern Europe where it is not atypical for school graduates to wait two or three years before entering into a stable employment relationship. So it is not surprising that much research has focused on this issue (see, for example, Del Boca (2002) for Italy and Noguera et.al. (2002) for Spain).<sup>(4)</sup>

Where the transition from school to work is difficult and prolonged, there will be two parallel factors that can influence family formation: one, prolonged unemployment and lack of a stable income; two, the necessity of remaining in the parental home. Italy and Spain are extreme cases of continued dependency, with more than 50 percent of all 20-34 year olds still living with their parents (OECD's Family Data Base). To put this into perspective, the rate in Denmark is only 8%. Sleebos (2003) finds that both factors influence fertility significantly.

Based on Sleebos' estimates we can, once again, construct a thought-experiment: what might Spanish fertility look like if young people were able to emulate the Danish way of gaining independence? The calculation suggests that the Spanish TFR would increase to somewhere near 1.7.

### **Family demographic correlates**

Most fertility research has focused on two major changes in family behavior: one, the rise of non-traditional arrangements such as cohabitation, and two, rising couple instability and the risk of divorce.

Marriage rates have been declining steadily over the past decades, although more sharply in some countries than in others. In Scandinavia the marriage rate has remained fairly stable from 1970 to today, but the role of cohabitation has been significant throughout, and this means that these countries' marriage rates were always comparably lower. In other countries we witness a dramatic fall – and here Spain excels, as its marriage rate was halved between 1970 and 2009 (from 7.3 to 3.7)!<sup>(5)</sup>

(4) For a comprehensive, comparative overview, see Blossfeld et.al. (2005).

(5) The crude marriage rate (number of marriages per 1000 persons) in Sweden was 5.4 in 1970 and 5.2 in 2009. Other countries that have experienced a sharp decline are Germany, the Netherlands, France and the UK. These marriage and divorce statistics are taken from the OECD Family Data Base.



Meanwhile, marriages are also becoming ever more unstable, as seen in the (crude) divorce rates over the same decades. Spain went from a zero divorce rate in 1970 (divorce was then illegal) to 2.4, which places Spain at the higher end of the international distribution – indeed above Germany, Sweden Norway and France.

Demographic research typically uncovers a negative fertility effect from delayed partnering and cohabitation. But here we must be very careful with the details. Postponement of partnership occurs primarily among the higher educated, but it may not result in lower fertility if couples manage to catch up. The ‘speed-premium’ evidence for Sweden captures exactly this – as does the fact that higher educated women in Scandinavia are now the most likely to achieve 2-plus children.

It is also evident that the logic of cohabitation differs markedly from one country to the next. In France and the Scandinavian countries it has emerged as a functional equivalent to marriage; in other countries, it remains more of a testing-ground that may, or may not, translate into marriage later. These differences can explain why empirical research produces rather contradictory findings. On the one hand, there is evidence that cohabitation (compared to marriage) decreases childbearing (Brien et.al., 1999; Baizan et.al., 2003; 2004; Heaton et.al., 1999). On the other hand, we also see that births are increasingly unrelated to marriage. This is especially the case in those very same countries where cohabitation has become institutionalized. In Scandinavia now, more than half of all first births occur out of wedlock, and in France the proportion is above 40 percent. French cohabiters have basically the same birth probabilities that married couples have (Toulemond and Testa, 2005). Births among cohabiters remain, however, uncommon in the rest of Europe (only 9 percent in Italy).

On this dimension, however, our own analyses (presented in Chapter 4) produce a major surprise: as far as *first* births are concerned, it turns out that Spanish cohabiters behave much more similarly to the Scandinavians than to either the Dutch, the Germans, or the Italians.

The impact of rising divorce risks on fertility is very difficult to identify. This is so for several reasons. Firstly, any given couple may perceive that

the longevity of their relationship is uncertain simply because divorce is rampant throughout their community. In any case, it is the couple's assessment of their own relationship's durability that must influence their fertility decisions. And here we encounter the second difficulty, because uncertainty about its durability can logically produce two opposite decisions: some may refrain from having children; others may attempt to prop up the relationship by having a child (Lillard and Waite, 1993; Myers, 1997; Rijken and Liefbroer, 2009; for an overview, see Balbo et.al., 2012). Rijken and Thomson (2011) provide an especially interesting answer to this ambiguity. They discover that the link between couple instability and births is non-linear. Women who view the relationship as neither bad nor good are more likely to have a child as a way to stabilize the union.

### **The role of gender egalitarianism**

Considering the 'masculinization' of the female life course, at least as far as careers are concerned, it should be quite obvious that key decisions regarding family life will depend on altered gender relations. This reasoning has now become central to fertility research. McDonald's (2000; 2002) gendered fertility thesis has in this respect exerted a major influence.

The crux of McDonald's argument is that low fertility occurs when gender relations fail to realign themselves to the new economic role of women. The persistence of traditional gender behavior is, in this framework, probably the single best explanation of low fertility.

The decision to have children in today's world requires an adaption to women's new roles at two levels. Firstly, public policy needs to promote family-friendly policies that permit role conciliation. These, however, are unlikely to be genuinely effective unless accompanied by a concomitant equalization within couples. The key to the latter is the formation of a critical mass that promotes the diffusion of normative expectations in favor of gender egalitarian arrangements (Esping-Andersen and Billari, 2012; see also Neyer, Lappegård and Vignoli 2011; Sleebos 2003).

A number of studies give empirical support to this claim. Fathers' more equitable contribution to domestic tasks and child care has been found to influence fertility positively, especially for career women (Brodmann, Esping-Andersen and Güell, 2007; Cooke 2004; 2009; Craig and Siminski 2011; DeLaat and Sevilla Sanz, 2006; Duvander and Andersson, 2003; Myrskylä, Billari and Kohler 2011; Olah, 2003; Sevilla Sanz, 2010). Such studies have examined a variety of gender-egalitarian behavioral effects.

Since forming a union is almost always a prerequisite for parenthood, at least in most of Europe, the impact of gender egalitarianism may initially work via how individuals select themselves into partnerships. In a rare study where such prior selection is examined, Gimenez-Nadal et.al. (2011) discover that where very traditional family norms prevail, women are significantly less inclined to marry and this, in turn, will affect fertility adversely.

But most research examines the direct link between gender egalitarianism and births. Some have focused on men's relative contribution to domestic tasks, and here the main finding is that sharing child care is more decisive than for housework (Neyer et.al, 2011). A few studies have examined how a more egalitarian use of parental leave influences subsequent births. For Sweden, the effect has been found to be quite positive (Duvander et.al., 2010). A third approach is represented by the Neyer et.al. (2011) study which examines how more equitable sharing within the partnership influences future fertility *intentions*. They uncover quite substantial effects, although primarily among one-child couples. The effect wanes among parents who already have two or more children. Interestingly, their study also reveals that women's satisfaction with the division of labor has a stronger bearing on fertility intentions than does the actual allocation of domestic tasks. This parallels very nicely with the argument in Esping-Andersen and Billari (2012) that perceived *fairness* is likely to be more decisive.

But, as Esping-Andersen and Billari also emphasize, the link between gender equity and fertility should be u-shaped. This means that we would expect high fertility in two kinds of equilibria: in the traditional male-

breadwinner regime and in gender egalitarian arrangements. Fertility will bottom out when, on the one hand, the traditional family has eroded and, on the other hand, no new egalitarian regime has become manifest. In fact, a similar u-shaped effect has been documented for the US (Miller Torr and Short, 2004).

## II. The fertility gap in Spain: Late parenthood, few children and unfulfilled reproductive desires

---

Teresa Castro-Martín & Teresa Martín-García

### 2.1. Introduction

Spain had one of the highest levels of fertility in Europe for much of the 20<sup>th</sup> century and then, from the mid-1970s onwards, it experienced an extraordinarily steep drop in fertility. The total fertility rate (TFR), which was nearly 3 children per woman in the early 1970s, dropped below replacement threshold<sup>(1)</sup> in 1981 and continued its decline until reaching an historical low of 1.15 in 1998. Thereafter, a moderate recovery occurred, the TFR reaching 1.45 in 2008. This ended with the arrival of the economic crisis. In 2011, the total fertility rate stood at 1.35 children per woman, and no official population projection envisions the possibility that fertility in Spain might climb back to replacement level in the foreseeable future.<sup>(2)</sup>

Sub-replacement fertility and concerns about its consequences – namely, aging populations, a shrinking labour force and declining population size – are not new phenomena. Between 1920 and 1940, fertility dropped below replacement level in many Western countries (Van Babel, 2010). This awakened fears of population decline and provoked doomsday scenarios (Teitelbaum and Winter, 1985). However, birth rates increased considerably during the baby boom of the 1950s and 1960s. The current low-fertility syndrome appears far more persistent.

(1) Replacement-level fertility is defined as an average of 2.1 children per woman. If this level is maintained, population size will remain stable.

(2) The long-term population projections from the Spanish National Institute of Statistics and EUROSTAT coincide in assuming that Spain's total fertility rate will be 1.55 in 2050.

Since persistent below-replacement fertility has such far-reaching consequences, it has also become a major political issue. According to the latest United Nations World Population Policies Report, governments in 47 countries view fertility in their country as «too low», and 85% say they have introduced policy measures to boost fertility (United Nations, 2010). The European Union has also come to view low fertility as a major challenge. The EU Commission's Green Paper, *Confronting Demographic Change: A New Solidarity between the Generations* (European Commission, 2005) was the first comprehensive EU-level document openly concerned with demographic sustainability, and it formally acknowledged the need to address the links between childbearing, employment and public policy.

Yet is below-replacement fertility inevitable for advanced societies? At present, most European countries have fertility rates below 2.1, but the differences vary considerably. Southern, Eastern and Central Europe currently display the lowest fertility rates. By contrast, Northern and Western European countries, which once led the trend in fertility decline, are now fertility leaders. Indeed, Sweden, France, the UK, Ireland and Iceland lie very close to the replacement level. Outside Europe we find similarly large variations. The United States, Australia, and New Zealand have fertility rates close to 2 children per woman, whereas the rich countries of East Asia – Japan, South Korea, Singapore and Taiwan – have fertility levels similar to the lowest-fertility countries of Europe (Jones, 2011).

This chapter will review childbearing patterns in Spain from a broader European perspective. We describe the dynamics behind fertility decline and explore the demographic, economic and social factors that drive low fertility, the aim being to identify possible pathways to higher fertility.

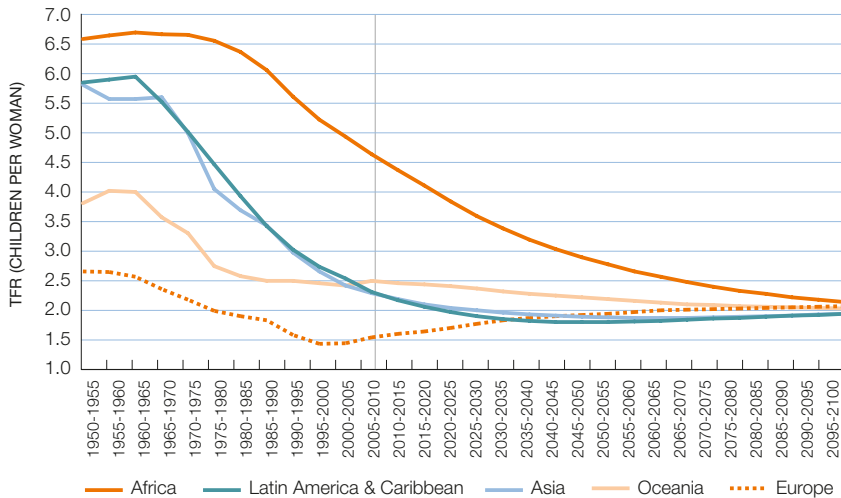
## **2.2. Sub-replacement fertility: from the exception to the norm**

Sub-replacement fertility, once considered a distinctive feature of the more advanced societies, is spreading rapidly across the globe (see

Figure 2.1). According to the United Nations Population Division, 75 countries – accounting for nearly half of the world population – had fertility levels below 2.1 children per woman in 2005-2010.

GRAPH 2.1

**Past and future estimated trends in total fertility rate (TFR) in major world regions, 1950-2100**



Source: United Nations, World Population Prospects: The 2010 Revision.

Whereas in the developed world, fertility reached current low levels after a long and gradual decline, fertility reduction is taking place later but much faster in many developing countries (Bongaarts, 2002). In Spain, it took more than a century for the total fertility rate to drop from approximately 5 children per woman at the end of the 19th century to 2 children in 1980. In contrast, the total fertility rate in Turkey fell from 5 to 2 children in only four decades, from 1970 to 2010. Within the next decades, the number of countries with below-replacement fertility is expected to almost double, from 75 in 2005-2010 to 136 in 2045-2050. This means that by mid-century, approximately 78% of the world population will live in countries with an average fertility below 2.1 children per woman (United Nations, 2011).

Although below-replacement fertility is becoming the norm globally, during the 1990s a number of countries experienced record low levels. Spain and Italy, in the early 1990s, were the first countries in the world to have a TFR below 1.3, a level that demographers have termed «*lowest-low fertility*» (Kohler, Billari and Ortega, 2002; Billari and Kohler, 2004). Note, however, that there is no natural lower limit to fertility. This phenomenon spread thereafter to the rest of Southern Europe, Central and Eastern Europe, and also to the rich countries of East Asia. Concerns about the demographic implications of this historically unprecedented low level of fertility are certainly warranted: in the absence of migration, a persistent fertility rate of 1.3 children would reduce total population size by half within 45 years.

Since the early 2000s there have been some signs of fertility recovery in many developed countries (Myrskylä, Kohler and Billari, 2009). The number of countries with *lowest-low* fertility diminished considerably, from 21 in 2003 to 4 in 2008 – all of them in East Asia (Goldstein, Sobotka and Jasilioniene, 2009). Concomitantly, a few advanced countries, such as the United States, Australia, Sweden, Norway and France, achieved fertility levels close to replacement. This reversal was mostly the result of the slowing-down of fertility postponement and the «recuperation» of postponed childbearing among women of older ages (Bongaarts and Sobotka, 2012). Increased immigration and social policies supporting families may also have contributed to this fertility rebound (Luci and Thévenon, 2012).

Spain, too, experienced a moderate fertility recovery. Its TFR rose from 1.15 in 1998 to 1.46 in 2008. As we will discuss later in the chapter, several factors accounted for this upward trend: the slowdown of first birth postponement, the arrival of younger and relatively higher fertility immigrants, and the diffusion of new forms of family arrangements among young cohorts.

The global economic downturn after 2008 led to stagnant or declining fertility in many countries (see Table 2.1). By 2011, a number of Eastern European countries (such as Hungary, Poland or Romania) had returned to a lowest-low fertility scenario, with all the Southern European countries following close behind. The economic crisis has also had adverse effects



on migration flows and on union formation (Sobotka, Skirbekk and Philipov, 2011). In the past, fertility declines during economic recessions were usually driven by childbearing postponement, and were subsequently offset by higher fertility in boom years. However, the depth of the current economic crisis may produce persistent effects, particularly in the hardest-hit countries, such as the low-fertility Southern European countries. In Spain, unemployment reached a record high of 26% at the end of 2012 – and 46% among those below 25 years – and there is no sign that it will recede soon. In this context, a significant recovery of fertility is difficult to imagine.

TABLE 2.1

**Total fertility rate (TFR) in year of lowest fertility, 2008 and 2011.  
Selected low fertility countries**

	LOWEST TFR		TFR IN 2008		TFR IN 2011	
	YEAR	TFR	TFR	CHANGE FROM LOWEST POINT	TFR	CHANGE 2008-2011
<b>Western Europe</b>						
Austria	2001	1.33	1.41	0.08	1.42	0.01
France	1993	1.66	1.99	0.33	2.00	0.01
Germany	1994	1.24	1.38	0.14	1.36	-0.02
Ireland	1995	1.84	2.07	0.23	2.05	-0.02
Netherlands	1983	1.47	1.77	0.30	1.76	-0.01
Switzerland	2001	1.38	1.48	0.10	1.52	0.04
UK	2001	1.63	1.96	0.33	1.98	0.02
<b>Northern Europe</b>						
Denmark	1983	1.38	1.89	0.51	1.75	-0.14
Finland	1987	1.59	1.85	0.26	1.83	-0.02
Norway	1983	1.66	1.96	0.30	1.88	-0.08
Sweden	1999	1.50	1.91	0.41	1.90	0.00
<b>Southern Europe</b>						
Greece	1999	1.24	1.51	0.27	1.43	-0.08
Italy	1995	1.19	1.42	0.23	1.41	-0.01
Portugal	2007	1.34	1.37	0.04	1.35	-0.02
Spain	1998	1.16	1.46	0.30	1.36	-0.10
<b>Central Europe</b>						
Czech Republic	1999	1.13	1.50	0.36	1.43	-0.07

	LOWEST TFR		TFR IN 2008		TFR IN 2011	
	YEAR	TFR	TFR	CHANGE FROM LOWEST POINT	TFR	CHANGE 2008-2011
Hungary	1999	1.28	1.35	0.07	1.23	-0.12
Poland	2003	1.22	1.39	0.17	1.30	-0.09
Slovakia	2002	1.19	1.32	0.14	1.45	0.13
Slovenia	2003	1.20	1.53	0.33	1.56	0.03
<b>Eastern Europe</b>						
Bulgaria	1997	1.09	1.57	0.48	1.51	-0.06
Romania	2002	1.25	1.35	0.10	1.25	-0.10
Estonia	1998	1.28	1.65	0.37	1.52	-0.13
Latvia	1998	1.11	1.44	0.33	1.34	-0.10
Lithuania	2002	1.24	1.47	0.23	1.53	0.06
Russia	1999	1.16	1.49	0.34	1.56	0.07
Ukraine	2001	1.09	1.46	0.37	1.47	0.01
<b>Eastern Asia</b>						
Hong Kong	2003	0.90	1.06	0.16	1.19	0.13
Japan	2005	1.29	1.37	0.08	1.39	0.02
S. Korea	2005	1.08	1.19	0.12	1.24	0.05
Singapore	2005	1.26	1.28	0.02	1.20	-0.08
Taiwan	2010	0.90	1.05		1.06	0.01
<b>Other low fertility Countries</b>						
Australia	2001	1.73	1.90	0.17	1.89	-0.02
Canada	2000	1.49	1.68	0.19	1.66	-0.02
Cuba	2006	1.39	1.59	0.20	1.69	0.10
United States	1976	1.74	2.09	0.35	1.89	-0.19

Sources: EUROSTAT; Population Reference Bureau, 2012; European Demographic Datasheet 2012; Goldstein, Sobotka and Jasilioniene, 2009.

### 2.3. A closer look at recent fertility dynamics in Spain

In 1975, Spain emerged from nearly four decades of dictatorship, an epoch in which the Catholic church dominated family and education policies, promoting family values based on asymmetric gender relations and a strict sexual code for women (Nash, 1991). In this period Spain's TFR, at 2.8, was well above the European average (2.1). Two decades later Spain's TFR dropped to the lowest fertility level in the world. In

some northern regions, such as Asturias, Cantabria, Galicia or the Basque country, fertility actually dropped below 1 child per woman during the 1990s.<sup>(3)</sup>

How can we explain that Spain, a historical laggard in fertility decline and family change, came to pioneer lowest-low fertility in the early 1990s? To arrive at an answer, we first examine the demographic components of the observed fertility decline. In particular, we focus on childbearing postponement, completed cohort fertility, parity transitions and contraception use, as well as on changes in fertility preferences. When the data allow, we explore differentials by education level in order to provide a more nuanced picture of fertility change across social strata.

### **Does postponed childbearing mean fewer births?**

The decline in fertility is closely linked to a progressive postponement of childbearing. Contraception has provided adults with more control over the occurrence and timing of births. The impressive increases in women's education and labour force participation are considered to be major forces driving the postponement of childbearing. Increasingly, both women and men want to first establish themselves in the labour market before assuming the role of parents. This trend towards delayed family formation can be observed in all advanced societies (Billari, Liefbroer and Philipov, 2006; Mills et al., 2011) and has contributed greatly to fertility decline (Billari et al., 2007; Sobotka, 2010).

Postponed parenthood is just one of the features of the delayed transition to adulthood that is so characteristic of Southern European societies (Buchmann and Kriesi, 2011). Everywhere, young adults tend to study longer, enter the labor market later, search for a partner longer, leave the parental home later, and become parents older than in the past. However, in Southern Europe, the delay of all these major events has been particularly intense (Billari et al., 2002). High rates of unemployment and difficulties in attaining a stable job (Adsera, 2004), a shortage of affordable housing (Holdsworth and Irazoqui, 2002), the lack of supportive policies, and strong inter-generational family ties (Reher, 1998; Dalla Zuanna, 2000)

(3) The lowest recorded TFR was 0.8 in Asturias during 1994-1999.

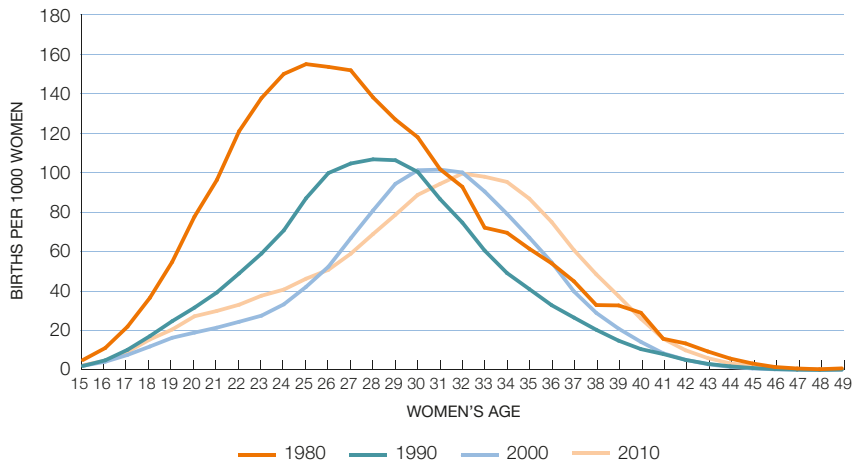
are some of the factors hypothesized to drive the so-called «syndrome of delay» (Livi Bacci, 2001). This is especially the case for transitions like parenthood that require long-term binding commitments.

The delay in the transition to parenthood has been remarkable in Spain: the mean age at first birth increased from 25 in 1980 to 30.1 among women and 33.3 among men in 2011. Spain, together with Italy, Germany and the UK, are now the countries with the latest age of entry into motherhood in the world (OECD, 2011).

Graph 2.2 illustrates how during the past three decades the calendar of fertility has moved to gradually older ages. Over this period, teenage childbearing has become marginal and fertility below age 25 has fallen dramatically. The peak of childbearing has shifted to ages 32-34, and births among women over age 35 now account for 18% of all births.<sup>(4)</sup> Although fertility among women older than 40 remains low, the proportion of first births to «late» mothers (40+) has more than tripled: from 0.9% in 1996 to 3.9% in 2011.

GRAPH 2.2

### Age-specific fertility rates, Spain 1980-2010



Source: INEbase <[www.ine.es](http://www.ine.es)>.

(4) The delay of parenthood is also evident in the case of men. Births among men over age 35 accounted for 49% of all births in 2011.

Parallel to the trend towards postponement, most countries have witnessed a gradual relaxation of the age norms that govern the timing of family transitions (Liefbroer and Billari, 2010). In the past, social norms about the appropriate age of motherhood constituted a barrier to childbearing for women past the «normative age». Nowadays, attitudes regarding the timing of family formation are much more flexible. An analysis of the *Timing of life module* of the 2006 European Social Survey shows that late childbearing in Spain is supported by relatively late ideal ages for becoming a parent (Martín-García and Castro-Martín, 2008). In fact, women in Spain report the highest mean ideal age of transition to motherhood (27.3) in Europe (graph 2.3). There is clearly a substantial gap between ideal and actual ages of first birth. But as optimal conditions for childbearing (completing education, attaining stable employment, couple stability, and home ownership) become harder to attain, the normative timeframe for family formation also expands.

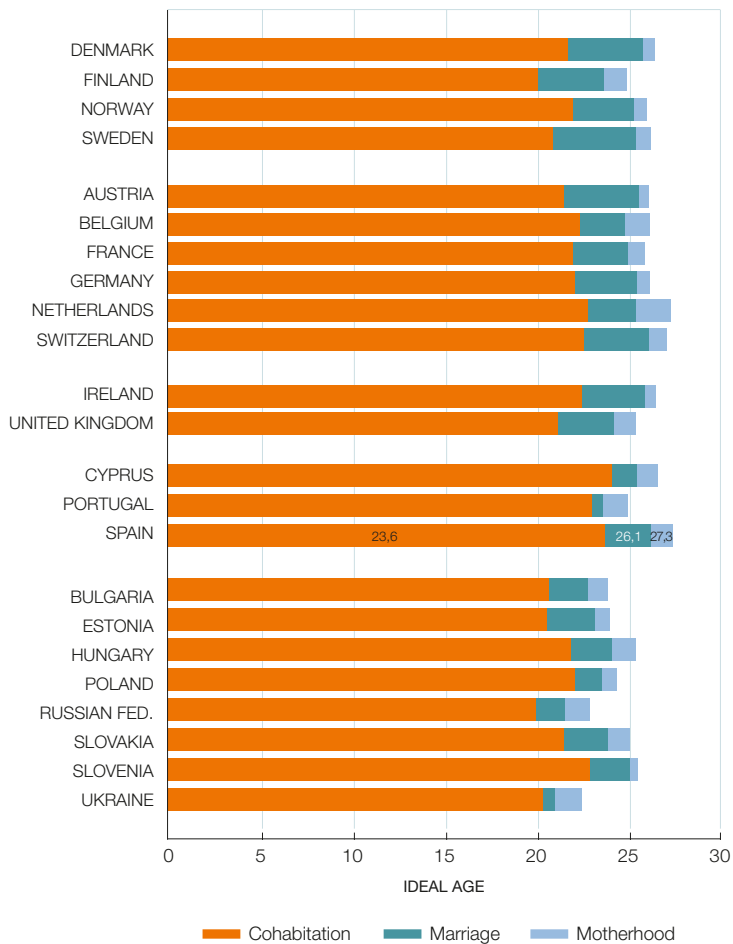
The trend towards postponement means that a growing proportion of women enter motherhood at ages when from a strictly biological viewpoint fecundity is in sharp decline (Leridon, 2008). Research highlights the adverse consequences of later childbearing for maternal and neonatal health. Pregnancy complications, miscarriage, premature birth and low birthweight are some of the potential problems which increase exponentially with the mother's age (Luke and Brown, 2007). In contrast, the sociological literature tends to emphasize the positive aspects of late childbearing, such as greater family stability, parents' superior economic resources, and a less disruptive impact for mothers' (Miller, 2010) and fathers' careers (Henwood, Shirani and Kellett, 2011).

Assisted reproductive technologies (ART) have contributed significantly to the extension of women's reproductive window, although with limitations, since the success rate of these techniques decreases sharply with age. Since 1978, when the first in-vitro fertilization baby was born, ART utilization has increased rapidly. Several studies suggest that assisted reproduction has a small but non-negligible effect on fertility (Habbema et al., 2009; Sobotka et al., 2008). Spain, along with France and Germany, are among the European countries with more ART cycles reported. Recent reports estimate that about 3% of all children born have been conceived through ART methods (de Mouzon et al., 2010).

Assisted reproduction policy is fairly liberal in Spain and has been available to all women – whether married or not – through the national healthcare system since 1988 (Melo-Martín, 2009). Increasing ART use has contributed to the rapid increase of multiple births in Spain: from 2.5% of all births in 1996 to 4.1% in 2011.

GRAPH 2.3

**Mean ideal age for women’s early family transitions.  
European Social Survey 2006/2007**

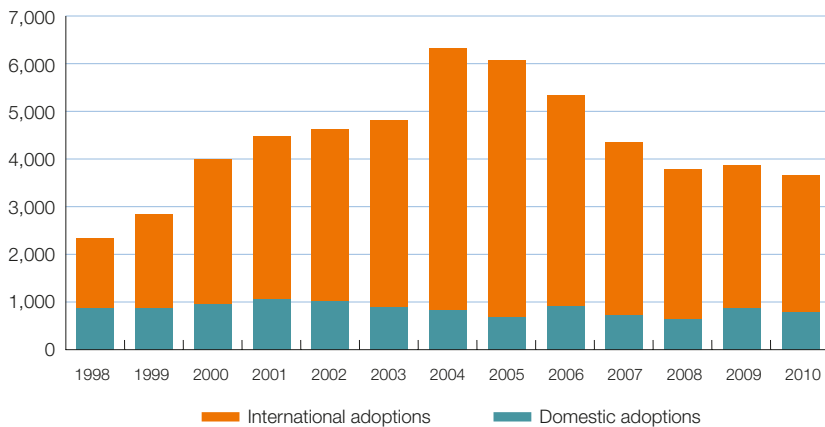


Source: Martín-García and Castro-Martín (2008).

Adoption has also expanded. Its rise is linked to the postponement of childbearing (and reduced fecundity) and to the expansion of ‘families by choice’. Adoption is increasingly international. The United States, France and Spain are, in order of importance, the major countries of destination (United Nations, 2009). Although adoption remains relatively rare – less than 1% of births in any given year – it has contributed significantly to the growing diversity of family forms. A recent downward trend in international adoption has been observed in many countries (Selman, 2012), including Spain (graph 2.4), where the number of international adoptions more than halved from its peak in 2004 (5,541 adoptions) to 2011 (2,573 adoptions), not because of weakening demand but mainly due to increasing barriers to intercountry adoption established by sending countries.

GRAPH 2.4

**Trends in the number of international and national adoptions, Spain 1998-2010**



Source: Estadística Básica de Medidas de Protección a la Infancia. Ministerio de Sanidad, Servicios Sociales e Igualdad.

We now return to the question whether later births necessarily mean fewer births? On an individual level, later entry into motherhood is associated with lower completed fertility because fecundity declines with age; couples

have fewer years left to attain their desired family size. Also, the longer they remain childless, the more likely they are to revise their fertility intentions downward due to competing life interests. However, at the aggregate level, older age at first birth is not always associated with lower overall fertility. In many European countries with comparatively high fertility, such as France, the Netherlands or Sweden, the mean age at first birth is close to 30, i.e. pretty much as in Spain. In most Eastern European countries, age at motherhood is significantly lower and so is fertility.

The question is to what extent delayed fertility can be recovered at older ages. The degree of recuperation differs across countries, and this is what makes a big difference between lower and higher fertility societies. Many studies have shown that postponement does not imply low fertility in Western and Northern Europe; but in Central and Southern Europe, it does (Sánchez Barricarte and Fernández Carro, 2007). There are also major country differences in terms of birth order. Most countries show a strong recuperation in terms of first-birth rates. The real difference lies in the probability of second and especially third births (Sobotka et al., 2011).

### A cohort perspective on fertility

Demographers have long been aware of the distortions in period fertility indicators, such as the total fertility rate (TFR), caused by shifts in the timing of childbearing (Ryder, 1964). Postponement, for instance, spreads the births that would have occurred in a single year across a larger time span, lowering the fertility rate in any given year, even if final completed fertility remains unchanged. A decline in fertility rates may therefore reflect fertility postponement (*tempo*) as well as a reduction in the number of births women will have in their lifetime (*quantum*). In fact, part of the explanation for the lowest-low fertility rates observed in Spain during the 1990s was the intense upward shift in the ages at childbearing.

Several adjustment methods have been proposed to correct these shortcomings of the TFR so as to provide a measure of the fertility *quantum* that is undistorted by birth timing changes (Bongaarts and Feeney, 1998; Kohler and Ortega, 2002). Yet the division of Europe into countries with very low fertility and countries with close-to-replacement



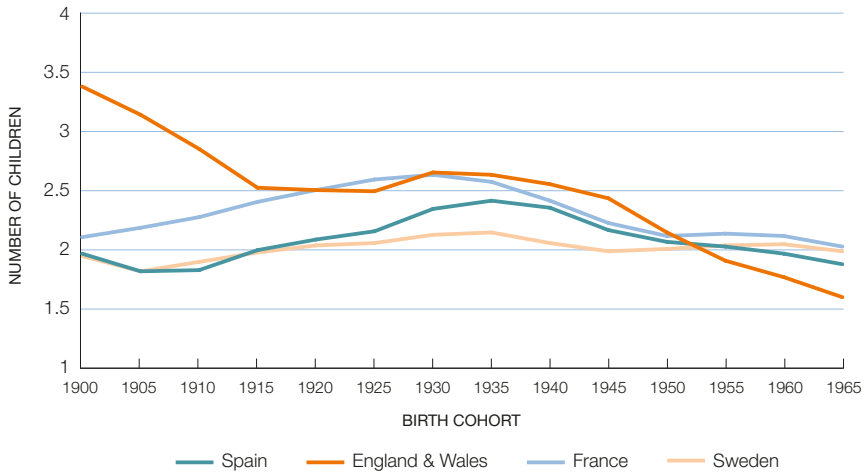
fertility remains roughly unchanged whether we use unadjusted or adjusted fertility rates. In the case of Spain, tempo-adjusted fertility rates were well above observed rates in the 1990s and early 2000s, but the tempo-adjusted TFR for 2008 was 1.54, very close to the observed TFR (1.46) (European Demographic Data Sheet, 2012). Hence, the current low levels of fertility can no longer be attributed to the distorting effect of postponement.

It is always advisable to also look at fertility from a longitudinal perspective. Cohort fertility analysis – based on the final number of offspring born to successive cohorts – is not affected by timing shifts and provides an accurate measure of trends in family size. An important shortcoming, though, is that lifetime fertility can only be observed for cohorts that have ended their reproductive span. Hence, cohort measures provide information about childbearing behaviour with a certain time lag. graph 2.5 displays long-term trends in lifetime fertility for successive female cohorts that have already completed their childbearing. In some countries, like Sweden, completed family size has been amazingly stable for all cohorts born in the 20<sup>th</sup> century. This is not the case for Spain. While women born in 1900 had on average 3.4 children, women born in 1965 – the last cohort that would have completed its reproductive phase by 2011 – had on average 1.6 children over their lifetimes. Although period and cohort fertility measures are not strictly comparable, both of them lead to a similar conclusion: Spain is positioned at the tail of the European fertility ranking. Furthermore, a recent forecast analysis suggests that completed cohort fertility for women born in 1975 will remain very low in Spain (1.40) (Myrskylä, Goldstein and Cheng, 2013).

The fall in average family size might be due to rising levels of childlessness and/or a decrease in family size among women who have children. In recent decades, parenthood has increasingly become a matter of choice and personal preferences (Morgan and Berkowitz King, 2001), and the prevalence of childlessness has risen considerably (González and Jurado-Guerrero, 2006). For some, childlessness is a deliberate choice; for others, decisions to postpone childbearing may result in having no children if the appropriate moment never arrives (Tanturri and Mencarini, 2008).

GRAPH 2.5

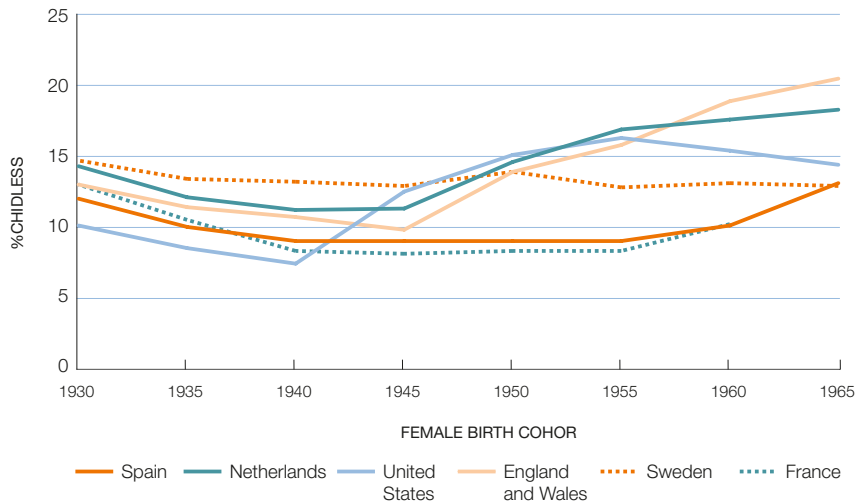
### Completed cohort fertility, female birth cohorts 1900-1965



Source: INED, Developed countries database. <[http://www.ined.fr/en/pop\\_figures/developed\\_countries/developed\\_countries\\_database](http://www.ined.fr/en/pop_figures/developed_countries/developed_countries_database)>.

GRAPH 2.6

### Definitive childlessness by female birth cohort



Source: OECD Family database <[www.oecd.org/els/social/family/database](http://www.oecd.org/els/social/family/database)>. Note: Data refer to women 45 years old.

The European countries vary considerably with regard to childlessness, and there is no clear-cut correlation between its prevalence and overall fertility levels. In some countries, like Germany or Austria, high childlessness goes hand in hand with low cohort fertility. In others, however, the link is weak. In the very low fertility countries of Southern and Eastern Europe, childlessness is not widespread, whereas in some moderately high fertility countries, like the UK, about 20% of women end up childless (Frejka, 2008). Graph 2.6 illustrates the divergence in lifetime childlessness across selected countries.

In Spain, definitive childlessness has risen for recent cohorts, but only moderately so. About 13% of women born in 1965 remained childless by the end of their reproductive span compared to 9% of women born in 1940. But even so, Spain's rate remains considerably lower than the 20% level observed in Austria or the UK – where childlessness is very concentrated among highly educated women.<sup>(5)</sup> The very low fertility in Spain, therefore, cannot be attributed to an increasing rejection of parenthood. Instead, it is low rates of progression to second and higher order births which explain low cohort fertility levels.

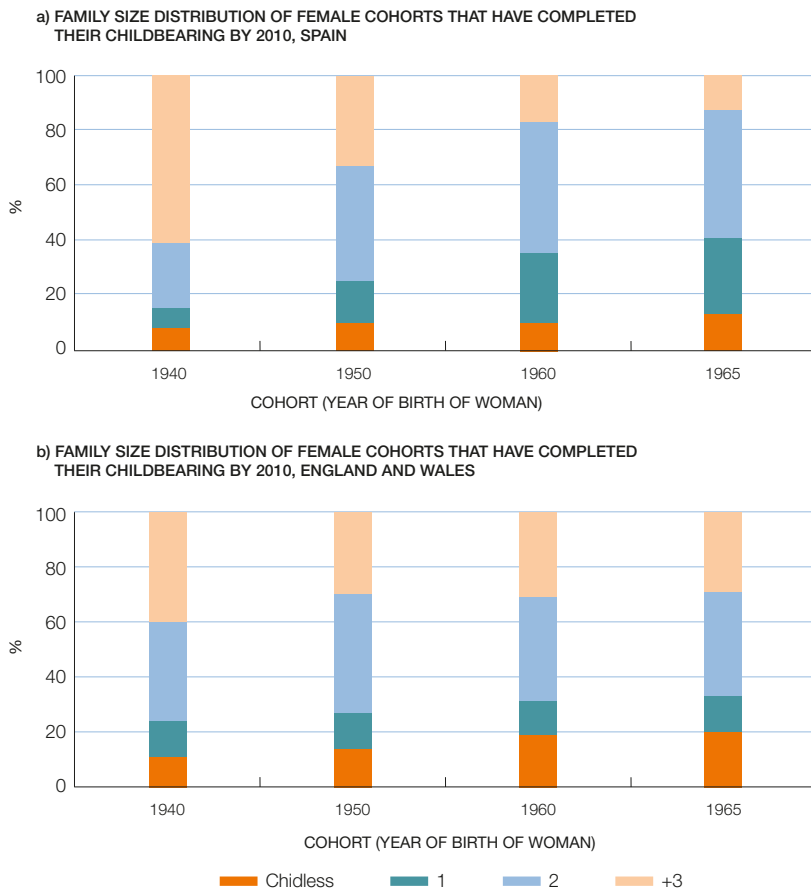
Graph 2.7a depicts the family size distribution of various female cohorts that have completed their childbearing in Spain. The proportion of large families has fallen dramatically: only 12.5% of women born in 1965 had three or more children compared to 60.7% of women born in 1940. In addition, the share of women born in 1965 who ended up with one child (27.6%) was well above that of women born in 1940 (7.4%). One-child families – and hence the number of children growing up without siblings – have become more widespread in Spain than in other countries. The pattern observed in England is quite different: a relatively high proportion of women remain childless but few have just one child (Graph 2.7b). And progression to second and third births remains commonplace.

The trends in parity progression ratios – the proportion of women who move from one parity to the next – are displayed in Graph 2.8. They confirm the patterns noted above. In Spain, the progression from childlessness to one child remains relatively high (87% of women in the 1965 cohort), and has not changed much over the past decades. However,

(5) Current levels of definitive childlessness in Spain are not particularly high in historical perspective either. Nearly 20% of female cohorts born in 1910-1920 remained childless.

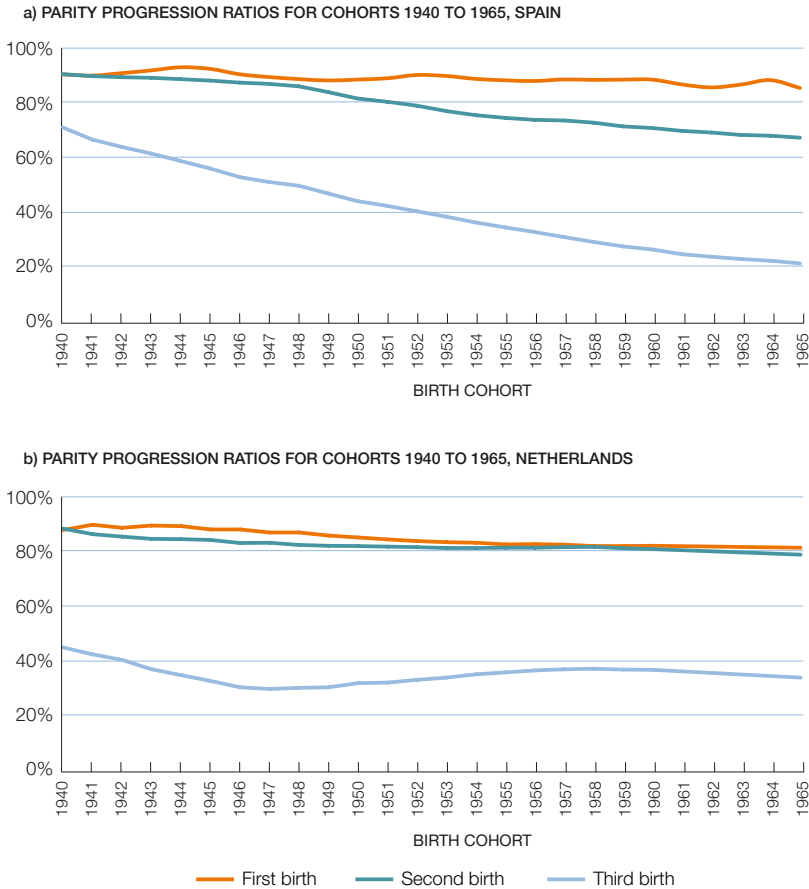
progression to second and higher order births has become less and less common. Among women who had one child, only 68% proceeded to have a second child, and among those who had a second child, only 21% proceeded to have a third child. In higher fertility countries, the transition from first to second birth tends to be more frequent. In the Netherlands, for instance, 79% of women born in 1965 who had one child went on to have a second one (Graph 2.8b).

GRAPH 2.7



Sources: Spain: calculations by Tomas Sobotka on the basis of birth records by age and birth order from EUROSTAT and INE. England and Wales: ONS <<http://www.ons.gov.uk>>

GRAPH 2.8



Sources: Spain: calculations by Tomas Sobotka. Netherlands: Human Fertility Database <<http://www.humanfertility.org>> and Frejka and Sardon (2007).

## 2.4. The rising importance of immigration on childbearing trends

In recent years, we have seen increased attention to the possibility that, with their youthful age pyramid and higher fertility, immigrants could help lessen the anticipated consequences of Europe’s sub-fertile, labor-short, ageing and declining populations (Lutz and Scherbov, 2002).

With a net annual inflow of more than 600,000 foreigners in the period 2000-2008, Spain became one of the main receiving countries of Europe – until the onset of the current economic crisis. The proportion of foreigners in the total population increased rapidly: from 1.6% in 1998 to 12.2% in 2010. It has now leveled off. Net migration accounts for more than 90% of Spain's population growth. In parallel, after decades of uninterrupted decline, the annual number of births rose dramatically: from 365,193 in 1998 to 519,779 in 2008. This was largely due to the relatively high proportion of immigrant women in childbearing age. There was also a significant rise in total fertility – from 1.15 children per woman in 1998 to 1.46 in 2008. This allowed Spain to surmount the lowest-low fertility threshold. But what was the actual role of immigrants' childbearing in the recent fertility turn-around?

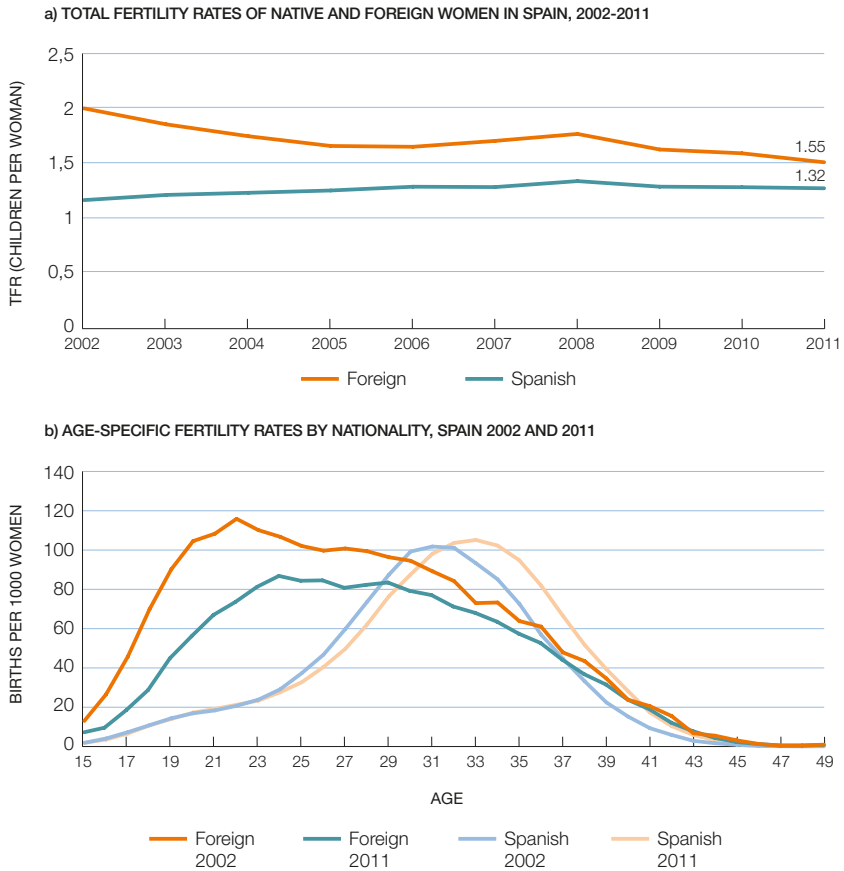
The birth statistics for 2011 indicate that nearly one out of four newborns in Spain (23.1%) had at least one foreign-born parent. Several studies have shown, however, that the aggregate impact of migrants on overall fertility levels, although not trivial, is rather modest (Roig and Castro-Martín, 2007). Castro-Martín and Rosero-Bixby (2011) estimated that immigrants' contribution to Spain's TFR in 2004-2006 was of 6.6% – or 0.082 children. This surprisingly small contribution resulted from their relatively low share of the childbearing population and also from the sustained decline in foreign women's fertility rates.

Graph 2.9a shows that the fertility rate for foreign women residing in Spain fell from 2.05 children in 2002 to 1.55 in 2011, not much above the fertility level of native women (1.32). The decline in immigrants' fertility can be partly attributed to ongoing change in the composition of the foreign population – a high proportion of recent immigrants come from low-fertility countries in Eastern Europe. Additionally, as also observed in other countries (Andersson, 2004), the longer they stay, the more immigrants' fertility will converge with that of the native population.

Although the contribution of immigrants' fertility to overall fertility in Spain has been relatively modest, it is important to note that immigrant women's younger childbearing schedule – their mean age at first birth in 2011 was 27.2 compared to 30.8 among Spanish women (Graph 2.9b)

– has contributed significantly to slowing down the rise in the mean age at motherhood and hence also the aggregate process of fertility postponement.

GRAPH 2.9



Source: INEbase <[www.ine.es](http://www.ine.es)>.

There is another effect of immigration on Spanish fertility that is worth mentioning. In Spain, as in other developed countries, immigrant women have been filling the domestic ‘caring gap’, taking care of the

old, the disabled, and children. Even if their direct contribution to overall fertility is relatively modest, their indirect contribution is probably important. Given the shortage of child care services in Spain and men's limited involvement in caring responsibilities, women's labour force participation and childrearing is usually reconciled via the unpaid care of grandparents and the low-paid care work of immigrants (Tobío, 2001). Hence, if fertility levels are currently very low, they would certainly be even lower without the contribution of immigrants to child care.

## 2.5. The gap between desired and achieved fertility

While in most developed societies fertility has declined below replacement level, the average number of desired children has remained relatively stable: at or above two children per woman (Bongaarts, 2001). The two-child norm – preferably one child of each sex (Mills and Begall, 2010) – prevails in most Western societies, even in very low fertility societies, meaning that actual fertility often deviates substantially from stated preferences.

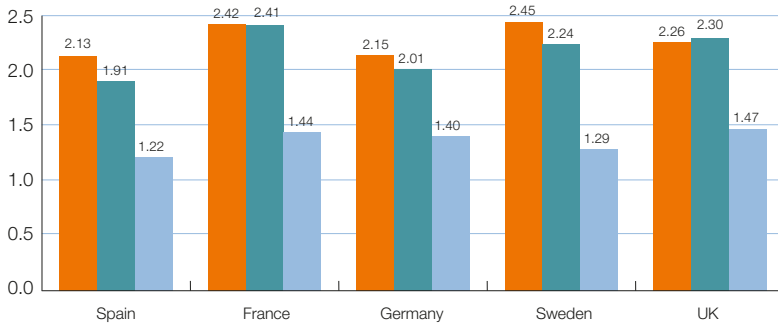
Why don't citizens fulfill their childbearing desires? What are the obstacles? The persistent gap between desired and achieved fertility has stirred concerns about unhappy citizens underachieving their fertility goals, and it has provided a strong argument in favor of social policies aimed at removing obstacles such as unstable working conditions or difficulties in combining family and work (OECD, 2007).

The use of fertility intentions data has been criticised on a number of fronts: respondents tend to give socially desirable answers, many individuals revise their fertility goals over their life course, and there is a high level of uncertainty attached to reproductive plans (Ní Bhrolcháin and Beaujouan, 2012). Despite these shortcomings, childbearing preferences play a central role in fertility decision-making and are typically considered as an influential predictor of future childbearing behaviour (Philipov, 2009).

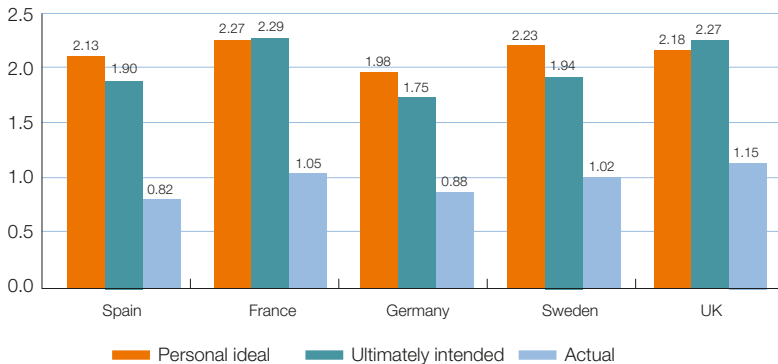


GRAPH 2.10

a) MEAN PERSONAL IDEAL, ULTIMATELY INTENDED AND ACTUAL NUMBER OF CHILDREN.  
WOMEN AGED 20-49, 2011



b) MEAN PERSONAL IDEAL, ULTIMATELY INTENDED AND ACTUAL NUMBER OF CHILDREN.  
MEN AGED 20-49, 2011



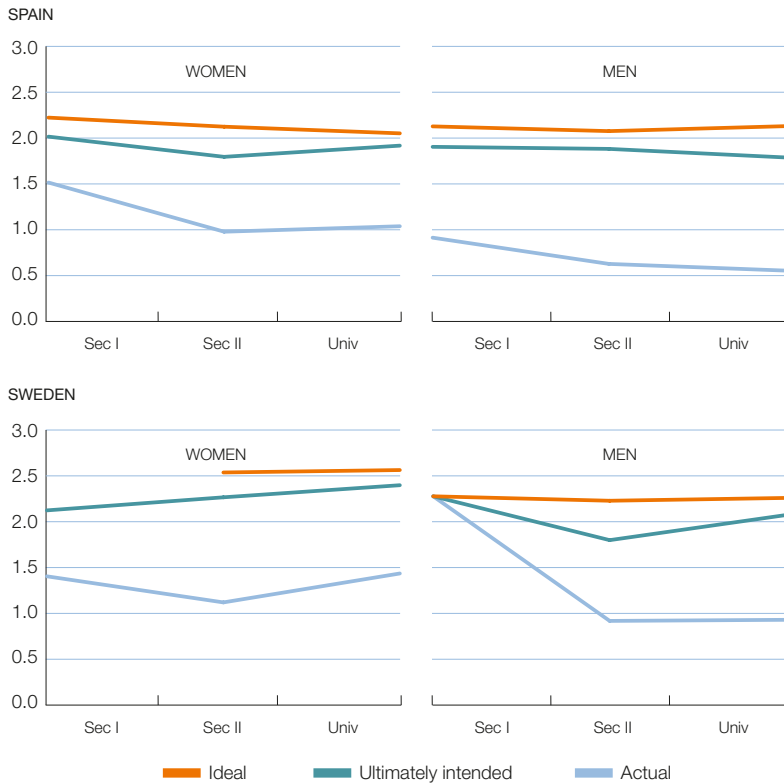
Source: Eurobarometer 75.4 (2011).

Recent data on fertility intentions collected in the Eurobarometer 75.4 in 2011 confirm that the two-child norm is strongly entrenched in all European countries (Testa, 2012a). Graph 2.10 shows the mean ideal, the ultimately intended, and the actual number of children among women and men aged 20 to 49 in five European countries. Ideal family size refers to the number of children a person would like to have, irrespective of whether it is possible. It is therefore likely to be influenced by prevailing social norms. In all countries examined, women's and men's ideal number of children is above 2 and reaches nearly 2.5 among women in France and Sweden. Intended

fertility, in contrast, is likely to take into account the various constraints in a person's life. Except in France and the UK, intended fertility is below ideal fertility, but still close to the replacement level. The lowest level of intended fertility is observed among Spanish women and men (1.9 children) and among German men (1.75 children). In all countries, the average number of intended children exceeds the observed rate of childbearing as measured by the total fertility rate. This is particularly the case in Spain, where the gap between intended fertility (1.9) and the total fertility rate (1.36) in 2011 was, in the aggregate, about 0.5 children.

GRAPH 2.11

**Mean personal ideal, ultimately intended and actual number of children by level of education, women and men aged 20-49, Spain and Sweden 2011**



Source: Eurobarometer 75.4 (2011).

The gap between intended and realized fertility tends to be particularly large among highly educated women, who typically intend to have the same number of children as their less educated counterparts, but ultimately end up with fewer children (Testa, 2012b; Iacovou and Tavares, 2011) – although this is not so in all countries. Graph 2.11 shows, for instance, that in Sweden, university-educated women intend to have more children than their less educated counterparts, and data on realized fertility, although incomplete because many women have not yet ended their reproductive period, show that differentials in actual fertility by educational attainment are relatively small. In Spain, in contrast, fertility intentions are very similar among women in different educational strata, but actual fertility of college-educated women is well below that of women with lower secondary education. A recent study by Testa (2012b) shows that the effect of education on the fertility gap is also gendered: compared to the less educated, highly educated women face more challenges in realizing their reproductive ideals than highly educated men.

## **2.6. Social, economic and relational factors driving or inhibiting childbearing**

We turn now to some of the key socio-economic factors that underlie the observed trends. We focus primarily on three factors: the massive expansion of women's education, the rapid increase in female labour force participation and the changing nature of intimate relationships. Despite competing views of what ultimately drives fertility change – structural vs. ideational forces –, there is broad consensus on the crucial role of women's educational aspirations and achievements, women's stronger attachment to the labour force, and changes in partnership behaviour in shaping childbearing trends (Balbo, Billari and Mills, 2013). However, as we will see next, their effect does not work in a linear fashion, nor is it uniform across time and space.

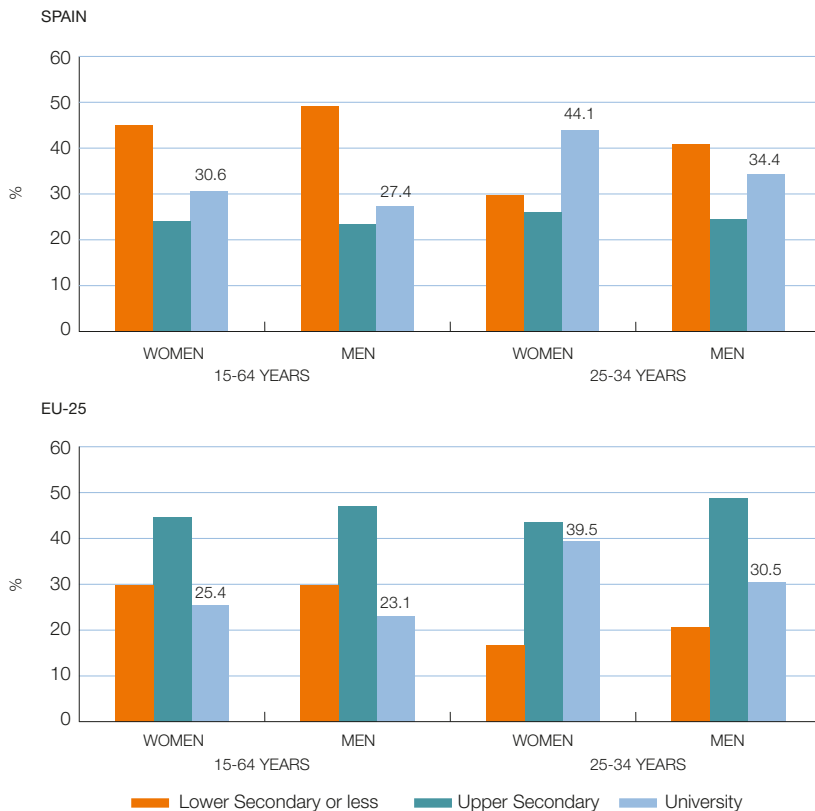
### **Women's education and childbearing: is the negative educational gradient weakening?**

Women's educational advancement is one of the most impressive social changes that has taken place in Spain in the last decades. Data from the 2001 census show that while less than 5% of Spanish women born in the late 1930s had access to university education, nearly one-third of women born in the early 1970s had attended college, surpassing their male counterparts

by 10 percentage points. According to Eurostat data, in 2011 the proportion of Spanish women aged 25-34 with a university degree not only exceeded that of men (44.1% vs. 34.4%), but it was above the EU-25 female average for this age group (39.5%) (see Graph 2.12). The rapid spread of tertiary education among women has altered the traditional patterns of assortative mating, since more highly-educated women are searching for partners with a similar educational attainment (Esteve et al., 2012). Some claim that the reversal of the gender imbalance in education is creating an education-specific mating squeeze that might affect the timing, probability and stability of union formation, with implications for fertility (van Bavel, 2012).

GRAPH 2.12

**Distribution of the population aged 15-64 and 25-34 by educational attainment, Spain and EU-25, 2011**



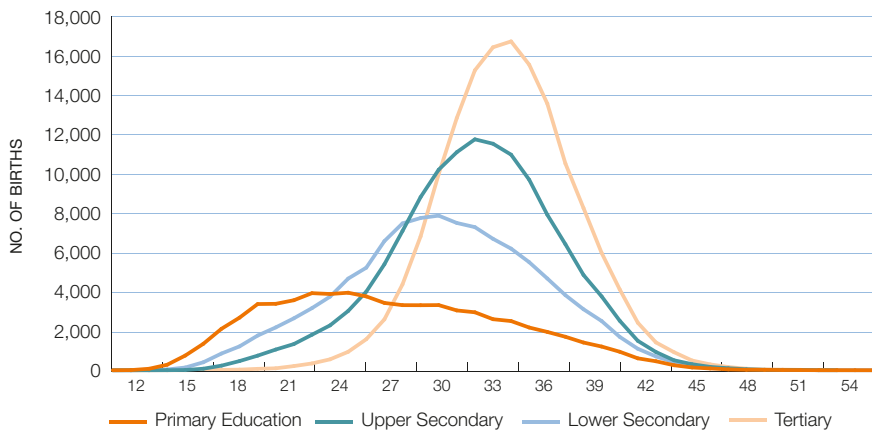
Source: Eurostat <<http://epp.eurostat.ec.europa.eu/portal/page/portal/education/data/database>>.

Postponed motherhood was initially spearheaded by highly educated women. In his *New Economics of the Family*, Becker (1981) argues that the opportunity costs of motherhood for women with more education and stronger career prospects are greater. This is because career interruptions impose much steeper earnings penalties and human capital devaluation. Not surprisingly, women with a strong earnings potential were the forerunners in fertility postponement (Mills et al., 2011).

Postponement has subsequently spread to all social groups, but sizable differentials in the timing of entry into motherhood across educational strata still prevail (Rendall et al., 2010). In Spain, postponement is pretty much across-the-board. In 2010, the mean age at first birth was 32.9 among college-educated women, 30.8 among those with upper secondary education, and 28.2 for those with lower secondary education (see Graph 2.13).

GRAPH 2.13

**Birth timing by women's education, 2010**



Source: INEbase <www.ine.es>.

Social disparities in the timing of first births are more pronounced in countries with 'liberal' welfare regimes, like the UK and the United States.

Here, women with university education usually have their first child after age 30 and women with low qualifications tend to have their first child earlier, quite often as teenagers (Sigle-Rushton, 2008). This signals a potential social polarization in family formation. McLanahan (2004) argues that the syndrome of early childbearing and single motherhood among the less educated is linked to an increasingly disadvantaged economic position. In contrast, in France and the Nordic countries, social disparities in age at motherhood are less marked (Rendall et al., 2010).

Educational gradients are observed not only for the timing of motherhood but also for overall fertility. Currently, the association between educational attainment and completed childbearing is negative in most European countries. However, evidence from the Nordic countries suggests that the negative educational gradient of fertility may be weakening or even disappearing. A recent Norwegian study by Kravdal and Rindfuss (2008) found that although higher educated women had their first child later, they were more likely to recuperate at a later age, so late motherhood did not have any visible impact on second or third birth rates. Andersson et al. (2009) also documents a strong recuperation of births at higher ages for highly educated women in Denmark, Finland, Norway and Sweden, resulting in small differences in completed fertility across educational groups. In Spain, data from the 2006 Fertility, Family and Values Survey indicate that the educational gradient of completed fertility remains negative. Among women aged 40 to 49, those with university credentials had on average 1.5 children, whereas women with lower secondary or less had on average 1.9 children.

Neutral or positive effects of education on ultimate fertility are mostly observed in societies committed to reducing social and gender inequalities and supporting maternal employment (Andersson et al., 2009). In fact, the reversal of the educational gradient of fertility in Scandinavia has been attributed to family-friendly policies, such as universal and high-quality early childcare (Kravdal and Rindfuss, 2008). In countries where women find it hard to achieve a good work-family balance, like in Southern Europe, fertility differentials by education level are larger (Solera and Bettio, 2013).

The field of education has also been shown to influence the timing and number of children (Lappegård and Rønsen, 2005; Hoem, Neyer and Andersson, 2006; van Bavel, 2010). In Spain, Martín-García and Baizán (2006) found that female-dominated disciplines concerned with the care of individuals or emphasizing interpersonal skills have a positive influence on the timing of first birth, irrespective of the level of education. Selection issues might be contributing to these findings. Women with a strong orientation towards childbearing might self-select into educational paths that lead to jobs where they are more able to combine motherhood and employment. But the difficulty of combining career and children may also vary by chosen career type (Mills et al., 2011). Furthermore, socialization effects of education might also play a role in reinforcing or altering initial orientations.

### **Women's labor force participation: obstacle or prerequisite for childbearing?**

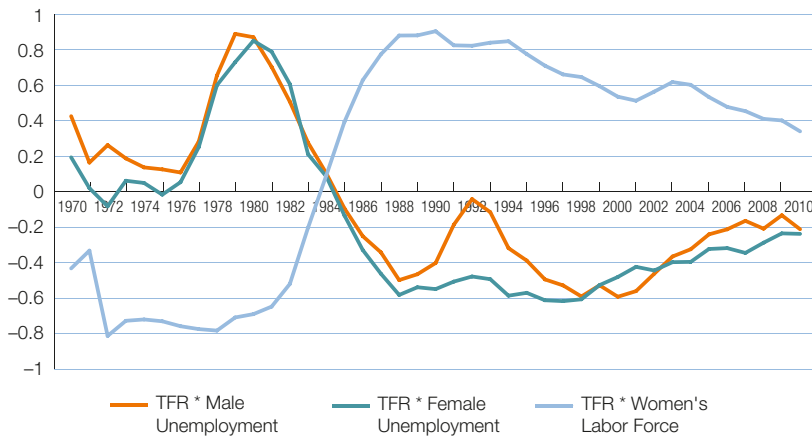
The increase in women's labour force participation has been accompanied by a steady decline in fertility. Yet again, we find important reversals both at the macro and micro levels. Ahn and Mira's study (2002) shows that at the macro level, the traditionally negative relationship between female labour force participation and fertility rates has turned positive since the mid-1980s (see Graph 2.14). The trend is just the opposite regarding women's unemployment: the cross-country correlation shifts from positive to negative. At the individual level, however, the association between female labour force participation and fertility tends to be negative, although there are important variations across cohorts and across countries (Matysiak and Vignoli, 2008). The impact of women's employment on childbearing is positive in Northern Europe (Andersson, 2000), but negative in Southern European countries (Baizán, 2005).

Women's career aspirations and labour force attachment have changed dramatically in Spain. Since the 1980s, women's labour force participation has increased rapidly, although it still lags behind many European countries. Today, 52% of Spanish women aged 15-64 are employed, compared to 60% in France, 65% in the UK, 68% in Germany or 72% in Sweden (Eurostat, 2013). Aggregate indicators, however, are often

misleading, because they do not take into account large cohort differences. Younger cohorts display a similar rate of labour force participation to their European counterparts. In 2007, women's employment rates in Spain for the 25-39 age group (70%) were close to those in Germany (71%), the UK (72%) or France (74%), and well above those in Italy (60%) (Naldini and Jurado, 2013). In other words, Spain is experiencing a very rapid shift from a male breadwinner family model to a dual-earner family model. The post-2008 economic crisis has, however, produced a sharp fall in female employment rates, especially among younger women. And this may delay the shift towards a dual earner/dual career model (León and Migliavacca, 2013).

GRAPH 2.14

**Correlation trends between TFR and some labour indicators, 1970-2010**



Countries included: Germany, France, Japan, Spain, Sweden, UK and USA.  
Source: OECD <http://www.oecd.org/statistics/>.

High unemployment has been an endemic problem in Spain. The unemployment rate averaged 17% in the 1980s and 19% in the 1990s; it went down to 10% during 2000-2007 and has risen sharply in recent years (18% in 2008-2011, reaching 26% in 2013). Unemployment has been systematically much higher among women and youth, and this clearly



affects family formation. For instance, 42% of Spanish women and 41% of men under age 30 were unemployed in 2011. The risk of unemployment declines with education, but nonetheless 16% of women and 14% of men aged 25-39 with a university degree were unable to find a job. A number of studies have shown that unemployment of one or both members of a couple has a particularly strong effect in reducing birth rates in Spain (Baizán, 2005; Gutiérrez-Domènech, 2008; Adsera, 2011).

Spain also suffers from a pronounced *insider-outsider* divide in the labour market. On one side, older workers enjoy indefinite contracts with solid guarantees in case of unemployment, while on the other side, young workers are either unemployed or tend to have short-term contracts with low wages, poor career prospects and limited safety nets (Häusermann and Schwander, 2011). Since the mid-1980s, a series of flexibility-driven labour market reforms have deepened the process of dualization of the Spanish working population, affecting mostly women and young people (Polavieja, 2006). In 2011, 27% of women and 24% of men had a fixed-term job in Spain (15% and 14% in the EU-25). Among young adults, Spain also occupies one of the top positions in the European ranking: 34% of Spanish employees below age 40 have a temporary job (vs. 22% in the EU-25). Several studies have shown that income and job insecurity largely discourage family formation in Spain (De la Rica and Iza 2005; Vignoli, Drefahl and De Santis, 2012). A minimum level of stability is a prerequisite for setting up an independent household and having children (González and Jurado-Guerrero, 2006).

Part-time jobs are generally expected to have a positive effect on fertility by permitting an easier re-entry into the labour market after childbirth. However, countries differ considerably regarding the regulation of part-time employment. In Spain, the prevalence of part-time employment is low (14%<sup>(6)</sup> vs. 19% in the EU-25). In contrast to other European countries, like the Netherlands or in Scandinavia, part-time employment does not represent a satisfactory strategy to combine work and childrearing in Spain. On the one hand, part-time work involves mostly low-skilled women in the service sector with low incomes, poor working conditions,

(6) 23.4% among women and 5.9% among men.

high temporality, and limited chances of upward mobility (Lapuerta, 2012). On the other hand, part-time employment is mainly driven by the demand of service industries rather than the desire of women for shorter working hours to accommodate their family roles. In fact, part-timers are often forced to accept non-standard hours of work that make it even more difficult to reconcile work with family and social life (Ibañez, 2011). Research shows that part-time jobs have a positive effect on fertility only in those countries where they are widespread and voluntarily chosen (Ariza, De la Rica and Ugidos, 2005).

Public sector jobs constitute a unique source of secure and stable employment before and after childbirth. Research shows that in those countries where the level of female employment is high, public sector employment tends to be a substantial contributor (Mandel and Semyonov, 2006). Moreover, fertility is usually higher in countries with larger public sectors (Bernhardt, 1993), and women employed in the public sector tend to have higher fertility rates than their counterparts in the private sector (Adsera, 2011; Esping-Andersen, 2007; Esping-Andersen et al, 2002; Martín-García and Castro-Martín 2013; Solera and Bettio, 2013). They are also more likely to remain in the labour force after childbirth (Gutiérrez-Domènech, 2008). Better job conditions in the public sector also encourage men's take-up of parental leave (Geisler and Kreyenfeld, 2011), as well as a greater involvement in childrearing, which in turn has a positive effect on fertility (Esping Andersen et al., 2007).

In Spain, job opportunities in the public sector are in shorter supply than in Northern Europe. Public sector employment accounts for about 12% of total employment, below the 15% average for the OECD (OECD, 2011). Norway, Denmark or Sweden are all well above 25%. Spanish women are more represented in the public sector than in the economy as a whole, but still represent only 54% of total public employment, compared to 70% in Norway (Røsen and Skrede, 2010).

A number of studies suggest that it is not merely employment versus non-employment, contract duration, or the number of hours worked that matter for childbearing (Begall and Mills, 2011). Work schedules and time flexibility, job characteristics such as autonomy, and

workplace organizational culture are increasingly considered important in terms of reconciling family and work (Drobníč and Guillén Rodríguez, 2011). A recent study documents that there are significant differences in women's fertility according to their occupational choice. It shows that health and teaching professionals have an advantage in harmonizing work and motherhood in Spain (Martín-García, 2010). Working conditions and schedules might be particularly important when, as in Spain, there is a lack of policy support for working mothers.

In brief, empirical research shows that women's labour force participation does not necessarily lead to very low fertility. The relationship between employment and fertility is largely conditioned by institutional arrangements, welfare policies, gender relations, the functioning of the labour market, and the social organization of work. As we have seen, none of these dimensions are conducive to fertility in Spain.

### **Do family and partnership changes affect fertility negatively?**

Family life and partnership dynamics have undergone profound changes in all Western societies in recent decades (Bumpass, 1990; Billari, 2005). Some of the key transformations have been later entry into conjugal unions, the declining significance of marriage, the spread of cohabitation and living-apart together relationships, the rise of separations and divorce, and the increase in re-partnering and step-families (Seltzer, 2000; Kiernan, 2001).

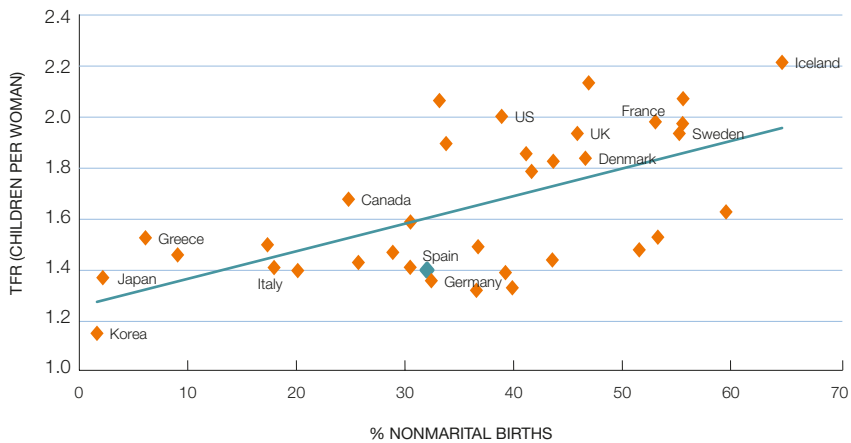
The retreat from marriage and the rising instability of partnerships have often been linked to low fertility. Indeed, it is reasonable to think that long periods spent during young adulthood outside a conjugal union may contribute to later and fewer births or that more unstable partnerships might prevent couples from having the number of children they aspire to. However, the relationship between partnership dynamics and fertility is not straightforward. When analyzed cross-nationally, the evidence points in the opposite direction than expected: fertility is currently higher in countries with a larger share of cohabitation, non-marital births, and union disruption (Billari and Kohler, 2004). Although some of these associations at the highly aggregated country level might

be temporary and spurious, they reveal that the eroding importance of marriage, the spread of alternative living arrangements, and rising union instability do not inevitably lead to long-term sub-replacement fertility.

Graph 2.15 illustrates the strong correlation that currently exists at the country level between overall fertility and the proportion of births taking place outside of marriage. In most countries where fertility is close to replacement, the proportion of non-marital births is in the range of 40-50%. The weakening relationship between marriage and fertility is closely linked to the rapid spread of cohabitation. In most European countries, a large majority of births outside marriage are planned and occur within stable cohabiting unions.

GRAPH 2.15

**Cross-country correlation between the percentage of nonmarital births and the total fertility rate, OECD countries, 2009**



Source: OECD Family Database <[www.oecd.org/social/family/database](http://www.oecd.org/social/family/database)>.

Spain is a latecomer to the global process of family change. At the end of the 20<sup>th</sup> century, it ranked highest in terms of age at marriage within Europe. The decline in marriage was not compensated for by a parallel increase in cohabitation, as has been the norm in most European

countries. Consequently, the percentage of Spanish women aged 20-34 (i.e. in the prime childbearing ages) who had not yet formed their first conjugal union was among the highest in Europe in the 2000s: 62% (Castro-Martín, Domínguez-Folgueras and Martín-García, 2008).

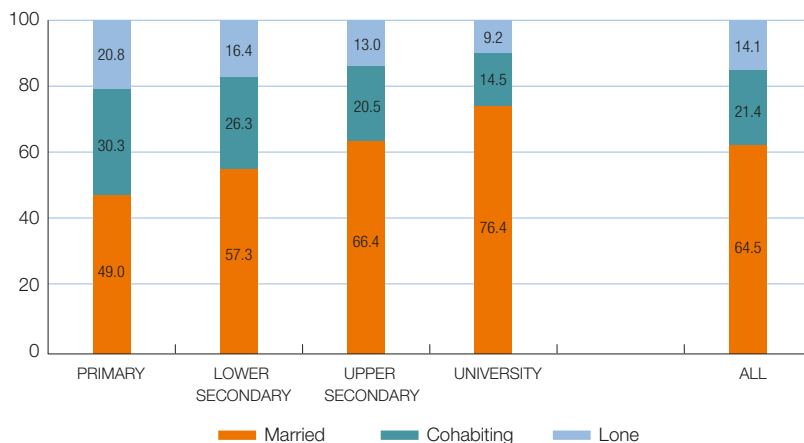
But as we shall also see in Chapter 4, here we see very rapid change. Cohabitation has become a common partnership choice: by the age of 35, 39% of women born in the 1970s had entered their first conjugal union through cohabitation, compared with 17% of women born in the 1960s and 6% of women born in the 1950s (Domínguez-Folgueras and Castro-Martín, 2013). This study also reveals that, while college-educated women were the clear forerunners of cohabitation in the mid 1990s, educational differentials are no longer significant. The waning effect of education may be interpreted as an indicator of the diffusion of cohabitation across all social strata. As we shall also see in Chapter 4, cohabiting couples in Spain appear quite stable.

Recent studies have also shown that the probability of marital dissolution, traditionally low in Spain, has increased substantially among recent marriage cohorts (Bernardi and Martínez-Pastor, 2011). Rising marital disruption might also influence the choice of cohabitation, because many divorced persons who re-partner choose to cohabit rather than re-marry (Wu and Schimmele, 2005).

However, the most striking family transformation in Spain has to do with the partnership context of childbearing (Castro-Martín, 2010). The percentage of births to unwed mothers rose from 4% in 1980 to 11% in 1995. Since then, the increase has been dramatic, reaching 37% in 2011. This has primarily been driven by births to cohabiting adults, a pattern that has also been observed in many other countries (Raley, 2001) (see Graph 2.16). In 2011, childbearing in cohabiting families accounted for 23% of all births. This level is similar to that documented by Manlove et al. (2010) for the United States and it suggests that cohabitation in Spain has become an accepted context for childbearing and possibly childrearing.

GRAPH 2.16

## Percentage of births to married, cohabiting and lone mothers by mother's level of education, Spain 2010



Source: INE, birth microdata.

## 2.7. Pathways to higher fertility

We have noted that there is a relatively wide variation in fertility levels across advanced societies. In 2010, the total fertility rate ranged from 1.17 (Latvia) to 2.2 (Iceland) in Europe and from 1.23 (Korea) to 3.03 (Israel) among OECD countries. As demographic research has underscored, the medium and long-term consequences of a fertility rate below 1.3 are vastly different from those of a fertility rate above 1.7. The latter, with moderate levels of immigration, could ensure population stabilization. In the former case, only massive and sustained immigration flows could offset a reduction in population size and rapid ageing.

The North-South fertility divide that prevailed in Europe during most of the 19<sup>th</sup> and 20<sup>th</sup> centuries has turned upside down since the 1990s (Castles, 2003), and the current fertility map displays an entirely new regional configuration. Northern and Western European countries, which were the forerunners of the first and second demographic transition, now have fertility levels close to replacement. Southern and Eastern Europe – laggards in both the first and second demographic transitions – and the

German-speaking countries display very low fertility levels. Several institutional, economic and social factors are good explanatory candidates. It appears that fertility tends to be higher in societies where children are viewed as both a private and a public good, where the costs and care of children are shared between the family and the state, and where more gender equity helps reconcile employment and childrearing. However, from a policy and welfare perspective, we can distinguish two broad clusters of countries (Sobotka, 2004).

In the first cluster fertility is comparatively high. Here we find the Scandinavian countries, France and other countries, like the Netherlands, which provide ample job protection for working mothers, relatively generous child benefits, subsidized child-care, and universal social policies that promote gender equality and support dual-earner families to achieve a work-family-life balance (Oláh and Bernhardt, 2008). In these countries differentials in fertility and family life across educational strata tend to be relatively small (Toulemon, Pailhé and Rossier, 2008; Andersson et al., 2009).

In a second cluster we also find comparatively high fertility. This group is comprised of Ireland, the United Kingdom and the United States. Here we find weak labour market regulations and family policies that tend to be targeted to the needy (McDonald and Moyle, 2010). Despite little public support for families and children, fertility remains relatively high, partly because disadvantaged social groups tend to have early – and often unintended – births, and partly because immigrant and ethnic groups exhibit high fertility rates (Sigle-Rushton, 2008). As a by-product, there has been an increasing social polarization in the timing, the *quantum*, and the family context of childbearing by education level and occupational class, with highly educated women having no children or small families, and low educated women having early births – often outside marriage – and relatively large families (Kiernan et al., 2011). In this context, greater fertility is linked to high levels of inequality. In turn, partnership and reproductive behaviour contribute to inequalities.

In brief, the experience of many advanced countries indicates that economic modernization, women's education and stronger attachment to the labour force do not inevitably lead to long-term sub-replacement

fertility. However, there seem to be two pathways to moderately high fertility: the Nordic model, based on public support for the dual-earner family and family-friendly policies aimed at facilitating the reconciliation of employment and care responsibilities of mothers and fathers, and the Anglo model, based on the persistence of high fertility niches.

## 2.8. Conclusions

Summarizing recent demographic research and presenting stylized evidence, we have tried to dispel various common misconceptions about low fertility – in particular the idea that very low fertility is the inevitable outcome of economic development, women’s massive entry into higher education and the labour market, and the increasing retreat from marriage. The empirical data reveal that this is not necessarily so. Several advanced societies have managed to maintain fertility levels close to replacement while having a highly educated and economically active female population and also exhibiting a weak link between marriage and reproduction. In contrast, fertility in Spain has remained below 1.5 children per woman for more than two decades, even though the mean desired number of children is about two. The moderate upward trend at the beginning of the new century was not only modest but also short-lived.

We have identified three key obstacles to fulfilling fertility preferences. Firstly, macro-level conditions related to labour market structures and opportunities matter. Since stable employment has become a prerequisite for childbearing, the high unemployment rate of young adults and the unstable position of many of those employed are clearly major obstacles to childbearing.

Secondly, the institutional and policy setting also matters. Public support for women and men to combine paid work and family responsibilities has never been a priority in Spain. Most policies have not gone beyond abstract commitments, strong rhetoric and piecemeal interventions. The current economic crisis, with rising unemployment and job insecurity, and the implementation of austerity programs make it even more difficult to envision more comprehensive support for families in the near future.



Finally, an increasing number of studies have found solid evidence that links gender (in)equality and fertility (Esping-Andersen, 2009; McDonald, 2000; Goldscheider, 2000; Neyer, Lappegård and Vignoli, 2011). Change in gender relations has been asymmetric since women's lives have changed much more than men's. Additionally, change has been more rapid in some spheres, such as education and employment, than in others, such as family practices or welfare state adaptation (England, 2010). In addition, gender (in)equalities have an important bearing on childbearing decisions.

What will the future course of fertility in Spain be? If failure to address job precariousness, gender equality, and work-family balance persists, the forecast is simple: very low fertility is here to stay. Only if the costs and care of children are shared between the family and the state and equitably between both parents, the gap between desired and actual childbearing is likely to narrow (Folbre, 2008). Yet the critical question posed by England and Folbre (1999): *who should pay for the kids?* – be it in terms of time and money – remains unanswered.

## III. Education, Employment, and Fertility

---

Daniela Bellani & Gøsta Esping-Andersen

### 3.1. Introduction

More education can exert a double influence on fertility. It is likely to promote a postponement of first births (the tempo effect) and lead to overall fewer children (the quantum effect). Research that focuses on the former typically finds a clear postponement effect (Rindfuss et.al., 1996; Martin, 2000; Lappegaard and Rønsen, 2005). This is true also for Spain (Noguera et.al., 2003) – although recent data suggest that less educated Spanish women are also increasingly delaying entry into motherhood (see Chapter 1).

Postponing the first birth will of course narrow the fertile part of women's life span. And, yet, there is no clear effect of postponement on 'quantum'. This is so for two reasons. One, late starters can catch up by accelerating subsequent births. This is, in fact, a widespread practice in Scandinavia. Two, the causal influence of education may be spurious or contingent on women's employment situation. Some studies that focus on fields of education, for example, find that women with strong fertility preferences select themselves into educational specializations and job trajectories that are more 'mother-friendly' (Lappegaard and Rønsen, 2005; Martin-Garcia and Baizan, 2006).

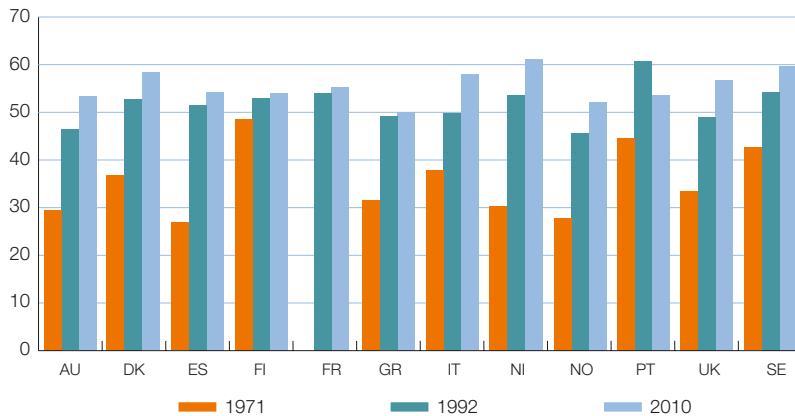
The quantum effect of education is linked to the greater economic opportunity costs that higher educated women face when interrupting careers. But historical studies cast some doubt on this straightforward explanation. Jones and Tertilt (2008) examine U.S. fertility trends from the early 1800s and find that the (negative) educational gradient of fertility

has remained basically stable over a century even if women’s employment was marginal throughout much of that period.

Over all, the evidence is quite ambiguous. There is, on the one hand, clear evidence that higher educated women have fewer children (Skirbekk, 2008). But studies that focus on more recent female cohorts do not find any clear correlation and some, in fact, suggest that the educational gradient may have reversed itself (Kravdal and Rindfuss, 2008; Mencarini and Tanturri, 2006; Mills et.al., 2008; Sobotka, 2004). In any case, as we saw in Chapter 1, there are no noticeable differences with regard to education as far as women’s fertility preferences are concerned.

GRAPH 3.1

**Female students enrolled in tertiary education (ISCED 5-6) as a percentage of all students in tertiary education, in 1971, 1992 and 2010**



Source: UNESCO. Data for France in 1971 are not available.

Throughout most of modern history, women’s educational attainment lagged far behind men’s. Today the situation has reversed itself in most advanced countries. Since the 1980s, women’s enrolment rates in higher education have surpassed men’s (UNESCO, 2010).<sup>(1)</sup> Figure 1 plots the percentage of female students among all students in tertiary education for

(1) Global Education Digest, Unesco 2010.

European countries in 1971, 1992 and 2010. As shown, all countries in 2010 boast a female majority in tertiary education. The vanguards were the Nordic countries.

Women have also surpassed men in terms of completion rates. Still, there are huge gender-gaps in terms of choice of disciplines.<sup>(2)</sup>

In the following we explore the changing relationship between education and fertility.

We begin with a meta-analysis in order to systematize a large number of existing studies that investigate this relationship. They focus on European Countries in different time periods of the last century.

We then examine micro-macro interactions, in order to study how the (micro-level) effect of education affects the intention of having another child within different macro-level settings. In this sense, this chapter provides an additional contribution to the analysis of the link between education and fertility by introducing empirical measures of institutional factors that might influence fertility.

Hence, in the first part of the chapter we shall test the validity of a U-shaped relationship between level of education and fertility at the aggregate level across countries. To test this association we begin with a structured literature review of the existing empirical evidence. In parallel, we analyze data from the European Social Survey 2004-5 (ESS Round 2) pooled with data from the World Value Survey (1981-2008) to explore how levels of education influence fertility.<sup>(3)</sup> Subsequently we will present and discuss the results of the analysis (called meta-analysis). A comparative perspective here is fundamental because existing research suggests that European countries are very heterogeneous in term of fertility trends.

To anticipate our findings, we do observe a reversal in the educational gradient of fertility precisely in those countries that pioneered not only the demographic transition but also the transformation of women's economic roles.

(2) Women and men continue to study different disciplines, leading to gender segregation by fields of study (Mills et al 2012).

(3) These data sets have some restrictions: the sample sizes are relatively small, the educational information is not very precise, and we are not able to follow respondents across time.

The puzzle, then, is why fertility is rising among highly educated women and falling among less educated women in some countries (Scandinavia) but not in others (Southern Europe). There is substantial evidence that labour market and welfare policies play a central role in this respect – in particular policies that support working mothers. Recent advances in fertility research demonstrate that women’s childbearing depends less on the male partner’s earning power and more on their own opportunity cost perceptions. Hence, child care support and maternity leaves can be decisive for fertility intentions. Similarly, labour market characteristics that help reconcile work-family conflicts may help lower the opportunity costs of motherhood.

To examine how such characteristics affect fertility, in particular for higher educated women, we will analyse the intention to have another child considering characteristics such as the opportunity to work part-time, the availability of public sector jobs, and the incidence of temporary contracts. Analysing the data from the 2004/5 Round of the European Social Survey we test the links between level of education and fertility intentions in a variety of labour market settings. We shall see that the intention to have another child appears to be mediated by family friendly labour market policies. In countries with a large proportion of public sector jobs we find significantly stronger fertility intentions among the highly educated.

The chapter proceeds as follows: in Section 2 we describe the main results of the meta-analysis. In Section 3 we present our analyses on fertility intentions and we conclude in Section 4.

### **3.2. Meta-analysis: a quantitative research review**

A large number of studies have investigated the relationship between education and fertility, but the majority have focused only on a single country in a specific time period. As a consequence, research has not yet produced any clear conclusions regarding trends in the educational gradient. The use of meta-analysis represents a solution to this conundrum because it offers a clear and systematic way of comparing, synthesizing and harmonizing the empirical evidence obtained by different studies.

In order to implement the meta-analysis, we sampled a large number of scientific contributions aimed at testing the association between education

and fertility. We then constructed a dataset containing comparable results across time and countries. As we will show in the next section, from this analysis it emerges very clearly that the sign of the relationship between education and the probability of having a second child has changed in the last decades.

### 3.2.1. Research design

The first step was to identify studies (from journals, books, working papers and international reports) which explicitly study the relationship between education and fertility in Western Europe over the past century. We focused on contributions where the key variables were operationalized as follows:

- The woman's level of education was measured either as a dummy variable (with ISCED 1-2 versus ISCED 5-6) or as a categorical variable (with ISCED1-2, ISCED 3-4, and ISCED 5-6).
- Fertility outcomes were measured as two dummy variables, having or not having a second child, and being or not being childless (that is symmetric to the variable having or not at least one child).

Our identification of relevant studies was accomplished using three web instruments (the Web of Knowledge, Google Scholar and Google). The keywords inserted in the databases were «education» «tertiary education» «educational attainment» (and similar), also combined with «childlessness», «transition to first (second/third) birth», «having a first (second/third) child», «childbearing», «fertility», «maternity», «quantum», «siblings», «parity», «parity transition», «parity progression» and «birth order», and similar in three different languages, English, Italian and Spanish. Additionally, we checked all the studies of interest that were cited by articles that matched our search criteria. We ended up with more than 90 contributions. A large number of these studies, however, could not be included because they did not conform to our selection criteria – estimations were not available separately by gender, the age cohorts considered were too extended (more than ten years), available results were not comparable because of different measures for our key variables (for example, in some studies the level of education was treated as a continuous variable), or women less than 38 years of age were included. In addition, descriptive results from Western countries included in the World Value Survey and the European Social Survey were included.

At the end we constructed a dataset including 113 estimates (referring only to women), distributed as follows: 47 coefficients refer to the risk of having a second child and 66 refer to the risk of being childless.<sup>(4)</sup>

As to the studies focusing on a second child, two coefficients are for the birth cohorts 1935-39, twelve for 1940-44, five for 1945-49, six for 1955-59, nineteen for 1960-64, fourteen for 1965-69 and eleven for 1970 up to the 1980s. As regards the studies of childlessness, 3 estimates are for the birth cohorts 1935-39, two for 1940-44, nine for 1945-49, ten for 1950-54, eleven for 1955-59, six for 1960-64, two for 1956-69 and two for the 1970s-1980s. The distribution across countries is presented in Table 1. A list of all references used in the meta-analysis is found in the bibliography.

TABLE 3.1

**Meta-sample composition – number of coefficients reported**

	CHILDLESSNESS	SECOND BIRTH
<b>Nordic Countries</b>		
Denmark	3	1
Norway	15	15
Sweden	9	3
Finland	6	5
<b>Continental Countries</b>		
Netherlands	4	3
Western Germany	2	3
France	8	3
<b>Mediterranean Countries</b>		
Italy	5	6
Greece	1	–
Spain	4	4
<b>Liberal Countries</b>		
UK	4	4
<b>Total</b>	<b>66</b>	<b>47</b>

Source: our elaboration.

(4) Not all the selected studies aimed to test the role of women's education on fertility outcomes but some of them treated it as a control variable.

We standardized all the reported coefficients:<sup>(5)</sup> we transformed them into odds ratios, i.e. the relative risk of having a second child or being childless comparing high educated women with low educated women (the reference category).<sup>(6)</sup> As a result, our dataset contains information for each contribution following this order: author(s), title, country, women's birth-cohorts, dataset, sample, methodology, control variables and coefficients of interest.

To identify the association between education and fertility over time, we test for both a linear and a quadratic function. The quadratic function fits better with the u-shaped hypothesis regarding the probability of having a second birth (and with the inverse u-shape in the case of childlessness).<sup>(7)</sup>

### **3.2.2. Changes in the educational gradient of fertility across European Countries: an overview**

In this section we present the effect sizes. We start with the probability of being childless. In Graph 2 the vertical axis shows the probability (odds ratio) of being childless for high educated relative to low educated (e.g. a value of two implies that higher educated women have twice the risk of being childless relative to low educated women). The fitted linear line in Graph 3 reveals no change in the association between education and childlessness over the past century.

But when we consider the Nordic countries separately a different pattern emerges. The absence of any effect in Figure 2 seems to have been the result of two different scenarios. For the Nordic countries there is a negative correlation between level of education and childlessness across time. But for the other European countries the evidence supports a positive association (Graph 3).

Put differently, the educational gradient of childlessness is evaporating in Scandinavia while it is strengthening in the rest of Europe.

(5) They result from regression analysis in the majority of the cases.

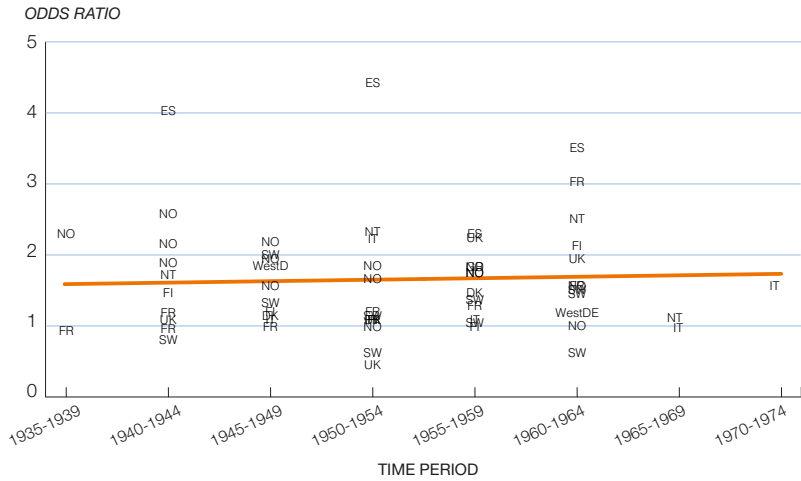
(6) Many studies reported more than two educational categories; we considered only two categories – less than secondary education and tertiary education.

(7) In our analysis we do not consider explanatory covariates used by original studies.



GRAPH 3.2

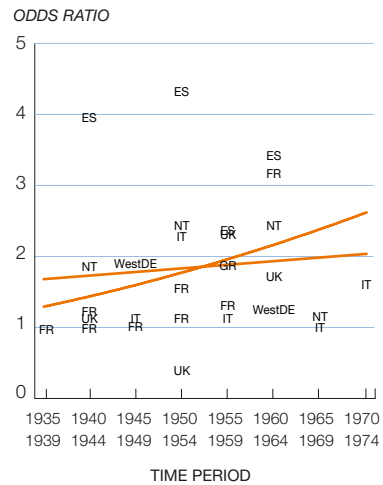
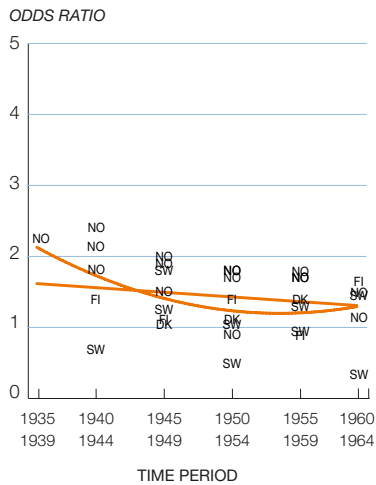
**Probability of being childless, all countries, birth cohorts 1935-1974**



Source: our elaboration.

GRAPH 3.3

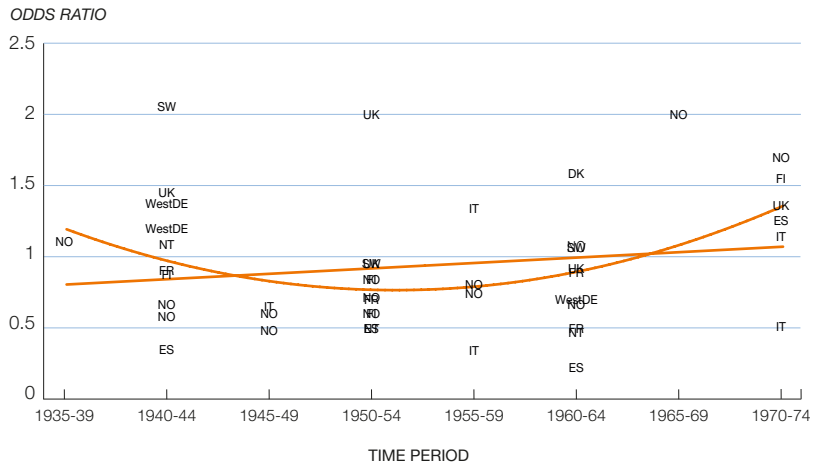
**Probability of being childless, Nordic (a) and other European Countries (b), birth cohorts, 1935-1974**



Source: our elaboration.

GRAPH 3.4

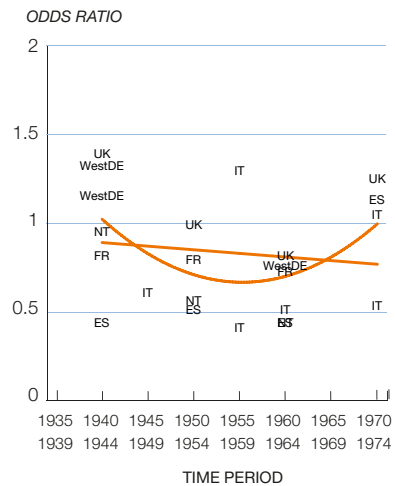
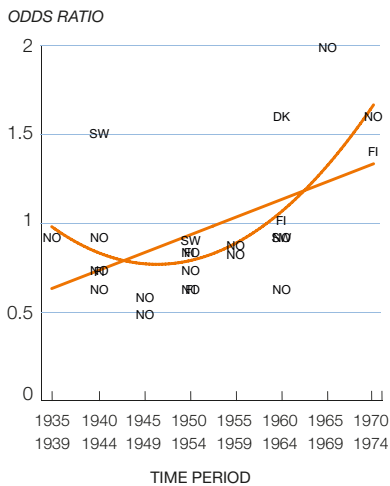
### Probability of having a second child, all countries, birth cohorts 1935-1974



Source: our elaboration.

GRAPH 3.5

### Probability of having a second child, Nordic (a) and other European Countries (b), birth cohorts 1935-1974



Source: our elaboration.

Graph 4 shows the association between education and the probability of having a second child. Here, too, the relationship is not clear. But again, when we separate the Nordic countries from the others, we note that the overall slightly positive association is due to two opposite relationships.

In particular, the fitted quadratic shape of Graph 5a (Nordic countries) reveals a shift from a negative education-fertility relation for the birth cohorts from the 1930s towards a positive correlation for those born in the 1950s and thereafter. In other European countries (Graph 5b) the fertility effect of education seems generally to be (slightly) negative.

### **3.3. National context and childbearing: a hierarchical model**

The association between women's education and fertility is shaped by the institutional framework. Labour market policies play an important role in this regard. Some labour market policies can exacerbate the so-called double burden of women; others can help reconcile family and work. We expect to find that the effects of such policies will vary across education levels.

In other words, the cross-country heterogeneity that we observed in the previous section concerning the relationship between education and fertility may be related to macro-level factors such as the availability of part-time contracts, the incidence of public sector employment, and the proliferation of temporary jobs. As we will explain below, public sector jobs typically provide greater security and flexibility for women as do part-time jobs. In contrast, the growth of temporary contracts could be perceived as an impediment to motherhood.

In the following section we will try to answer the following questions: does the availability of part time contracts or public sector employment influence fertility intentions positively? And how do such effects vary across levels of education?

Based on the second round of the European Social Survey, we conduct a multilevel analysis that takes into consideration both individual – and nation-level variables. We find that macro-level conditions do exert a positive influence on fertility. Specifically, in nations with abundant public

sector employment opportunities, easy access to part time work, and low levels of job insecurity, we find a stronger probability of higher-order births. And the effect of the availability of public employment seems especially clear for higher educated women.

### Temporary contracts

Previous studies have found that employment insecurity depresses fertility. Temporary contracts have hidden costs that can affect fertility adversely (for Spain see Bonet et.al, 2013 and Adsera, 2006; for Italy see Modena et.al, 2011). First, having a child under a temporary contract can signal a weak commitment to the employer, and this, in turn, may reduce a worker's chance of obtaining a permanent contract. Secondly, temporary contracts may not provide the degree of economic stability required when planning for motherhood (Baizan, 2005).

The diffusion of temporary contracts varies widely across countries. As shown in Table 2, in 2005, 37,4% of Spanish female employees aged 15-45 were on temporary contracts (with no significant differences across levels of education). In contrast, the corresponding level was only 3% in Ireland. These huge differences may have an impact on fertility behaviour, perhaps especially among higher educated women. The latter, having invested a great deal in their education, are more likely to face an acute work-family conflict if their labour market status is insecure.

### Part-time employment

Part-time employment can be a viable strategy for reconciling parenthood with career aspirations (Schmitt, 2012). The level of part-time employment varies across countries. Part-time jobs are very scarce in Mediterranean Countries, as well as in the Slovak Republics and Hungary (below 5%). In contrast, they are widespread in Scandinavia and Western Europe (see Table 2). In the Netherlands part-time employment represents close to 42% of female employment (considering women aged 15-45). In the latter group of countries, part time contracts are governed by generous reinstatement rights and extensive legal protection. Where part-time jobs are scarce, women often have to choose between non-employment or full time employment – an option that may not be compatible with childbearing.

In fact, where access to part-time employment is widespread we find that new mothers are more likely to remain in the labour market (Del Boca et.al, 2005).

### Public sector employment

Public sector employment generally offers superior conditions for reconciling motherhood and careers (Martin Garcia and Castro-Martin, 2013). Public employees are far better protected against unemployment, and they generally enjoy more flexible time schedules and fewer pressures when taking long parental leaves (Rønsen and Skrede, 2010). Additionally, there is generally less wage discrimination in the public sector (Cavalli, 2012).

Cross-national variations in public employment are large (see Table 2). The Nordic countries stand out, not only in terms of the size of the public sector but also in terms of its strong female employment bias (across all skill levels).

TABLE 3.2

### Public employment, part-time employment and temporary employment (in percentages), 2005

	INCIDENCE OF PUBLIC EMPLOYMENT (%)	INCIDENCE OF PART TIME EMPLOYMENT (%)	INCIDENCE OF TEMPORARY EMPLOYMENT (%)
AT Austria	13.7	12.1	6.5
BE Belgium	30.6	17.2	10.4
CH Switzerland	18.6	29.0	7.0
CZ Czech Rep	25.0	26.0	8.1
DE Germany	15.6	12.0	15.6
DK Denmark	49.1	17.3	12.0
EE Estonia	32.5	5.7	3.1
ES Spain	19.3	11.1	37.4
FI Finland	39.7	10.0	19.5
FR France	30.0	16.2	15.9
GB Great Brit	24.6	16.4	5.3
GR Greece	23.9	4.6	14.0
HU Hungary	36.3	2.5	8.8

	INCIDENCE OF PUBLIC EMPLOYMENT (%)	INCIDENCE OF PART TIME EMPLOYMENT (%)	INCIDENCE OF TEMPORARY EMPLOYMENT (%)
IE Ireland	21.9	14.5	3.0
IS Iceland	–	19.7	8.7
LU Luxembourg	13.6	10.2	5.9
NL Netherlands	24.4	41.6	14.2
NO Norway	37.7	26.2	11.7
PL Poland	37.7	7.7	30.7
PT Portugal	–	10.6	27.5
SE Sweden	48.0	17.1	18.2
SI Slovenia	39.0	7.5	22.8
SK Slovakia	27.9	1.7	5.0
TR Turkey	11.9	6.5	8.8
UA Ukraine	26.4	–	–

Sources: EU-LFS micro-data, ILO Laborstat, OECD.org, Eurostat.eu, Unece.org.

### 3.3.1. Hypotheses

Since part-time jobs and public sector employment help reduce work-family conflicts, their overall availability should have a positive influence on fertility. In contrast, since temporary contracts intensify work-family conflicts, their prevalence should have a negative effect on fertility.

Since higher educated women are generally more attached to the labour market, family-friendly policies may have a stronger positive impact within this educational group. For this reason we expect that if public sector jobs are abundant, the opportunity cost of parity progression will be lower especially for higher educated women.

Consequently, our main hypothesis is that

*– family-friendly labour market policies will positively influence the intention of higher order births.*

Moreover, we expect that

*– the impact of family-friendly labour market policies will be especially pronounced for higher educated women.*

### 3.3.2. Data, variables and methodology

Our empirical analyses are based on the European Social Survey Round 2, 2004-2005. The ESS is a biannual social survey that measures the values and behaviour of European citizens and how they change over time. The questionnaire for each round contains a core module, which is identical for each round, plus rotating modules. The core module monitors change and continuity on socio-economic, political and demographic variables. The Round 2 ESS is useful for our purposes since it contains information on family, work and wellbeing, including a specific question about family-work balance as well as general questions on family and fertility choices.

We select all the countries included in the ESS. We restrict our analyses to the sub-sample of women aged 18-41 with at least one child but with less than three children, and of men whose partner fits these characteristics (n=6,448).

To test our hypotheses we estimate a multilevel model. The ESS database has a hierarchical, multi-level structure with two levels, where level 1 units are individuals nested within level-2 units, which are the countries. We use multilevel analysis techniques that are well suited for a hierarchical data structure; moreover, they have many advantages compared to standard regression analysis. In particular, they allow for cross-country heterogeneity in the likelihood of the intention of having another child and for the investigation of how this variation can be explained by contextual factors.

The dependent variable is the respondent's intention to have another child within the next three years (versus not intending to have another child). The exact question in the questionnaire is the following: «Do you plan to have a child within the next three years?» Respondents could choose between four answers, «definitely yes», «probably yes», «probably not», «definitely not», or they can refuse to answer, or answer that they do not know. We create two categories collapsing the first two answers and the second two.<sup>(8)</sup> To clarify, our dependent variable assumes the value of one

(8) No respondent refused to answer or answered that he/she did not know in the sample that we selected. Missing values represent 8.4% of our sample.

if couples that have already had one child have the intention to have a second child or if couples with two children have the intention to have a third child. Our dependent variable assumes the value of zero if couples with one child or couples with two children do not have the intention to have another child.<sup>(9)</sup>

In the first set of models (1 and 2) we include women's socio-demographic characteristics: age, age squared, having one or two children, being religious, age of the youngest child, gender of the respondent, educational enrolment and the years of education as explanatory variables. In Models 3 and 4 we include level 2 measures: labour market regulation, the female share of fixed term contracts, the female share of public sector employment, and the female share of part time employment. These variables are key to identifying the extent to which labour market regulation may help reduce (or increase) the potential opportunity cost of a new birth. We measured these variables using other sources (EU-LFS micro-data, as well as labour statistics from the ILO, the OECD, Eurostat, and Unece) and included only women aged 15-45. Data on female public employment are not available for all countries. We assign values on total share of public employment for these cases. Iceland, Portugal and Ukraine are excluded from our analysis because of lack of data on one or more labour market indicators.

We estimate a two-level regression model, because the individuals are nested within countries: this permits us to control (partly) for the correlation of the responses of individuals that belong to the same country. As the outcome is binary, we use multi-level logistic regression.

### 3.3.3. Results

The results of the multilevel model estimating fertility intentions are presented in Figure 6. In this caterpillar plot we show the educational effect across countries together with a 95% confidence interval. We can see that the cases in the top right of the figure are the Nordic countries (with the exception of Denmark) along with France and Ireland. For these

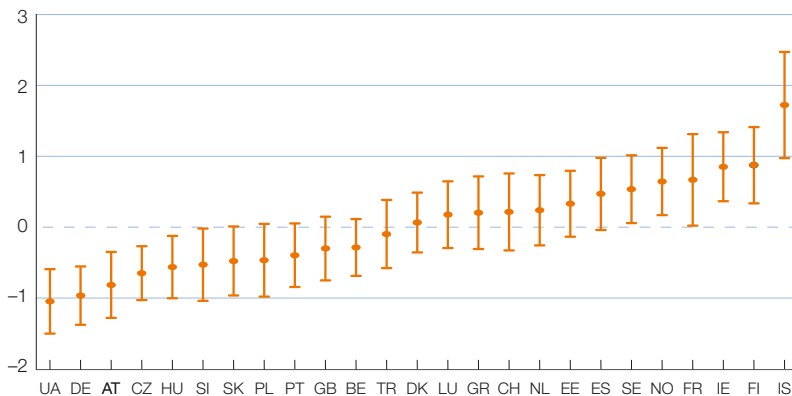
(9) As in Vitali et al (2009) and Mills et al (2008) we run a single analysis for couples that have one child or two children.



cases, the confidence interval does not overlap the line at zero. This implies a higher probability of planning a new birth over the next three years. As expected, birth intentions are lower in Germany and Austria (and also in Ukraine and the Czech Republic). There is no clear pattern for the Mediterranean countries.

GRAPH 3.6

**The effect of education varies by country**



Source: our elaboration on ESS data.

These results reflect ‘nation effects’ and do not take into consideration the individual-level explanatory variables. To examine how the national context influences different groups of women, we first add the following individual level variables to our model: age of the woman, age squared, number of children (one or two), religiosity, age of the youngest child, gender of the respondent to the question about fertility intention and educational level. The results, in the form of odds ratios, are presented in Model 1 of Table 2.

As is so often found, we see that being religious is positively associated with fertility intentions. This is also the case for the linear form of women’s age. But age squared, already having two children, and the age of the

youngest child all lower the relative probability of planning a higher order birth.

Model 2 in Table 2 adds the mother's years of education. This continuous variable is centered around its mean. We note that the effect is positive and significant, meaning that higher educated women are more likely to want another child.

Model 3 adds the three employment measures defined at the country-level – the share of female temporary employment aged 15-45, the share of female public employment aged 15-45, and the share of female part-timers aged 15-45. All these variables are centred to ease the interpretation of their coefficients.

As we can see, the share of part-time employment is positively and significantly related to fertility intentions; the other two labour market indicators follow the hypothesized causal direction, but their coefficients are not significant; the temporary worker variable assumes a negative relationship while the public employment one shows a positive impact.

Model 4 includes the interaction term of years of education and the labour market variables. Here we find that a (relatively) high incidence of public employment increases fertility intentions significantly among higher educated women. Turning to the interaction between the share of part-time employment and years of education, we find that the diffusion of part-time contracts influences the fertility intentions of higher educated women positively. Surprisingly, the interaction of the incidence of temporary employment with women's education is not significant at all.

In conclusion, the conditions governing labour markets do influence women's childbearing intentions, both in general and among higher educated women specifically. Countries with more family-friendly labour market institutions also seem to be likely to manifest higher fertility rates.

TABLE 3.3

**Results of the Multilevel analysis**

	MOD 1	MOD 2	MOD 3	MOD 4
Age	2.175*** (0.159)	2.064*** (0.152)	1.999*** (0.154)	1.996*** (0.154)
Age squared	0.986*** (0.001)	0.987*** (0.001)	0.987*** (0.001)	0.987*** (0.001)
Two children (vs one)	0.149*** (0.011)	0.155*** (0.012)	0.152*** (0.012)	0.152*** (0.011)
Being religious	1.264*** (0.102)	1.281*** (0.103)	1.280*** (0.108)	1.265*** (0.107)
Age last child	0.883*** (0.008)	0.896*** (0.009)	0.891*** (0.008)	0.893*** (0.008)
Gender of the respondent on fertility intentions	0.842 (0.059)**	0.828 (0.059)**	0.846 (0.063)**	0.844 (0.063)**
In education	1.028 (0.183)	0.959 (0.172)	0.857 (0.161)	0.850 (0.160)
Years of education (centred)		1.080*** (0.013)	1.080*** (0.014)	1.005 (0.038)
Share of public employment (centred)			1.788 (1.367)	0.058 (4.102)
Share of temporary workers (centred)			0.672 (0.613)	5.791 (10.88)
Share of part-time (centred)			5.297** (4.283)	0.207 (0.412)
Interaction Share public empl * Years of edu				1.292 (0.156)**
Interaction Share of temp workers * Years of edu				0.853 (0.107)
Interaction Share of part-time * Years of edu				1.281* (0.180)
Intercept	0.000 (0.000)	0.001 (0.001)	0.002 (0.002)	0.001 (0.001)
Variance component Country	0.470 (0.082)	0.437 (0.072)	0.308 (0.061)	0.308 (0.061)
N	6448	6339	5785	5785
Country	25	25	22	22

Source: our elaboration, ESS data, EU-LFS micro-data, ILO Laborstat, OECD.org, Eurostat.eu, Unece.org.

### 3.4. Conclusions

The negative association between women's educational attainment and fertility has essentially always been an uncontested assumption in demography. Recent evidence of a turn-around in Scandinavia and elsewhere has therefore come as a major surprise. It is, in fact, somewhat of a puzzle. The reasons why we should expect a negative correlation are evident: higher educated women will generally enter into motherhood later and this means a squeeze in terms of their fertile years. Granted, a fertility catch-up is possible. But highly educated women also face much steeper opportunity costs of motherhood, and this should especially be the case for higher parities.

In this chapter we have taken a second look at this phenomenon. As a first step, we conducted a meta-analysis based on the existing econometric evidence. Here we discovered that the Mediterranean and Continental European countries continue to exhibit the classic pattern: higher educated women still have a lower likelihood of second-birth parity progression and higher probabilities of being childless comparing with less educated women. But our analyses also seem to confirm that a turn-around in the educational gradient has (partly) occurred in the Nordic countries. There, higher educated women appear more likely to have a second child and less likely to remain childless compared to less educated women. Interestingly, these are the very same countries (together with France) where highly educated women not only have higher parity progression rates but also where total fertility tends to be relatively high overall.

This coincidence suggests that the reproductive choices of highly educated women may be crucial for a country's overall fertility level. In fact, the phenomenal expansion in female education in recent decades implies that women with university degrees represent approximately a third of the entire female population within younger cohorts.

To probe more deeply into this phenomenon, we explored key socio-economic mechanisms related to the link between education and fertility, especially focusing on three aspects of labor markets that should exert a major influence on women's ability to reconcile motherhood with careers:

access to part-time employment, the incidence of temporary contracts, and the availability of public sector jobs.

We found that a high incidence of part time employment is positively and significantly associated with the intention of having higher order births.

The availability of public sector jobs seems to be a key factor that pushes higher educated women towards motherhood. In countries where there is a large public sector, for example, in Scandinavian countries *par excellence*, higher educated women are more likely to want another child. The public sector tends to have shorter workdays, more flexible time schedules, and is more tolerant of long parental leaves than is the private sector in general, and sectors with strong male competition in particular (Rønsen and Skrede, 2010).

We are conscious that this study has important limitations. First of all, we have not considered the role of the male partner's education. It is well-established that higher educated men are far more likely to participate actively in child care and housework and this should also promote reconciliation. This is similarly the case for social policies and day care in particular – a theme that will be explored in Chapter 7.

Another limitation is that we have not explored fertility behaviour among low educated women. There are, in fact, indications that less educated women are reducing their fertility. Evidence from the U.S. points to a dramatic decline of «marriageable» less-educated men, especially within the Black community (Wilson, 1987). Perhaps European countries are facing a similar trend considering the worsening economic status of less skilled males.

Regardless, our study does underscore the relevance of labour market reform for any significant improvement in fertility.

## IV. Is fertility influenced by couple instability?

---

Mathew Creighton, Gøsta Esping-Andersen, Roberta Rutigliano and Maike van Damme

### 4.1. Introduction

As we saw in Chapter 1, research on family behavioral change has been dominated by two theoretical frameworks, namely Gary Becker's neo-classical economic approach and the 2nd Demographic Transition thesis. For very different reasons, both envisage that gender convergence in terms of employment and life-long careers will promote greater couple instability, weaker commitments to partnerships, and a drop in fertility.

The evidence has appeared to support these arguments quite well, but only up to a certain point. A number of countries have, over the past decades, experienced a radical u-turn in terms of marital stability and fertility. And most interestingly, these are the very same countries that boast the greatest degree of gender convergence in terms of earnings and employment. This turn-about suggests that we need to re-theorize longer-run trends.

In any case, one thing is abundantly clear, namely that union formation and fertility behavior are intimately connected. What is less clear is exactly how they are connected. Does the rise in divorce propensities produce fewer births? And is lower fertility also a consequence of new partnership practices, such as cohabitation?

These are questions that have inspired a huge amount of empirical research and, yet, we do not have any clear and unequivocal conclusions. The principal problem lies in how to establish clear causal connections. As we shall explain below, we would logically expect that stable couples would be more likely to have children. But the inverse is equally possible:

troubled partnerships may see parenthood as a way to shore up their relationship.

In a very similar vein, new partnership arrangements, such as cohabitation, may or may not influence fertility, depending on what they actually represent. Is cohabitation a genuine equivalent to marriage – or an arrangement that reflects the partners’ hesitation to commit? If it conforms to marriage, we should not expect any significant differences in fertility among married and cohabiting couples. If it does not, we would not expect cohabiting couples to have children – at least not until they decide to transit into formal marriage.

As in most chapters in this book, we give special attention to Spain, but within a broader comparison of countries. Spain has exhibited over the past decades a rather unique blend of family dynamics. In a broader European context, it has experienced one of the most dramatic declines in fertility since the 1970s. And since divorce was legalized in 1981, it has moved from the bottom to the top in terms of divorce rates. Moreover, Spain no longer represents the conventional marriage-centric triad in which one is either married, remarried or single. Instead, cohabitation has come to offer a distinct and relatively widespread partnership option. Although far from the dominant union-type, as in some Northern European countries, the increasing prevalence of cohabitation does suggest an increasing diversity in the acceptable relationship options upon which one could build a family.

## **4.2. Theories of Fertility and Relationship Stability**

Theories of the link between fertility and relationship stability can be broadly divided into two perspectives. One perspective considers relationship (in)stability to be a determining factor in fertility behavior. In other words, stable relationships influence the decision to have a child. Note, however, that the effect may be positive or negative, all depending on whether the intention is to stabilize or end the relationship. The second perspective argues a reverse kind of causality: deciding to have children affects subsequent relationship stability. This implies that greater stability

emerges from the birth of a child, whether or not the decision to reproduce is independent of the partners' views of their relationship.

There is empirical support for both views. Euro-barometer data seem to support the first perspective (i.e., stability induces fertility), since they consistently show that relationship stability is an important factor in the decision to reproduce (European Commission 1997; Malpas and Lambert 1993; Testa 2006). Similar findings derive from a study of partnership quality and intentions to have a 1st child in Germany (Berninger et al. 2011). Earlier studies of the US find that marital discord suppresses reproduction among couples (Thornton 1978). And stable unions predict higher overall fertility in France (Thomson et al. 2012) and greater childbearing rates in the Netherlands (Rijken and Thomson 2011). Conversely, a greater risk of relationship disruption decreases the likelihood of birth in the US (Lillard and Waite 1993; Myers 1997), Italy and Spain (Coppola and Cesare 2008).

A rational-choice theoretical counter-thesis emerged in the early 1990s. Here the argument was that less couple stability could lead to greater fertility. The key argument is that childbearing is a strategy to reduce uncertainty in the relationship (Friedman et al. 1994). Although the logic is compelling in that it explains higher fertility among couples in more trying social and economic circumstances, its original articulation was purely theoretical. The few empirical tests that exist do not offer much empirical support for the thesis (Myers 1997).

The second perspective (i.e., fertility affects stability) is in many ways similar to the thesis that couples have children in order to reduce uncertainty. The argument is that childbearing itself, given that it is irreversible and shared, strengthens relationship bonds. As Lillard and Waite (1993) argue, having a child signals a long-term commitment (i.e., greater implied stability) and increases marital satisfaction, which also bodes well for stability. Economic calculations by members of any given union are key to outcomes: parents will face higher costs in ending their relationship relative to childless couples, whether they are married or cohabiting. There is some empirical support for the argument. Relationship stability is positively linked to the birth of a first child or early higher-parity births in the US (Waite and Lillard 1991). Research based on Italy



and Spain also finds that childbearing reduces the overall risk of union dissolution (Coppola and Cesare 2008).

All told, we lack any clear consensus as to which of the rival causal arguments best represents reality. Empirical studies offer support for both perspectives (i.e., stability- > fertility and fertility -> stability). For instance, Coppola and Cesare's (2008) study of Italy and Spain finds that a greater risk of relationship disruption decreases fertility *and* that fertility leads to greater relationship stability.

The implications of such ambiguity are profound. If the first perspective is right, namely that a change in the stability of unions precedes a change in fertility, the upshot is that efforts to influence fertility trends should focus on the quality of relationships. This line of reasoning is echoed in Kneip and Bauer's (2007) conclusion that «changing divorce regimes have contributed to a decline of fertility in Europe». However, if the second perspective is right (fertility affects stability), the opposite is true. Observed trends in union formation (i.e., the emergence of cohabitation) and relationship stability are, in part, the result of changes in fertility behavior. From this perspective, trying to understand fertility through the lens of trends in relationship stability would be misguided. Instead, policy would be better served to look at other factors, such as reproductive norms, rather than attribute a causal role to emergent union-types (such as cohabitation) or to rising divorce rates.

### 4.3. General Trends in Divorce and Fertility: Putting Spain in Context

In recent decades Spain has experienced distinct trends in terms of divorce and fertility. The Crude Divorce Rate (CDR) shows a steady upward trend.<sup>(1)</sup> In 1990, Spain and Italy were largely indistinguishable with internationally low CDRs – reflecting a distinct Mediterranean pattern. By 2010, Spain's CDR was markedly higher than Italy's,<sup>(2)</sup> due primarily to a rapid rise after 2000, and Spain now finds itself nestled between Austria and Germany. As far as divorce is concerned, Spain has

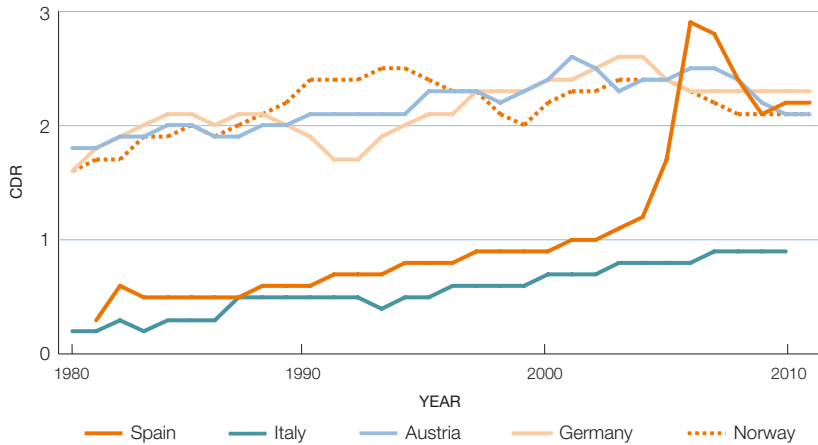
(1) The CDR measures the number of divorces per 1000 married couples.

(2) The huge gap between the two countries may be due to differences in divorce laws. The 2005 Spanish reform abolished compulsory separation prior to formal divorce.

clearly departed from the Southern European pattern and appears to converge with Northern Europe. See Graph 4.1.

GRAPH 4.1

### General Trends in Crude Divorce Rate (CDR) – 1990 to 2010



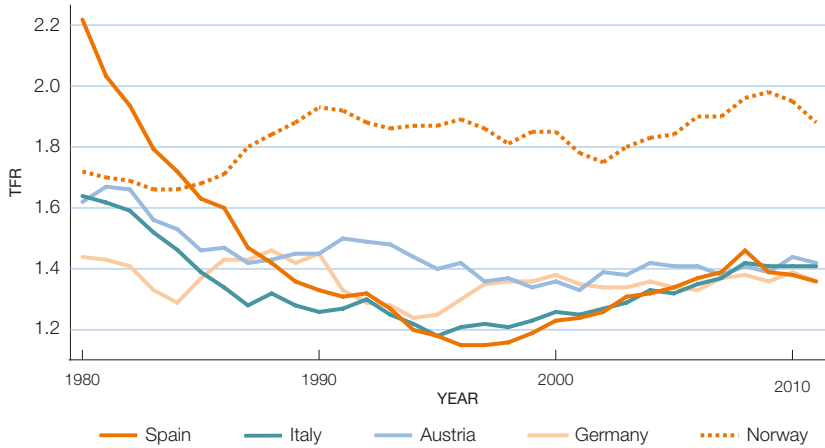
Source: Eurostat.

As shown in previous chapters, Spain experienced one of the most dramatic and rapid declines in fertility, which culminated in the late 1990s. We do, however, register a significant recovery during the 2000s. In contrast to divorce, here we find quite similar profiles for Spain and Italy: both reaching internationally very low TFRs (~1.2) and «recovering» to a somewhat higher TFR of approximately 1.4 by 2010. See Graph 4.2.

Viewed together, these patterns raise more questions than they answer, particularly in the case of Spain. If Spain so clearly diverges from the pattern of her Mediterranean neighbor in terms of divorce, why has a similar divergence not occurred in fertility? Another way to pose the question is, why does Spain's divorce rate look so similar to her northern neighbors and her fertility rate so different? These broad questions are behind the three specific goals of this chapter.

GRAPH 4.2

### General Trends in Total Fertility Rate (TFR) – 1990 to 2010



Source: World Bank.

#### 4.4. Research Goals

In order to trace the connection between union stability and fertility, our first step is to explore recent trends in relationship stability in Spain, Germany, Norway, Austria and Italy. Here we distinguish between married and cohabiting couples. We ask the following specific questions: Are cohabiting couples at a greater risk of separation than married couples? How do the Spanish patterns differ from, respectively Scandinavia (Norway), Continental Europe (Germany and Austria), and Southern Europe (Italy)?

The second step is to assess fertility variations among married and cohabiting partners, based on the same nation comparison. The analysis separately considers the birth of a first and second child to address the following questions: are cohabiting couples less likely to experience a first or second birth than are married couples? And how does the Spanish pattern compare to the rest of Europe?

The third and final step is to analyze the links between divorce propensities and fertility. Instead of considering the two as mutually independent, our aim is to consider them jointly. The question is straightforward: Simply put, are couples at a greater risk of separation more or less likely to reproduce?

## Data

For these analyses we use two different datasets: for Germany, Italy, Austria, and Norway we use the *Generations and Gender Survey (GGS)* 2007/8; for Spain, we analyze the *Fertility and Family Survey (FFS)* from 2006. The GGS survey focuses on fertility, partnership, the transition to adulthood, and economic activity. It contains retrospective information that allows intergenerational and longitudinal analysis. Although nineteen countries are included in the GGS, we have decided to limit our comparisons to Western European countries only. Some additional countries had to be excluded due to insufficient information on fertility and partnership histories. The FFS is a survey with retrospective information concentrating on fertility and family data. It is the best source of data on recent trends in fertility for Spain.

For reasons of comparability and parsimony, we selected only women who formed a union after age 21 and before age 46 (the end of women's reproductive years). We do not select unions formed at young ages because these may be very unstable, thereby biasing our results. We limit the analyses to the first relationship and exclude re-partnered couples (which also have shown to be less stable). All couples who transit from cohabitation to marriage (with the same partner) are considered as married.<sup>(3)</sup> We restrict the period of analysis to 1980 through 2007/08 (2006 for Spain). The reasons behind this relatively short time-span are that it captures the recent fertility-cum-recovery and the period during which cohabitation has become prevalent.

(3) Additional analyses, considering the premarital cohabiters a different group, have been done. Nevertheless, their survival curves as well as the log-rank test did not show any significant differences compared to married couples, so we joined them with married couples.

## Method

We conduct two types of analyses to investigate the link between relationship stability and fertility. Firstly, using Kaplan-Meier survival curves we explore cross-national differences in partnership stability, comparing cohabiting and marital unions, and subsequently we examine differences in their fertility behavior (transitions to first and second parity). Secondly, we analyze the relationship between partnership instability and fertility with multivariate, discrete-time event history models. In these models we estimate the relationship between separations (our measure of partnership instability) and having a first and a second child. We focus on the time of conception rather than on the actual birth of a child. One important reason for this is that some couples may decide to have a child before they actually live together. Likewise, some may end up separating in the 9-month period between conception and birth. Put differently, our focus is on the decision to bear a child rather than the actual birth.

### 4.5. Differences in stability among cohabiting and married couples

Appendix Table A1 presents basic descriptive statistics for our study. Among Spanish women over the 1980-2006 period, 17 percent were cohabiting at some point, notably less than the 43 percent in Austria and Norway. Cohabitation, despite its recent emergence, has become surprisingly widespread in Spain –accounting now for more than 15 percent of all unions. For an overview, see Graph 4.3.

When interpreting childbearing among cohabiting couples we must keep in mind national differences in the meaning of, and selection into, cohabitation. In Norway it has become *de facto* institutionalized and is practically indistinguishable from marriage. This also implies that there is no evident social selection that determines who cohabits. Kiernan (2002) argues that cohabitation in the Mediterranean countries remains at an early stage and, as such, participation is likely to be limited to a narrow avant-garde. In this early stage, according to Kiernan, cohabiting couples are unlikely to have children. As we shall see below, Kiernan's argument appears to not be valid for Spain where, first, cohabitation seems quite

stable and, secondly, is associated with quite high fertility, at least in terms of first births. Indeed, it would appear that Spanish co-habitation is converging with marriage.

With regard to parenthood, we observe somewhat more conceptions in Spain than in other countries: 60 percent of couples had at least one child, and 44 percent at least two. The average age of the Spanish sample size is 33 and the average duration of a union is 7.8 years. Separation occurred in 7 percent of the cases, which is lower than in Germany, Austria, or Norway (where the separation rate was 18, 26, and 30 percent respectively).

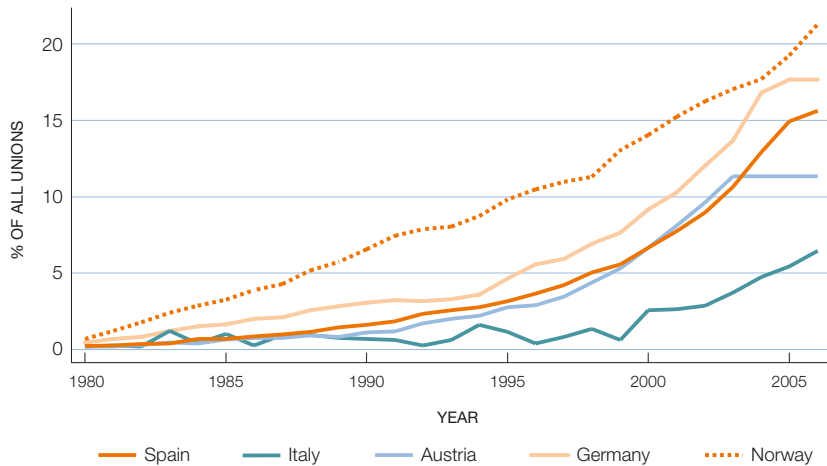
We turn first to differences in union instability for married and cohabiting couples, based on Kaplan-Meier (KM) survival curve estimations.<sup>(4)</sup> We follow couples for a maximum of 15 years (measured in months). We stop observing women at age 45 since first or second births are almost non-existent after this age.

The graphs in Graph 4.4 show that marriage is clearly more stable than cohabitation in all countries, although in Italy and Spain the differences between marriage and cohabitation are less accentuated. For cohabiting couples there is some convergence in Germany, Austria and Norway: after 15 years (180 months), almost 65% of unions have ended. In Norway, cohabitation is very widespread but also quite unstable.

(4) Since for some countries, the analyzed period is characterized by economic and social changes, we preliminarily split it into two: from 1980 to 1990 and after 1990. We ran a model for each period and a log rank test to assess whether there are significant differences in the hazard within each country and for each relationship status (cohabiting versus married). For married couples, we found that for all countries there are no significant differences between the two periods. The only exception is Italy, which shows a faster decline of the survival curve after 1990. However, Italy is a peculiar case in Europe as far as divorce is concerned. One possible explanation for the value of the log rank of Italy, is the reform of the divorce law in 1987, which reduced the procedures for divorce from five to three years. This may have caused a sudden increase in divorces, illustrated by a faster decline of the KM curve immediately after 1990. For cohabitating couples, the trend in divorce does not differ between the two periods in Austria, Norway and Spain, whereas it does in Germany and Italy (the log rank test values are significant). If we ignore Italy, where the rate of cohabitation is very low to begin with, we find a big difference between 1980 and 1990 for German cohabitating couples (log rank value 24.16\*\*\*). It is reasonable to think that this is a consequence of German reunification. In 1990 the Western and Eastern cultures started to mix and this might have resulted in a spillover effect in terms of the diffusion of cohabitation habits among couples. Despite this discontinuity in Germany, we decided to restrict the analysis and examine the two periods together for all the countries.

GRAPH 4.3

**Comparative trends in Cohabitation (as percent of all unions)**



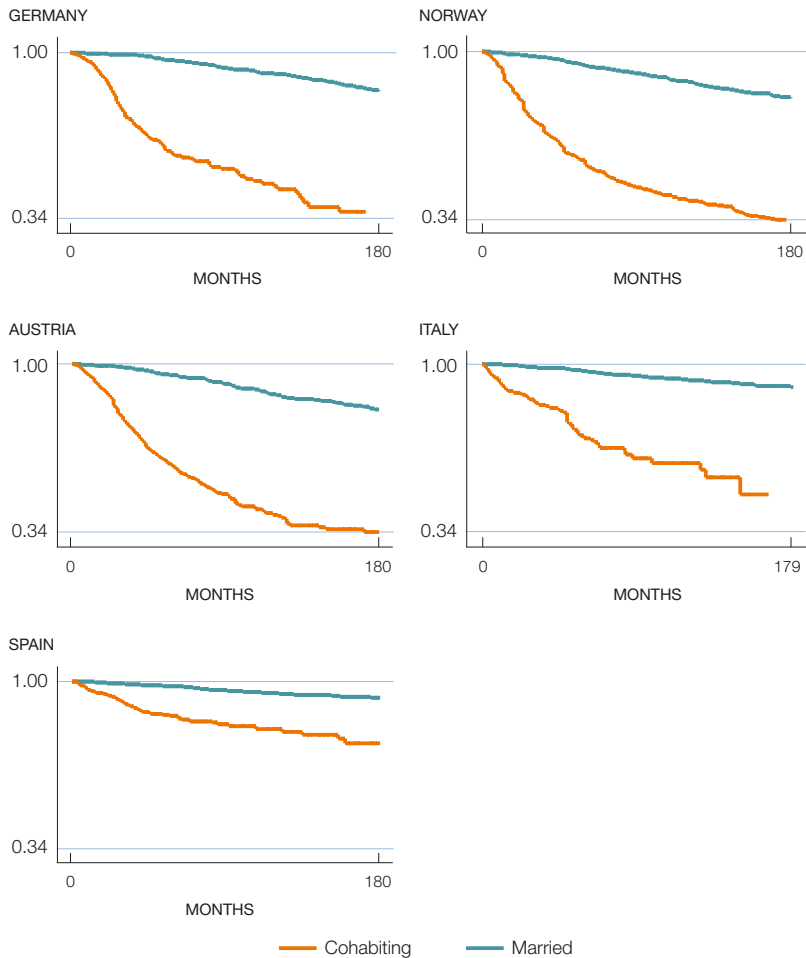
For this first group of countries there is a constant and continuous decline that starts immediately before the third year of the relationship. In Italy and Spain the path is more stable; after fifteen years «only» about 24% (Spain) and 50% (Italy) of cohabiting couples separated. Further, taking into account the attrition in the last part of the curve, we observe even lower separation rates (after 100 months, 40% of Italian and 18% of Spanish were separated). For Italian couples the risk is higher between the 2<sup>nd</sup> and 3<sup>rd</sup> year and, once again, around the 5<sup>th</sup> year. The survival curve for Spain is gradual up to the 10<sup>th</sup> year. Surprisingly, Spain stands out in terms of much greater stability among cohabiting couples. A Log rank test confirms this: Italy and Spain are significantly different (21.6\*\*\*).

In comparison, marriages are clearly far more stable. Here we find two distinct nation-clusters. The first includes Germany, Norway, and Austria, where the divorce rate hovers around 15-18%. In contrast, we observe much lower rates in Spain and Italy (8-9%). See Graph 4.4.<sup>(5)</sup>

(5) Log rank tests show that for cohabitation Spain and Italy differ systematically from the other countries. Austria is different from Italy and Spain, but converges with Germany and Norway. Finally, Austria and Norway do not show a significant difference in their divorce risks. For married couples, we do not find any substantial country differences. To conclude, marriage is clearly more stable than cohabitation, except in Spain where both types of partnership appear quite stable. Results from the Log rank tests are found in Appendix Table A2.

GRAPH 4.4

## Kaplan Mayer Survival Curves for couples



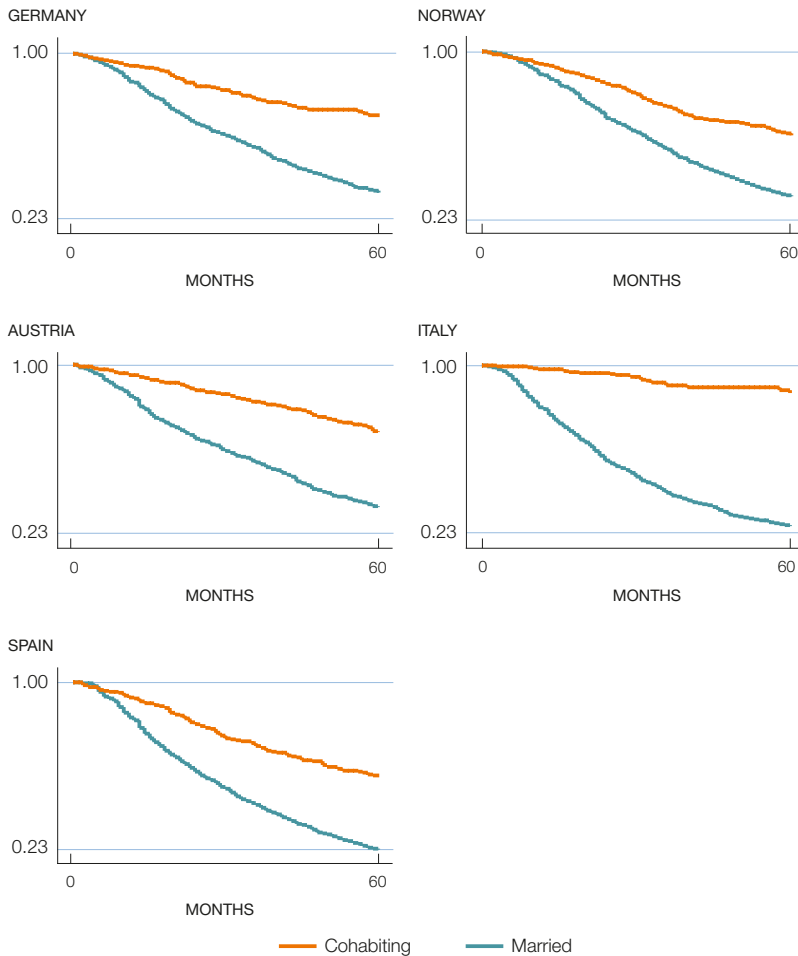
### 4.6. First births

We follow couples from one month up until 5 years of partnership. We also include people who started living together after they learned about the pregnancy. In Graph 4.4 we focus on the probability of a first birth.



GRAPH 4.5

### Transitions to the first child. Kaplan Mayer Survival Curves



For cohabiting couples, Spain and Norway follow a very similar path in terms of first birth. At the end of the fifth year almost 40% of women have made the transition to motherhood in both countries. Germany and Austria also appear rather similar: by the end of the 60-month period about 30% of women have become mothers in both countries. In Italy, cohabiting women have exceptionally low birth rates: 87% of women

remain childless after five years of partnering. A common characteristic in all countries is the evident drop after 20 months of partnering. Because our 'clock' starts 8 months before any birth, this means that a large number of couples conceive about one year after cohabitation began. Here again we observe that Spain deviates sharply from its Mediterranean neighbor, converging instead with Norway.

Turning to married couples, we immediately note substantially higher birth probabilities across all countries. Italy and Spain display comparatively higher birth rates among married couples: at the end of the fifth year almost 77% of women have become mothers. The big spurt in fertility occurs around the second year of partnership. Germany, Norway, and Austria exhibit similar dynamics. In these countries about 65% of married women have given birth within the 5-year period, with the highest level of fertility occurring around the first year.<sup>(6)</sup>

#### 4.7. Second births

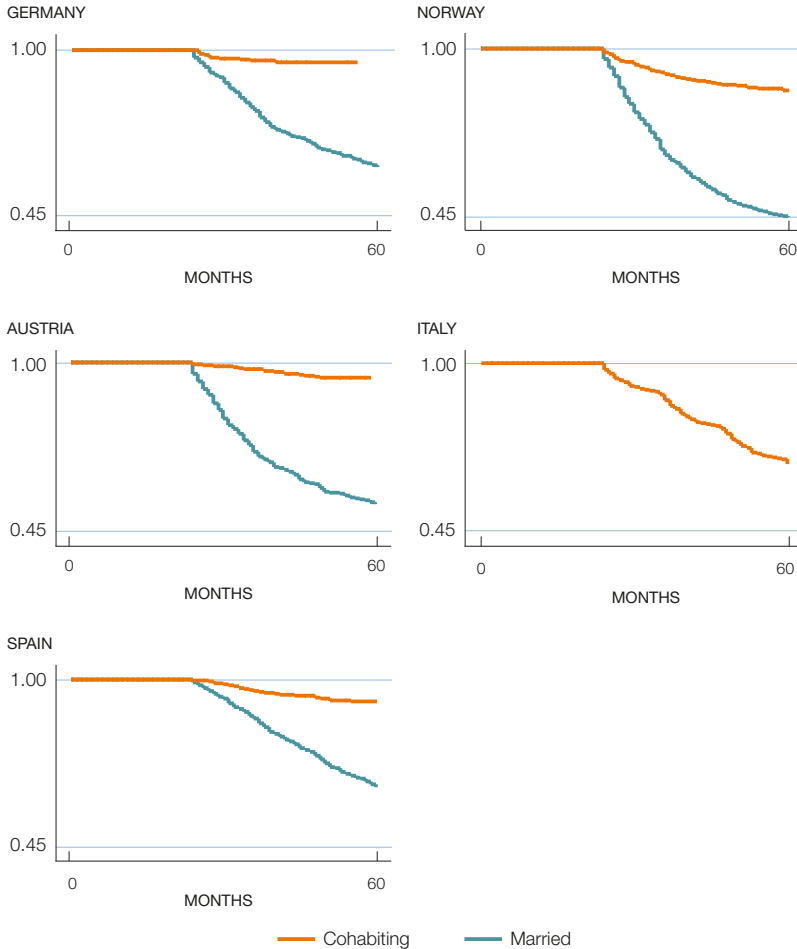
Our analysis of second births implies a change in our calendar. We now examine couples from 24 months after the first conception and follow them over 5 years. As is standard practice in research, we impose an infertile period of 24 months. The event of interest is whether a second child is born. See Graph 4.6.

A very different pattern emerges when we examine second births. Let us once again begin with cohabiting couples. The first thing we notice is that Norwegians are far more likely (16%) to have a second child than couples in any of the other countries. The graphs suggest that the transition to a second child occurs at a fairly constant rate. For the remaining countries (except Italy) the pattern is pretty much the same. In this group, very few (about 4%) cohabiting women have a second child.

(6) Once again, to ascertain whether the differences we find are significant we conduct log rank tests. For cohabiting couples we observe significant country differences. Germany is similar to Austria, and Spain to Norway; Log Rank = 10.22;  $p=0.22$ . For married couples, Italy and Spain emerge as significantly different from the other countries. Spain looked very «Norwegian» in terms of cohabiting couples, but clusters with Italy for married unions.

GRAPH 4.6

### Transitions to a Second Child. Kaplan Mayer Survival Curves



The probability of a second birth is evidently much greater among married couples. Here, again, Norway stands out with far higher fertility rates: about 55% of women have a second child within five years of marriage. Austria and Germany occupy a middle position: 46% and 49%, respectively, of women in these countries have a second child within five years of marriage. Spain and Italy are now very similar, both representing very low

fertility, with only about one-third of married women progressing to a second child.<sup>(7)</sup>

#### 4.8. The risk of divorce and the probability of having children

In order to identify the degree of partnership stability we use a statistical technique that predicts the divorce risk of couples. We estimate a discrete-time event history model in which we predict the risk of separation or divorce on the basis of a series of covariates that have proven to predict this risk in earlier studies. We selected the covariates based on overview studies, one focusing on the 1980s (White, 1999) and another on the 1990s and 2000s (Lyngstad and Jalovaara, 2010). We standardized the predicted divorce risk measure (for each country) and used this to construct a predictor in the models estimating the birth probabilities. For reasons of identification, it is important to include some covariates in the separation model that do not predict childbirth. These are: the experience of a parental divorce before the age of 18, and the (time-varying) divorce rate in the country (see Appendix, Table A3). Other important variables, such as education, employment, social class, religiosity, and age homogamy could not be included because we do not have such information for the spouses.

##### Conception of the first child

We begin by estimating the likelihood of having a first child. See Table 4.1. In Table 4.1 we see that union instability has an overall negative influence on births; however, the effect is only significant in Spain. An increase of one standard deviation on the measure of separation risk reduces the odds of having a first child by roughly 20 percent. For Spain we illustrate the age-specific relationship between the risk of separation and the birth of a first child. See Graph 4.7 (left panel). We follow women from age 22 up to 45 in terms of the probability that they will conceive a child. The yearly likelihood varies between 0.008 and 0.016. Women who face lower divorce

(7) For cohabiting couples there are significant country differences. Spain, which was similar to Norway for first births, is now strongly deviant (the log rank = 19.66\*\*\*). And, yet, this does not mean that Spain conforms to a 'Mediterranean logic'. Surprisingly, Spain is now quite similar to Germany and Austria. For married couples we also find that the countries differ significantly from each other.

risks are systematically more likely to give birth to a child at any given age than are women in more at-risk partnerships. We note also that the probability decreases proportionally as women age.

TABLE 4.1

**The probability of a first birth: Discrete-time event history analysis**

	SPAIN	ITALY	GERMANY	AUSTRIA	NORWAY
Predicted divorce risk	-0.211***	-0.061	-0.017	-0.050	-0.024
Cohabiting	-0.470***		-0.813***	-0.805***	-0.817***
Union duration	-0.008***	-0.011***	-0.007***	-0.006***	-0.005***
Age (time-varying)	-0.017*	-0.009	-0.010	-0.003	-0.024**
<i>Chi</i> <sup>2</sup> (df)	310.710*** (13)	192.184*** (12)	225.195*** (14)	316.281*** (14)	276.917*** (14)
<i>Pseudo-R</i> <sup>2</sup>	0.023	0.021	0.030	0.047	0.023
<i>N of women-months</i> <sup>a</sup>	81,542	53,714	55,039	55,906	82,209
<i>N of women</i> <sup>b</sup>	2,082	1,695	1,095	1,150	1,776
<i>N of events</i> <sup>b</sup>	1,347	988	697	616	1,133

The models control for women's employment status at the time of the interview, their education, whether they are native born, the degree of urbanization, and their number of siblings.

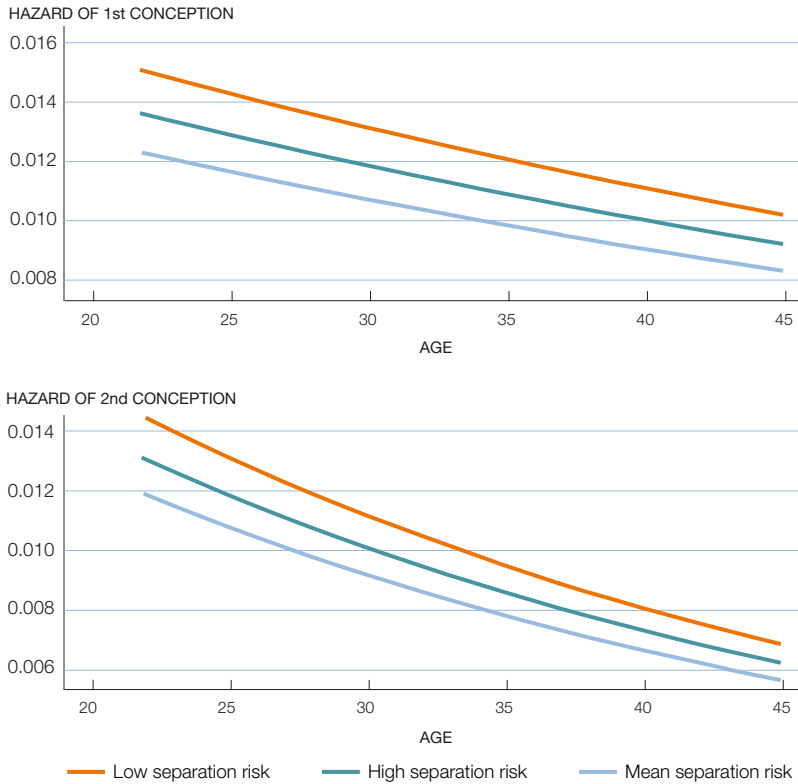
<sup>a</sup> Differences in sample sizes with Appendix Table A.1 are due to missing values.

Here again we see that cohabiting women are less likely to give birth in all five countries. In Spain, for instance, the odds of having a first child are 37 percent lower for cohabiting women relative to married women. The association is even more pronounced in the four other countries.

Our analyses also take into account the duration of the union and the age of women. In line with other studies we also find that the likelihood of a birth declines with the duration of the partnership. To illustrate, a one year increase in the relationship is associated with a 9 percent decrease in the odds of having a first child. And not surprisingly, we also find that older women are less likely to give birth to a first child than are younger women; a one-year increase in age is associated with a 2 percent decline in conceptions. Thus, a 45 year old woman is 32 percent less likely to give birth than a 22 year old woman.

GRAPH 4.7

## Age-specific probabilities of first and second conceptions in Spain



Hazard of first and second conception for women (aged 22-45) by separation risk (low= -0.50 standard deviation; mean; high=0.50 standard deviation), based on the models in Table 4.1 and 4.2, FFS2006, Spain, 1980-2009. Estimation for fulltime working women, middle-level education, native, living in the capital city, whose parents were not divorced at age 18.

### Conception of the second child

Turning to second births in Table 4.2, we observe that the effects of divorce risk on having a second child are now weaker. In Spain, women are 18 percent less likely to have a second child if they score one standard deviation higher on the separation risk scale. The effect is not as large as it was for first conceptions. This also emerges from Graph 4.7 (right panel): the lines that represent women with different divorce risks lie much closer together than was the case for first births.

TABLE 4.2

**Discrete-time event history models predicting second birth**

	SPAIN	ITALY	GERMANY	AUSTRIA	NORWAY
Predicted divorce risk	-0.198*	0.111*	0.214*	-0.346*	-0.061
Cohabiting	-0.001		-0.692***	-0.279	-0.317*
Union duration	-0.005***	-0.003**	-0.007***	-0.004**	-0.001
Age (time-varying)	-0.032***	-0.029**	-0.052***	-0.067***	-0.061***
Constant	-3.493***	-4.189***	-3.693***	-2.892***	-2.363***
<i>Chi</i> <sup>2</sup> (df)	139.034*** (13)	99.261*** (11)	281.142*** (14)	209.817*** (13)	158.088*** (14)
<i>Pseudo-R</i> <sup>2</sup>	0.012	0.011	0.043	0.035	0.014
<i>N of women-months</i> <sup>a</sup>	102,222	84,276	59,798	43,754	64,538
<i>N of women</i> <sup>b</sup>	1,667	1,377	976	914	1,505
<i>N of events</i> <sup>b</sup>	993	814	581	565	1,100

The models control for women's employment status at the time of the interview, their education, whether they are native born, the degree of urbanization, and family size.

<sup>a</sup> Note that only women who are at risk of having a second child at a certain point in time are considered.

<sup>b</sup> Differences in sample sizes compared to Appendix Table 1 are due to missing values on independent variables.

Table 4.2 reveals noticeable differences across the countries. In Spain and Austria, we find the anticipated negative effect of divorce risks on second births. In Italy and Germany, however, it is the other way around: couple instability seems to promote fertility. This could, of course, lend credence to the thesis that couples have children as a way to solidify a shaky relationship. Why this is the case for second, but not first births, is not immediately obvious. One possible explanation may simply have to do with the duration of relationships – as time elapses, divorce risks increase (at least up to a point). A second explanation may be that couples perceive the need for a sibling for the first-born. However, why this logic obtains in Italy and Germany, but not elsewhere, remains very puzzling.

We also find that cohabiting couples in Germany and Norway are significantly less likely to conceive a second child than are married couples, but in Spain and Austria there is no difference. And as previously, union duration and a woman's age remain negatively related to the conception of a second child.

## 4.9. Conclusions

Our study has, on the one hand, produced findings that are pretty much in line with previous research. On the other hand, however, we have uncovered some truly surprising manifestations of family life in Spain.

Let us begin by summarizing our confirmatory results. First and foremost we found – as expected – that couples facing higher risks of divorce will be less likely to enter into parenthood. This effect was clear for first births. But for second parities we discovered that different logics seem to operate across the countries we compare. In Austria and Spain we found the predicted relationship: greater risks of divorce lower the probability of having a second child. But in Germany and Italy, for reasons we are unable to explain, heightened divorce risks actually raise the odds of having a second child. The latter can, of course, represent a strategy of stabilizing shaky partnerships via childbirths – as some theoretical arguments hypothesize. But why this holds true for some countries and not others remains puzzling.

We should bear in mind that our measure of divorce risks is an indirect one, based on prediction rather than on verifiable observation. And this implies that we should interpret our findings with caution.

In the literature on family behavior and demography, Spain is routinely regarded as a full-fledged representative of the Mediterranean group, exhibiting strong familialism, rather traditional gender-relations and, of course, very low fertility. Indeed, as Livi-Bacci ( 2001) has put it, these countries have sunk into a syndrome where paradoxically, too much family is antithetical to childbearing.

And yet, our study reveals that Spain deviates significantly from the purported Mediterranean model. In Spain, cohabitation is still a relatively novel institution. Nonetheless, as we discovered, Spanish cohabitating couples appear surprisingly stable. Moreover, their childbearing behavior *in terms of first births* lies much closer to Scandinavian practice, here represented by Norway. But when we turn to second births, this convergence ends and Spain, once again, looks rather Mediterranean.



## V. The diffusion of gender egalitarian values and fertility

---

Bruno Arpino, Gøsta Esping-Andersen, Léa Pessin

### 5.1. Introduction

As discussed in Chapter 1, the last half century saw a trend towards ‘less family’ across all dimensions of family behaviour. All developed countries experienced a decline in marriage accompanied by a rise in divorce and cohabitation, with fertility rates also dropping to historically low-levels. While the Nordic and Anglo-Saxon countries have experienced a rather clear recovery over the past decades, that is not the case in the Eastern European and Mediterranean countries, where the «lowest-low» scenario of less than 1.3 children per woman persists (Kohler et al., 2002; Billari and Kohler, 2004).

If we wish to explain cross-national differences in fertility trends, we clearly need to focus on macro-level factors. Here, research has focused its attention on three in particular: structural factors, institutions and value changes (for a review see Balbo et al., 2013).

A number of studies focus primarily on macro-economic conditions. As Balbo et al. 2013) suggest, there is no clear association between GDP and fertility rates (TFR). But a different picture emerges when we use a broader measure of socio-economic development, such as the Human Development Index (HDI). Interestingly, Myrskylä et al. (2009) show that for the great majority of countries, the relationship between the Human Development Index (HDI) and TFR reverses – from negative to positive – as countries achieve very high HDI levels. Other studies have focused on particular dimensions of the economy, especially on the impact of unemployment and the rate of female employment. Unemployment has a clear and consistently negative effect (see for example Örsal and Goldstein, 2010).

But, just like the HDI, the level of female labour force participation exhibits a u-shaped relation with fertility: we see high fertility in countries with either very low or very high rates of female employment (Ahn and Mira, 2002; Luci and Thevenon, 2010).

Institutional differences and perhaps welfare state characteristics in particular also appear to have an influence on fertility rates. A key issue here is the extent to which family and labour market policies facilitate reconciliation of motherhood and careers and, more generally, the degree to which policies help ‘de-familialize’ welfare responsibilities (Esping-Andersen, 2009; Sleebos, 2003). Generally speaking, Southern and Eastern European countries show the lowest levels of de-familialization and Denmark, the highest (Saraceno, 2010).

This chapter looks at the third set of explanations of fertility trends, namely value changes. As reviewed in Chapter 1, most value-based explanations have favoured a postmodernist interpretation, arguing that heightened individualism and the prioritization of self-realization ideals produce weaker family commitments (Lesthaeghe, 1995). However, there seems to be little empirical support for this thesis, and indeed, it contradicts the recent move towards ‘more family’ observed in a number of countries.

Our focus is, instead, on the impact of gender equity values. In a previous study, Arpino and Tavares (2013) found that the greatest increases in TFR across Europe occurred in regions where both individualism with respect to relationships and individual autonomy rose in tandem with diminished individualism regarding children. Their findings support McDonald’s theory (2004) that gender equity both in societal institutions (i.e. formal education and the labour market) and in partnerships is necessary for fertility to rise. Where only the former prevails, fertility is likely to remain low. Along these lines, Myrskylä et al. (2011) show that gender equality<sup>(1)</sup> is a necessary condition for the reversal in the relationship between fertility and high degrees of socio-economic development. This is also consistent with the idea that societies may arrive at a higher fertility equilibrium once

(1) In Myrskylä et al. (2009), gender equality is measured using the Global Gender Gap Index, which is a measure of structural gender equality.

they manage to effectively reconcile motherhood with female labour force participation.

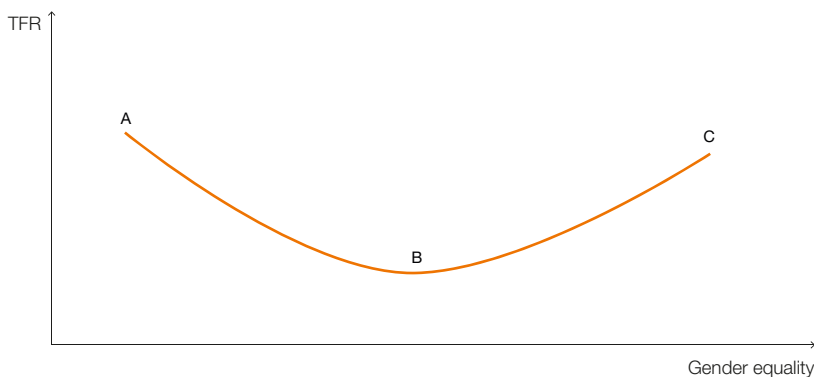
While previous research concentrates on the relationship between gender equality and fertility at either the country or the individual level, we are interested in understanding whether fertility is related to the spread of gender egalitarian values within countries. As illustrated by Figure 1, we expect fertility to be lowest when the traditional family is eroding but a new egalitarian model has not yet emerged with force. But once this transition is completed, higher fertility levels are expected (Aassve et al., 2012; Esping-Andersen and Billari, 2012).

As a first step, we test this hypothesis. But we add a second thesis, arguing that it is not just the overall level of gender egalitarian values that matter, but also how they are distributed across groups (in terms of educational attainment) and how they differ between men and women. The idea is that similar levels of gender equality values might have a different significance (and impact on fertility), depending on their dispersion across groups. If, for example, an increase in gender equality is mainly driven by women, this may reflect strong tensions between the sexes, which, in turn, is likely to produce less fertility.

GRAPH 5.1

### Fertility and gender equality

---



Moreover, it is also relevant to look at gender values across education levels, as educational attainment has become a major determinant within marriage markets (Blossfeld and Timm 2003, Schwartz and Mare 2005). The data suggest that in developed countries women are now attaining higher levels of education than men (Esteve et al. 2012). As a consequence, higher educated women may have difficulties finding partners with a similar education level. If education is positively related to gender egalitarian values, high educated women may prefer not to marry, or if they marry lower educated men, this may increase the share of couples with contrasting gender values.

We argue that fertility is likely to be related to gender egalitarian values in a non-linear way, depending on the stage in the transition from a traditional to an egalitarian model that any given country finds itself in. Moreover, the positive fertility effect is likely to be enhanced where there is little disagreement between men and women and similar education levels. The reverse, large value-gaps between the groups, will depress fertility.

In the following section, we first explore whether gender equality values are converging across nations over time and to what extent there are differences by gender and education. Secondly, we assess how different dynamics of gender egalitarian values in terms of levels and dispersion across groups are associated with fertility levels.

## 5.2. Data and methods

Our analysis is based on data from the World Values Survey and the European Values Study. The datasets consist of repeated cross-sectional individual level surveys, which are conducted approximately every ten years (five years for some countries). The first wave was sampled in 1981 and the last in 2008/2009. The countries and parts of the questionnaire have changed over the years. We focus on developed countries and exclude the first wave because of missing information on our gender equality indicator. In order to obtain a balanced dataset, we use information on twenty-seven countries for the following three waves: 1990-1993, 1999-2000 and 2006-2009 (See Table 1 for a list of countries).

TABLE 5.1

### Values of the gender equality index, adjusted gender and education gaps and TFR

COUNTRY	ABB.	WAVE 1990-1993				WAVE 1999-2000				WAVE 2006-2009			
		GENDER INDEX	GENDER GAP	EDUCATION GAP	TFR	GENDER INDEX	GENDER GAP	EDUCATION GAP	TFR	GENDER INDEX	GENDER GAP	EDUCATION GAP	TFR
Austria	AT	50.76	0.14	0.37	1.47	64.39	0.07	0.27	1.36	73.30	0.14	0.15	1.39
Belgium	BE	59.13	0.05	0.27	1.59	78.50	0.03	0.19	1.63	86.79	-0.01	0.12	1.85
Bulgaria	BG	50.39	0.26	0.01	1.79	52.56	0.24	0.15	1.20	63.17	0.10	0.29	1.49
Canada	CA	79.40	0.04	0.14	1.77	84.66	0.03	0.19	1.50	85.19	0.04	0.09	1.60
Czech Republic	CZ	48.81	-0.02	0.15	1.82	72.59	0.07	0.20	1.14	60.62	0.21	0.18	1.48
Denmark	DK	94.16	-0.03	0.07	1.66	93.51	0.06	0.03	1.74	97.57	0.00	0.03	1.86
East Germany	DE	65.61	0.19	0.15	1.36	59.70	0.20	0.12	1.17	72.17	0.27	0.03	1.40
Estonia	EE	50.71	0.01	0.09	2.01	76.47	0.16	0.26	1.33	74.51	0.16	0.20	1.63
Finland	FI	71.62	0.06	0.03	1.76	88.47	0.13	0.13	1.73	89.26	0.13	0.06	1.86
France	FR	65.07	0.03	0.27	1.77	72.99	0.04	0.24	1.83	92.23	-0.04	0.08	2.00
Great Britain	GB	71.87	0.02	0.08	1.82	74.06	0.09	0.24	1.68	86.93	0.03	0.06	1.95
Hungary	HU	60.39	-0.02	0.32	1.82	73.76	0.11	0.22	1.31	86.02	0.08	0.20	1.33
Iceland	IS	93.06	0.04	0.05	2.23	95.14	0.05	0.07	2.04	98.02	-0.00	0.01	2.19
Ireland	IE	69.43	0.07	0.25	2.10	84.46	0.06	0.13	1.91	75.86	0.20	0.13	2.06
Italy	IT	55.92	0.17	0.27	1.27	67.42	0.07	0.33	1.23	75.79	0.09	0.20	1.41
Latvia	LV	51.86	0.11	0.09	1.98	74.51	0.06	0.25	1.16	72.75	0.20	0.16	1.39
Lithuania	LT	25.96	0.09	0.00	1.99	68.28	0.28	0.18	1.44	63.93	0.36	0.31	1.46
Netherlands	NL	78.00	0.02	0.16	1.59	89.53	0.01	0.20	1.67	94.38	0.02	0.13	1.76
Poland	PL	39.02	0.12	0.27	2.06	52.53	0.18	0.23	1.39	66.36	0.12	0.17	1.37
Portugal	PT	62.52	0.09	0.22	1.44	68.96	0.07	0.24	1.51	69.48	0.16	0.17	1.34
Romania	RO	46.53	0.17	0.24	1.46	52.83	0.17	0.35	1.31	56.45	0.01	0.20	1.34
Slovakia	SK	43.47	0.03	0.27	2.02	58.25	0.24	0.27	1.33	58.51	0.11	0.14	1.33
Slovenia	SI	67.68	0.15	0.19	1.36	72.31	0.13	0.43	1.23	88.68	0.07	0.13	1.48
Spain	ES	70.04	0.13	0.15	1.33	71.32	0.13	0.17	1.19	81.78	0.19	0.06	1.42
Sweden	SE	91.10	0.03	0.14	2.09	94.88	0.08	-0.02	1.51	97.19	0.03	0.32	1.94
United States	US	77.91	0.05	0.11	2.05	84.25	0.06	0.17	2.02	71.24	0.20	0.11	2.09
West Germany	DW	68.14	0.25	0.27	1.43	63.18	0.06	0.28	1.42	63.41	0.16	0.16	1.37

Source: Own calculations from World Values Survey, European Values Study, World Bank Indicators and Human Fertility Database.

We focus on one dimension of gender equality, namely values towards appropriate gender roles with respect to the labour market. The aim is to capture the normative context regarding what are the expected roles of men and women in paid work activities. Traditional values towards gender roles are represented by the male breadwinner model; egalitarian views imply that men and women are equally entitled to participate in the labour market.

Following previous work by Azmat et al. (2004) and Fortin (2005), our measure of gender equality is based on the following question:<sup>(2)</sup> «Do you agree or disagree with the following statement? When jobs are scarce, men should have more right to a job than women.» The question offers three possible answers: 1 ‘agree’, 2 ‘disagree’ and 3 ‘neither’. We recode the variable into a binary response: 0 is ‘agree’ or ‘neither’ and 1 is ‘disagree’. This way, we consider that individuals who respond ‘1’ hold non-discriminatory values towards working women.

We limit our sample to respondents between the ages of 14 and 50. The reason for doing so is that we wish to focus on respondents when they are more likely to be making fertility decisions. From now on, we will refer to this measure as the *Gender Equality indicator*.<sup>(3)</sup>

The *Gender Equality* indicator measures the percentage of gender egalitarian respondents by country and by wave. Since our variable is binary, the percentage is also a measure of dispersion/concentration: the closer the percentage is to 0 or 1, the more similar the values are within a country at any point in time. However, for values different from 0 and 1, the same level of gender equality in two countries can mask different patterns of distribution among groups. So, to better analyse the diffusion of values we also calculate the percentage of gender-egalitarian respondents by gender and compute the difference to obtain the *Gender Gap* indicator.

The *Gender Gap* indicator captures whether gender-values have spread in a similar manner between men and women. Similarly, we compute the

(2) The question corresponds to variable c001 in the dataset.

(3) We decided to use only one question instead of an index of questions as this is the only available question (three waves and a large sample of countries) that clearly measures views toward gender roles in the labour market.

percentage of gender egalitarian respondents by education level.<sup>(4)</sup> We take the difference between the highest and lowest level of education groups. As for the *Gender Gap* indicator, we read the *Education Gap* indicator as a measure of diffusion of gender values across groups by education level.

In order to adjust for compositional effects, we replace the actual percentage of gender egalitarian respondents by gender/wave and education/wave by the predicted probabilities of being gender egalitarian, employing a simple probit model. For the Gender Gap we control for age and education, and for the Education Gap we include age and gender. Estimates from these models are used to obtain country/wave specific gender equality measures net of differences in age and educational or gender distributions. The resulting levels and gaps will be referred to as «adjusted».

To measure fertility levels in each country and for each wave, we use the total fertility rate.<sup>(5)</sup> Because TFR is subject to large annual fluctuations, we take a three-year average of TFR around the corresponding survey year instead of the single annual value.<sup>(6)</sup> We obtained TFR from the World Bank World Indicators1 for all countries with the exception of East and West Germany, for which we used the Human Fertility Database.

### 5.3. Trends in gender equality

We start by comparing the levels and dynamics of gender equality across the considered countries during the period 1990-2009. Figure 2 shows the average (over waves) Gender Equality indicator by country. As expected, the Nordic countries are the most gender egalitarian with average values higher than 80%, followed by the Anglo-Saxon and some Continental European countries. Just below these countries, we find Spain in a relatively high position (74%). Other Southern European countries show

(4) The education variable is measured as age at which the respondent completes his or her full education (x023). This is the only available variable in the dataset that measures education in a consistent manner across the three waves and the twenty-seven countries. We recode the education variable into a three category variable: 0 – low «16 years and below»; 1 – medium «17-20 years»; 2 – high «21 years and above».

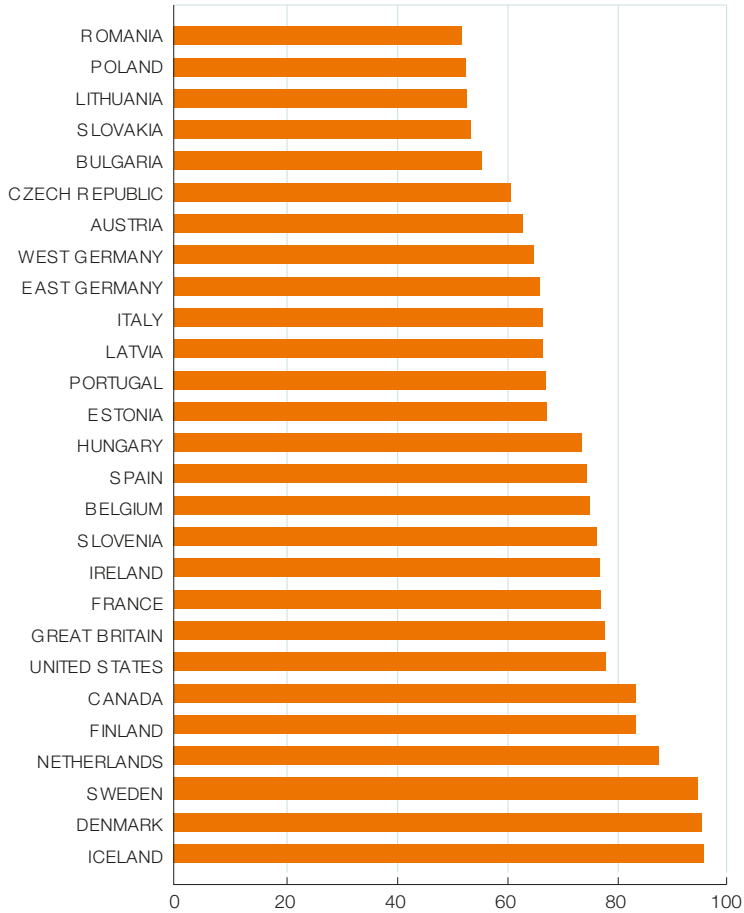
(5) The TFR reflects the number of children that would be born to a woman during her lifetime if she experienced the age-specific fertility rates observed in a calendar year.

(6) For example, in the first wave Austria is surveyed in 1990, so we used the average of the TFRs for the years 1989, 1990 and 1991.

much lower values, and at the bottom of the distribution we find the majority of Eastern European countries, with average values below 60%.

GRAPH 5.2

### Average level of gender equality by country and across waves



Source: Own calculations from World Values Survey and European Values Study.

The selected countries represent different dynamics over the considered period. In Sweden, gender egalitarian values were already widely diffused in 1990 (90%), and moreover, they were almost equally spread among



women and men. Together with Iceland and Denmark, its transition to an egalitarian society appears to be more or less completed. In Canada as well, there is no significant gender gap, and the average gender equality level has changed little over time, stagnating however around 80%. As the Canadian case suggests, some countries may never fully complete the «gender roles revolution» – perhaps because of the presence of minorities who persistently cling to traditionalism.

A second scenario is found in The Netherlands. Starting at a much lower level, it attains (in the third wave) a similar degree of egalitarianism. Interestingly, gender values in the Netherlands have spread similarly among women and men (the gap is always very close to 0). A very similar dynamic is found in France and Belgium. However, the latter show a lower average value for the equality index in the third wave.

In 1990, Finland shows an average level appreciably lower than that of the other Nordic countries. Over the last 20 years, the gender egalitarian index increased but much more for women (they reach 94%, which is similar to the Swedish average), and as a consequence, the gender gap increased from almost 0 to 13%. A similar pattern is experienced by Estonia, although there the average level remains lower.

Bulgaria, Romania and Slovenia are characterised by an inverted pattern: in these countries, women initially scored higher on the gender equality index, but men caught up in 2008. These countries are still characterised by very low average levels of gender equality when compared to the Nordic and Central European countries. The Mediterranean countries displayed intermediate levels of gender equality in 2008, with Spain leading the group. Spain has exhibited, especially in the last decade, a steady diffusion of gender equality values, with women leading the process.

### Education and gender-equality dynamics

Figure 4 shows the gender equality index by education level. Here, too, the dynamics differ by country. The findings reveal that differences by education are usually statistically significant when high and low education groups are compared, while this is generally not the case for contrasts among other groups.

Table 1 shows that for many countries the education gaps are larger than the gender gap. This is especially true in the first wave. Several countries in that first wave show an education gap above 25 percentage points (Austria, Belgium, Hungary, France, Italy, Poland, Slovakia, West Germany). Even though this gap has fallen considerably in many countries, in the last wave we can still observe important differences between the high and low educated. In fact, the education gap in all these countries remains above 10 percentage points and as high as 22 percentage points in Italy. Interestingly, there is a small group of countries (Bulgaria, Estonia and Lithuania) that experiences an increase in the education gap. Table 1 shows that in the first wave these countries' gender values were homogeneously distributed across education groups. Thereafter, gender egalitarian values spread mainly among the higher educated, and by the third wave these countries show education gap values between 20 and 32 percentage points (differences are significant).

Bulgaria is a particularly interesting case because it has experienced opposite trends in the gap by gender and by education: a converging pattern by gender and divergence by educational level. In Spain it is exactly the other way around: the gender gap increased while the education gap diminished. Thus, in Bulgaria educational heterogamy is expected to be associated with divergent gender egalitarian values in the couple, while this is not the case for Spain. Other countries show a relatively stable gap by education level. This is the case, for example, of the Netherlands, where gender egalitarian values spread almost uniformly across education groups.

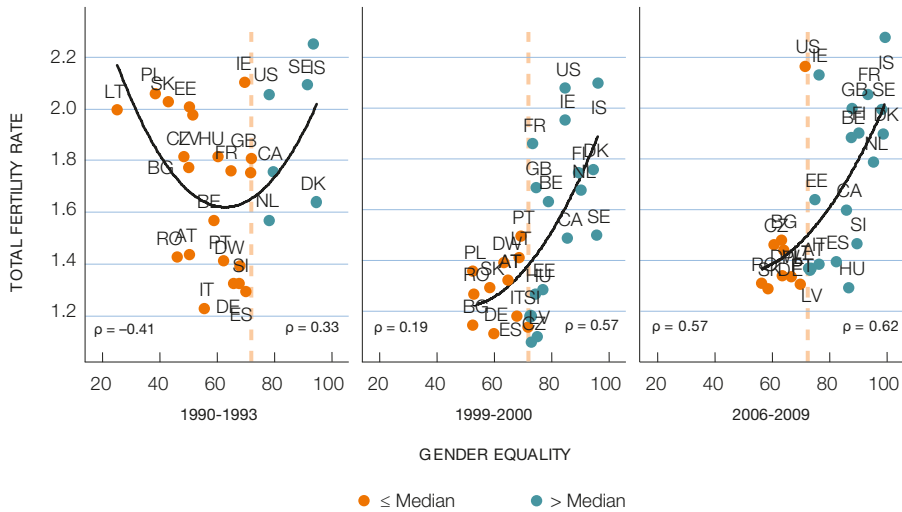
#### **5.4. Assessing the association between gender values dynamics and TFR**

We now estimate the association between TFR and the levels and gaps in gender values. In Figure 5 we plot TFRs and the gender equality index by wave. Doing so, we can identify different fertility trends: as found by Myrskylä et al. (2009), the Anglo-Saxon and Nordic countries experienced an increase in fertility between 2000 and 2010; the Mediterranean and Continental countries (except France) remained at fairly low-levels of

TFR; and starting in the nineties, the ex-Soviet countries experienced a sudden fertility drop. Moreover, since all countries move to the right on the x-axis we can conclude that there is a general egalitarian shift in values.

GRAPH 5.3

### TFR vs. level of gender equality by wave



Note: The median value of the Gender Equality indicator across the 3 waves is 71.87.

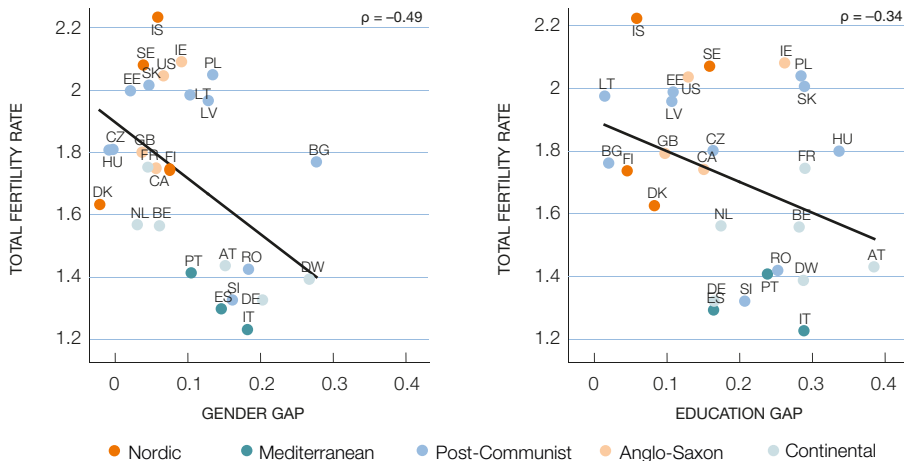
Source: Own calculations from World Values Survey, European Values Study, World Bank Indicators and Human Fertility Database.

We estimate a parabolic regression of TFR on gender values to assess if the hypothesis of a U-shaped relationship is valid. In the first wave this seems to be the case. As we move from countries with the lowest levels of gender equality to countries that lie closer to the median level (calculated on the pooled data and represented by the dashed vertical line) we observe, on average, a reduction of the TFR. This is reflected by the negative correlation coefficient (-0.41) that we obtain on the sub-sample of countries with values on the gender egalitarian index below the median level. For countries that are closer to the new gender egalitarian equilibrium, increasing levels of gender equality are associated with increasing levels of TFR (correlation = + 0.33).

In the first wave Spain occupies an intermediate position with respect to gender equality (Spain's level is very close to the median), while its TFR is one of the lowest. In the second and third waves the parabolic relationship between TFR and gender values is confirmed, but we cannot observe the descending slope of the parabola because all the countries have increased their levels of gender equality. We can see that for countries above the median level, increasing gender equality is strongly associated with TFR – correlations are about 0.6. Spain is following this trend: increase in both gender equality and TFR levels.

GRAPH 5.4

### TFR vs. gender and education gaps in wave 1990-1993



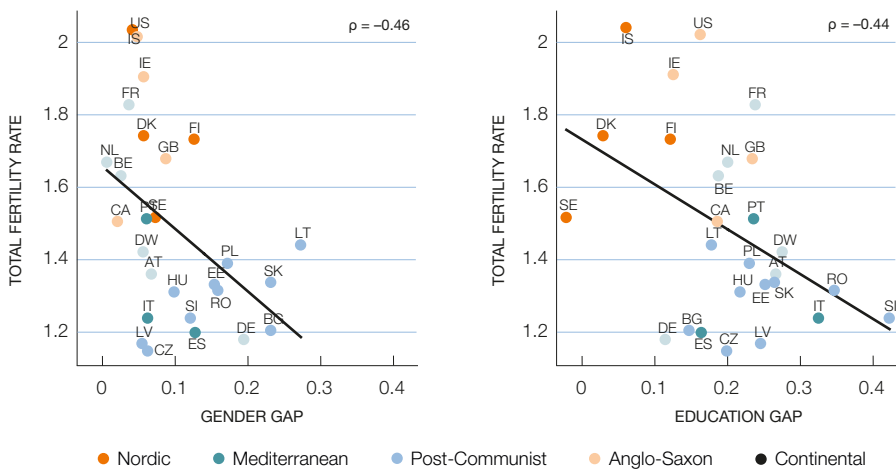
Source: Own calculations from World Values Survey, European Values Study, World Bank Indicators and Human Fertility Database.

In graphs 5.4, 5.5 and 5.6 we examine if gender equality gaps by gender and education are likewise correlated with TFR. In all waves these gaps are negatively associated with TFR. And, vice versa, where women and men or education groups converge in terms of gender egalitarian values, we find higher fertility rates. Interestingly, in the first wave the correlation between the gender gap and TFR was higher than that

between the education gap and TFR. But more recently, the two gaps are similarly associated with TFR. It should be noted that the values of the gaps are independent of the general gender equality level in any country. For example, we can see in graph 5.4 that in the first wave, Spain, Finland and Great Britain display very similar levels of gender equality (about 70%, i.e. close to the overall median), but Spain shows much larger gaps by gender and education. This might help explain the differential TFR levels of countries with similar levels of gender equality. We conclude that not only is the overall level of gender egalitarianism important for fertility to rise, but also that these values are adopted by men and women alike.

GRAPH 5.5

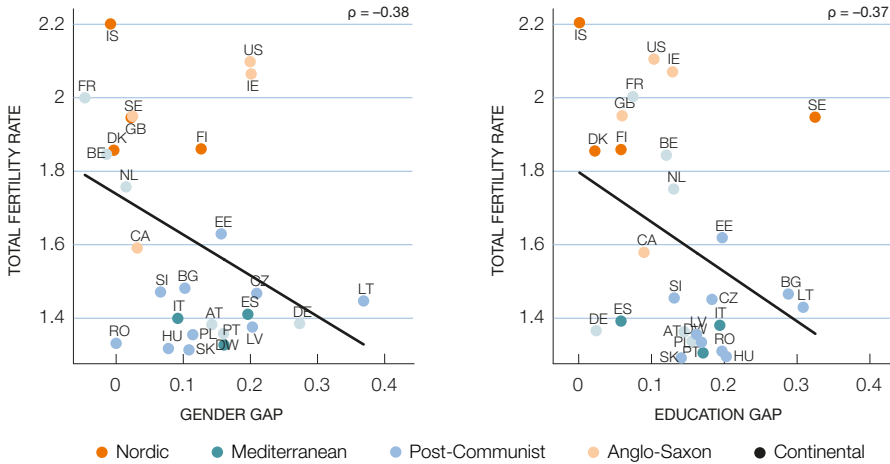
### TFR vs. gender and education gaps in wave 1999-2000



Source: Own calculations from World Values Survey, European Values Study, World Bank Indicators and Human Fertility Database.

GRAPH 5.6

## TFR vs. gender and education gaps in wave 2006-2009



Source: Own calculations from World Values Survey, European Values Study, World Bank Indicators and Human Fertility Database.

## 5.5. Conclusions

In this chapter we have adopted a simple and straightforward approach to the question of whether gender egalitarianism plays a role in fertility. Rather than focus on behaviour or institutions, we have opted for an analysis of how gender egalitarian value diffusion influences the TFR by comparing them across time and nations. We do not, of course, presume that values alone can fully explain fertility change or cross-national variations. Our analysis does not include other explanatory factors, such as the level of development, female labour force participation, or family support policy. And yet, our study does produce empirical support for our hypotheses.

First and foremost, the evidence gives credence to our idea of a U-shaped relationship between gender equality values and TFR: as countries start the transition away from the traditional male breadwinner family model, the diffusion of gender egalitarian values is negatively associated with fertility. When, however, this process is more advanced and new gender egalitarian values gain dominance in society we register a shift towards a

positive impact. Spain seems to have followed this dynamic in the last decade; here we observe a steady diffusion of gender equality values, with women leading the trend. And, in fact, this diffusion has been accompanied by an, albeit modest, rise in fertility.

Secondly, our findings seem to suggest that large differentials in gender egalitarian values, either by education or gender, depress fertility. In other words, a strong fertility recovery seems more likely to occur when and where value diffusion is homogenously strong. In Spain, we have seen that the gender gap increased because men's adoption of gender egalitarianism has lagged behind women's. At the same time, however, the gap across education levels diminished. We should therefore not expect any major value divergence among partners with different educational attainment.

# VI. Men Anticipating Fatherhood in Spain

---

M. José González, Marta Domínguez, Francesca Luppi

## 6.1. Introduction

Most fertility research focuses primarily on women. As discussed in Chapter 1, there are a number of rival explanations for why women's fertility has declined so markedly. One explanation is that the emergence of post-materialist values means greater prioritization is given to individual self-fulfilment and autonomy (Lesthaeghe, 1995; Van de Kaa, 1987, 1988). A second is that greater salience is given to the quality of partnerships (Oppenheimer, 1988). A third explanation argues that women face steeper opportunity costs for childbearing due to their increased investment in human capital and labour market attachment (Becker, 1993), this, in turn, is likely to lead to the postponement of fertility or the foregoing of motherhood altogether (Blossfeld et al., 2005). Another explanation associates low fertility with increased economic uncertainty among educated women (Kreyenfeld, 2010); while a fifth suggests that low fertility may occur where there is a mismatch between women's aspirations for equality and the perpetuation of gender inequalities within the family and public institutions (McDonald, 2000). Finally, an additional explanation is that women face difficulties in finding good marriage candidates due to worsening labour market conditions for men (Oppenheimer, 1988).

Men tend to be ignored in fertility research, as if their opinions, expectations, uncertainties or desires do not influence couples' fertility (Kravdal and Rindfuss, 2008). It is often assumed that men's preferences hardly change over time, that the rising cost of children does not matter for men's fertility intentions, and that new gender roles do not alter men's



desire for children. These assumptions, however, are no longer valid. There is growing evidence that a «new fatherhood», consisting of more involved and caring fathers, is emerging in Western societies, while the image of the detached or «emotionally distant» father commonly associated with the traditional male-breadwinner model is gradually disappearing (Clarke and Roberts, 2002; Hobson & Morgan 2002). The emergence of a «new fatherhood» has particular policy relevance, as it is considered to be highly beneficial for both fathers and children, both in building closer relationships and in promoting positive child outcomes in terms of cognitive competences and gender stereotyping (Marsiglio et al, 2000).

This chapter seeks to fill a gap in the literature by exploring the role of men in fertility decisions and the way in which they construct the notion of a «good father». The study is based on a sample of 68 first-time expectant fathers in dual-earner couples in Spain in 2011.<sup>(1)</sup> We use men's narratives to identify the importance of children in their lives, their ideals about «good fatherhood», and their expectations about childcare involvement and employment adjustments in the transition to the first child. Female partners' values and characteristics are also taken into consideration in some of the analysis. This study also provides us with a better understanding of men's preferred timing and preconditions for fatherhood. The latter serves as a complement to existing research on postponed parenthood and low fertility.

## 6.2. Theoretical Perspectives: Fathers, Fatherhood and Fathering

Being a father has culturally relative meanings. As Hobson and Morgan (2002) argue, the term «fatherhood» can be seen as a «cultural coding of men as fathers», which includes the rights, duties, responsibilities and status that are attached to fatherhood, as well as notions of what constitutes «good» and «bad» fathers (Hobson and Morgan, 2002; Lupton and Barclay, 1997). Connected with fatherhood, «fathering» is the set of practices carried out by fathers, equivalent to «mothering» and «parenting» (Quesnel-Vallee and Morgan, 2003). However, in much

(1) This research has been supported by the Spanish Ministry of Science and Innovation (Grant CSO2010-17811), the Spanish Women's Institute (Ref. 43/09) and the 'Centro de Investigaciones Sociológicas' (CIS).

of the contemporary research literature, the terms «fatherhood» and «fathering» are used interchangeably to include all the childrearing roles, activities, duties and responsibilities that fathers are expected to fulfil (Tanfer and Mott, 1997). In their discussion about the definition of the dimensions related to the concept of «father», Gregory and Milner (2004) have conceptualised the idea of a «fatherhood regime», which encompasses the specific rights and obligations placed on fathers by the state, the family, employment policies and the national working time regime (Gregory and Milner, 2005). According to these authors, family and employment policies are the most developed dimensions and, at least in countries like the UK, there has been a body of work relating the tensions around fathers' rights (especially post-separation) to the normative discourse of «involved» fatherhood, also termed the «new» fatherhood (Collier and Sheldon, 2008; Featherstone 2009; Smart and Neale, 1999).

### Meanings of New Fatherhood

Most of the literature focusing on masculinity in recent decades has stressed and developed the concept of «a new father» or «active fatherhood» to refer to the social and psychological re-construction of men's identity in Western societies since the 1970s (Lupton and Barclay, 1997; Henwood and Procter, 2003; Connel, 1995; Nentwich, 2008; Deave and Johnson, 2008; Gillis, 2000). The emergence of the concept is linked with the perceived decline of the male breadwinner model. A growing convergence has occurred between the lives of women and men in relation to the workplace and the family (Collier, 1999; McDowell, 1997). Social changes, such as rising divorce rates and family restructuring, have contributed to a convergence in the life course of men and women. The «new participating fatherhood» is defined in contrast to the «traditional absent father» (Finn and Henwood, 2009). In particular, research has stressed the emotional involvement of men in parenting and in sharing responsibility for childcare, domestic tasks and family life in general (Craig 2006; Lupton and Barclay, 1997; O'Brien, 2005). At the same time, the «marginalized fatherhood» role is being identified as a source of suffering among men who desire a more active paternal role (Gillis, 2000).

Despite increased scholarly attention, the concept of «new fatherhood» has not yet found a consensual definition. There are some studies, mostly qualitative, that focus on this point. Using semi-structured pre-/post-natal interviews, they present a complex web of concepts and behaviours to identify the ideal and real portrait of new fathers (Deave and Johnson, 2008; Anderson, 1996; Lupton and Barclay, 1999; Hall, 1994). These studies focus on the gap between the fatherhood ideal and its subsequent concrete realization. As Cowan and Cowan argue (1992), fatherhood tends to be more a process than a status. What men define as ideal fathering may be far removed from actual behaviour. The relationships they are in (with their partner, colleagues, relatives, friends) and the context in which they act (in the labour market, social and family policies systems, cultural rules, etc.) shape the possibilities of its realization.

Policies specifically related to fatherhood have begun to appear in the broader context of gender egalitarian measures. In particular, the need to encourage paternal involvement has been motivated by men's «role inadequacy» in light of falling birth rates as well as heightened divorce and separation risks. This perspective recognises the centrality of men's role in couples' fertility decisions. For instance, it has been well demonstrated that the decision to have a/another child or not is made jointly by both partners (Morgan, 1985; Thomson et al., 1990; Thomson and Hoem, 1998), and disagreement between partners in fertility decisions is likely to lead to postponement (Miller, Severy and Pasta, 2004). At the same time, women's historical role as the «natural caregiver» means that men's intentions have traditionally been more accommodating to the preferences of their partner than vice versa (Rindfuss et al. 1988). More recently, Miller, Severy and Pasta (2004) discovered that women consider their own desires to be more important, while men treat their own child-timing intentions as equal to those of their partners. This incongruence in perceptions may be the result of a restructuring process in family roles that has not yet concluded.

### **Trade-offs & Opportunity Costs of Childbearing for Men**

The trade-off between job and family still requires a difficult balancing process for women's identity and well-being. This is illustrated by the fact

that in more egalitarian dual income couples, women are more inclined to postpone motherhood than men are to postpone fatherhood (Rosina and Testa, 2009). Nevertheless, the idea that childbearing now represents an opportunity-cost trade-off for men as well emerges clearly in the literature on the new-fatherhood, in particular among dual-career couples. The «new fatherhood» seems more related to the way in which men try to face the dual identities of being a worker (breadwinner) and father, in terms of dedicating time to both roles (Henwood and Procter, 2003). Indeed, we see that time dedicated to childcare has increased both for mothers and fathers in recent decades (Sayer, Bianchi and Robinson, 2004). The increasing importance of the overall time spent with children by both parents is very much emphasized by Gregg and Washbrook (2003). They show how fathers in dual-career couples compensate for reduced maternal presence by increasing their input.

However, as O'Brien (2005) argues, «parental involvement is a trade off between money, time and care». Partners' family role preferences are deeply connected to the economic and policy context. Desiring to work longer hours is typical in countries with a weak economy, while in countries with a stronger economy, desires for part-time work or flexibility are more common (Stier and Lewin-Epstein, 2003). At the same time, the problem of «time availability» affects both the desire to be a father and the ideals of fatherhood (Daly 1996). Especially where family policies are lacking, or are unable to support parenting, men are more likely to cut down on leisure than on working time (Sayer, Bianchi and Robinson, 2004). For women, working part-time or exiting the labour market remain common strategies to match family needs. The quality and nature of paternal time with children have also changed. Traditionally, fathers were more involved in playing activities (Pleck, 1997), but Sayer, Bianchi and Robinson (2004) find that the increase in fathers' participation in childcare includes all aspects of childcare (physical care, education, games, etc.). By and large we see a normative shift; men should not be just «good workers» and «good fathers», but also «good husbands». This emerges clearly when we examine the conflict over time and resources that a man can or should dedicate to each role. While for men, «being a good father» involves taking time and resources from leisure, for women a «good husband» does his

fair share of childcare; not doing a fair share is, in fact, related to a decrease in women's marital satisfaction (Kalmuss, Davidson & Cushman, 1992). But gender convergence remains stronger regarding childcare than housework (Kodz, 2003). As often noted, looking after children is more emotionally rewarding than housework (Oakley, 1974). In this sense the trade-off between «being a good father and husband» and giving up leisure time seems to go hand-in-hand with less male involvement in the less agreeable household tasks. The concept of an unfair division of labour is not limited to the female side of the gender story. Milkie et al. (2002) found that if inadequate paternal childcare is a source of stress for mothers, an undesired increase in paid work can be a source of stress for fathers; and women can be obstacles to husbands' childcare when they maintain their traditional role as the sole caregiver. Such maternal gate-keeping (Allen and Hawkins, 1999) reveals how gender balance can involve a complex power game.

It goes without saying that participatory fathering is linked to the cultural and social environment. In fact, active fathering should be positively related to favourable family policies as well as gender norm change. Research on fathering must clearly take such factors into account. This chapter presents the main results of a study that aims to fill at least some of our knowledge gap about Spanish fathers.

### 6.3. Data and analytical approach

The data for this research derives from a qualitative international research project ('TransParent') on the transition to parenthood. It includes 136 individual in-depth interviews (both partners were interviewed separately) and 68 joint interviews (both interviewed together) conducted in four major cities (Barcelona, Madrid, Pamplona and Seville) in 2011. In this chapter we mainly draw on the male sample. The TransParent project chose couples on the basis of two main criteria: being dual-earner couples (or in search of a job) and being first time expectant parents. The definition of dual-earners was eventually relaxed to include unemployed individuals in order to adapt the sample design to the current economic crisis (a jump in unemployment from 9% in 2005 to 20% in 2011). Couples were mainly

recruited during childbirth preparation classes. Ethical approval to conduct anonymous couple interviews was obtained from the Pompeu Fabra University ethics committee.

A major effort was also made to include individuals from different socio-economic backgrounds (see Table 1). Yet, the sample is not representative of the Spanish population, for instance, it is worth noting that our sample is biased towards older ages. According to national statistics, the mean age of women at first birth was 31 in 2010 (INE),<sup>(2)</sup> whereas the mean age at first birth for women in our sample is 34. The education structure is also slightly biased, with the low educated population underrepresented.

For this kind of qualitative research, the aim is not to ensure statistical representativeness. Still, it was important to have couples with different educational and economic backgrounds since these factors influence gender values, expectations and behaviour (Coltrane, 2000). The sample allows us to explore how men with different education and work experiences articulate their views about fatherhood. The individual interviews were semi-structured and inquired about each partner's work plans immediately after the arrival of the child, whether they had always wanted to have a child and in what circumstances the idea to have a child arose, how they prepared for the arrival of the child, their references for reflecting on motherhood/fatherhood (friends and relatives), the ideal plans for childcare and balancing paid work and family responsibilities, and finally, their plans regarding the use of parental leaves.<sup>(3)</sup> The sample also has some drawbacks. We lack, for instance, information on partnered men who prefer to be childless or who have not yet taken the step to become fathers. Such cases may provide insight into the reasons for delaying or rejecting fertility. Yet, the sample contains a large representation of men by age groups. The youngest is 27 and the oldest 46; 12 out of the 68 men

(2) Main Demographic Indicators from the National Statistics Institute (INE) are available on-line (see: <http://www.ine.es/>).

(3) According to the Spanish parental leave system, mothers are entitled to *maternity leave* for a period of 16 weeks, of which 10 can be taken before birth or transferred to the father. Fathers are entitled to 15 days of *paternity leave* if they are employees or 13 days if they are self-employed. Both leaves, maternity and paternity, guarantee full wage replacement, can be taken simultaneously or the father's leave can be taken at the end of the mother's leave. Both parents are also entitled to *unpaid parental leaves* to look after their children (the self-employed are excluded) for a maximum duration of three years from childbirth. Finally, parents are entitled to a *part-time parental leave* (also known as 'reduced working hours') to care for children with the corresponding pay reduction.

expecting a first child are 40 or older. This represents well those who have postponed their fertility decisions.

TABLE 6.1

**Main Sample Characteristics: Individuals (Men and Women)  
in Dual-Earner Couples Expecting their First Child**

	INDIVIDUALS	(%)
<b>City:</b>		
Barcelona	34	25
Madrid	42	31
Pamplona	42	31
Sevilla	18	13
<b>Total</b>	<b>136</b>	<b>100</b>
<b>Mean age:</b>		
Men	36	
Women	34	
<b>Educational attainment:</b>		
Without finishing Compulsory Education	5	4
Up to Lower Secondary Education	8	6
Upper Secondary Education	36	26
Tertiary Education (Three years)	27	20
Tertiary Education (5 years)	54	40
PhD or Master Degree	6	4
<b>Total</b>	<b>136</b>	<b>100</b>
<b>Relationship with labour market:</b>		
Civil Servant	9	7
Fixed-term	75	55
Fixed-term and Self-Employed	3	2
Self-Employed	11	8
Temporary	19	14
Irregular Worker (without job contract)	1	1
Unemployed	18	13
<b>Total</b>	<b>136</b>	<b>100</b>

Note: interviews were conducted between November 2010 and July 2011.

## 6.4. Men's Desire for Fatherhood & Ideal Timing for a First Child

In light of the eroding male breadwinner model, greater female economic independence and more paternal participation in child rearing, men's perception of the cost of children and the appropriate timing to have a first child may have changed. We begin by exploring in this section the role of men in the decision to have a child and what they consider to be «the right timing» for fatherhood. As illustrated in Table 2, four large groups emerge depending on who is behind the decision and who initially feels a stronger desire to have a child.

TABLE 6.2

### Sample Description: Individuals in Dual-Earner Couples Expecting a First Child, according to Who Took the Initiative in the Decision

	N° OF COUPLES		WOMEN'S MEAN AGE	MEN'S MEAN AGE
The man took the initiative to have a first child	16	24%	35	34
She pushed, he consented	16	24%	33	35
Both agreed on the decision to have a child	27	40%	34	37
Unintended first pregnancy	7	10%	36	37

Note: two couples did not provide explicit information.

In the first group, in which the *man took the initiative to have a first child*, the men kept postponing fertility even if they had a long-standing desire to have children. For many, it simply took time to find the 'right person' and, additionally, to reach emotional and occupational stability. Some of these men see a child as the obvious outcome of a partnership. Their decision to choose to become fathers seems to be closely connected to the biological clock. Some describe themselves as being very child-oriented («muy niño»), and some even said they enjoy watching child rearing reality shows on TV. They tend to come from large families and have fond memories of their own childhood. Some also mention that most people around them are having babies, which provides an additional sign that it is about time for them to take the plunge. In some cases, the desire for children emerges very strongly, as when respondents state that having



children is a very important project in the couple's life, or that the couple may not feel fulfilled without children. A recurrent theme in postponing fatherhood in this group is the idea that their partners were not ready because they wanted to wait until they had a stable job or had attained certain goals in their careers.

The second group, *she pushed and he mainly consented*, is largely dominated by men who resist taking on fatherhood responsibilities. For a small group of men in this category, fatherhood is not an essential element in their lives; it is something they could easily have done without, or it was not a priority at the time their partners suggested it. These men accept their imminent fatherhood as something inevitable basically because they cannot deny motherhood to their partner. One man, for instance, mentions that at a certain point he and his partner assumed the risk of not using contraception. Another says that the pregnancy just happened, and they accepted it, and others mention that their partners' biological clock was the reason. Many of these men are in their early forties and had already decided they were not going to have a child. Another argument often mentioned is that men are never ready to assume, at least on their own initiative, a responsibility as important as fatherhood, which is perceived to be too costly for their lifestyle and, in particular, for their leisure time. As they put it, they have enjoyed living with a partner with complete freedom, and soon they will have to change most of their routines. These men not only feel scared about fatherhood, but also mention feeling that they are not really as trained for fatherhood as women are for being mothers. Other men, who were resigned to the idea that sooner or later they would have children, explicitly discussed the issue with their partner and asked them to wait until their employment situation improved or they attained greater economic stability.

The third group consists of couples in which *both agreed on the decision to have a child*. For this group a recurrent theme is having passed a 'checklist' of preconditions for parenthood, which often includes the couple's labour market situation or, to a lesser extent, each one having found «the right person» (many in this group are in their late thirties). They often explicitly decided to postpone having a child until they felt established in the labour market, as most couples pursue the dual-earner

model, in part in response to heightened economic uncertainty (Abril *et al.* 2012). Where they fail to achieve this goal, the men in particular express anxiety. Another reason given for having a child is that the couple was childless for a long time and have now reached the right time for parenthood. Some men expressed uncertainty about whether they were going to have children or not. Some couples also mentioned that they felt as if everybody around them was having children and they were an exception among their peers. Fernando, who evoked the difficult time he and his partner had to go through in order for her to get pregnant, expressed it in these words:<sup>(4)</sup>

*(1) FERNANDO: yeah, yeah, yeah, almost all my friends. I'm thirty-eight and I am the..., how to say, the youngest of my friends, almost all of them have children, and this is something that, well, I've always wanted a lot, you know? Maybe we are now in another stage, and it's a long time that we have been playing with the idea, this [pregnancy] will also be a bit of peace for us.*

*INTERVIEWER: ¿how come?*

*FERNANDO: Yes, after so long, that [pregnancy] will be good for us.*

[Fernando (38 years old), secondary education. Fátima (34 years old), tertiary education]

Finally, the last and smallest group consists of couples that have had an *unintended first pregnancy*. Interestingly enough, individuals in this group are rather mature and educated. Yet, some of these couples argued that the pregnancy came unexpectedly, after they had given up on the idea of having children following a series of miscarriages. In these cases, parenthood was an important project that had not been possible previously.

In short, the sample shows great heterogeneity in men's fertility intentions and desired timing for fatherhood. There are men pushing for or stopping their partner from making the transition to parenthood; there are men with fears and men with strong desires for parenthood. The important point here is to elucidate to what extent the man's initiative in fertility decisions is related to different ideals of fatherhood. Shall we infer that fathers who take the initiative are also the ones more inclined to develop

(4) Original citations have been included in the Annex.

an «involved parenthood»? Or shall we infer that couples planning the transition to the first child together will share child care tasks more equally? Some of these questions are discussed in the next section.

## 6.5. Men's Ideals about Fatherhood and Plans to Care for the Child

The previous section revealed a significant heterogeneity in men's desires for fatherhood, in the value attached to children in order to have a fulfilling relationship and in the appropriate timing of fatherhood. It emerges that the underlying 'decision process' is not only guided by women's preferences, but that there is, in addition, joint decision-making, with the partners weighing the constraints and options against each other, and, as suggested by Miller, Severy and Pasta (2004), disagreements play a role in influencing the timing of the first child. Contrary to our expectations, however, we found no pervasive inclination towards a more active fatherhood role among the men who took the initiative to have a first child; rather, many different ideals of fatherhood emerge. We find men with strong career-oriented values who anticipate only minor, if any, adjustments in their working life and who simply fancy the idea of having a large family. For these men, fatherhood is, as expressed by Townsend (2002), a component of a culturally determined «package deal» in which getting married, having children, holding a steady job and owning a home are four interconnected elements. We also find men who plan to be highly involved in childcare and happen to be unemployed (manual workers), for whom participation as caregiver is conditioned on their future occupational prospects; men with «weak career values» who would love to spend every hour with the child, especially in the first year, if this was a feasible option and a residual group who plan to be highly involved in care: men with weak career-commitments, or men with good career prospects for whom care is not perceived to negatively affect their job.

In this section, we will focus on men's anticipated involvement in childcare and paid work to understand what fatherhood means to them. In particular, we explore the meaning of being a «good father», the extent to which men anticipate participating in childcare during the first years and the opportunity costs attached to such decisions, as well as the extent to which

they favour a gender balanced approach to childcare. By «anticipating» we refer to the adjustments that expectant fathers make in order to put their ideals into practise. As initially argued, we presuppose that first time expecting fathers who embrace the idea of an active fatherhood will foresee the need for adjustments in their daily working life and will engage in different bargaining processes regarding the allocation of childcare.

Most men in the sample said that they were excited – a few also said they were terrified – about their imminent fatherhood and expressed explicit desires to be a «participating father». Very few felt comfortable with the breadwinner-absent father model, which in a few cases was justified as a sacrifice for the sake of the family. This is the case, for instance, of Andres, a highly qualified professional, doing very well in a leading sector in his field, working long hours, and married to a highly qualified woman with a weak attachment to the labour market due to the economic crisis. For him it was clear that work comes first. His wife would do most of the caregiving so that he could continue investing in his career, which he considered to be economically beneficial for the family in the long run:

*(2) ANDRÉS: Maybe there are people who do this in my [business], of course, just as there are people with these profiles elsewhere, like in many government departments and companies. I sincerely believe that if you have the ambition necessary to climb the ladder now, which will allow you to relax later on, I am of the opinion that you should do it, and I am also of the opinion that if a woman feels more comfortable at home with flexible and less demanding work ... I'm totally pro-family, that is, and it is not that I am sexist either because ... in the end, one of the two has to devote more to some tasks than the other. I have some friends who do it differently, you know?*

*ANDRÉS: No, but, of course I would love to have in ... ten years a work situation that allows me to enjoy my ... my children. I know that for another 10 years... I will not be able to do it because I will have to work hard but ... I hope to do it.*

[Andrés (36 years old), university degree. Ana (31 years old), university degree]

Andres is representative of a group of fathers for whom the need to focus on the family is a long-term plan. Here, the attainment of a desired social position is very important. These men do not consider being a father as an

opportunity cost in terms of their careers; to the contrary, they plan to be more involved in work so that they can provide for their families. This does not mean that they are not aware of the needs of children in terms of time and care, but they know that those needs will be met by the mothers and by external help. Among these men the idea emerges that working hard in the present will allow them to enjoy their family more in the future. In these cases, no negotiation with the partner is mentioned; the need to focus on work is presented as something inevitable, derived from their chosen profession, or related to an investment that will benefit the family in the long run, and that their partners «understand».

However, the «absent father» reflected in the above case is rather unusual in our interviews. A recurrent discourse is men's desire to escape from the traditional breadwinner family model. Men compare their ideals of fatherhood with their own fathers and often distance themselves from what was likely to be a model of an authoritarian and often absent father, adopting a position in favour of a more participatory model. They mention, for instance, the need to improve their «fathering skills» in those areas in which they felt disappointed by their own parents, such as paying more attention to the child's performance in school or spending more time together.

In spite of their rejection of the absent father, many men find it difficult to find the time to be more involved with their children. The image of the father who arrives home just in time to bathe the child and put him or her to sleep is recurrently evoked. Many fathers identify with it – with varying degrees of resignation. Ideally, most fathers would like to devote more time to their children and to arrive home earlier, but they do not think it is feasible. Again, the justification for this is often based on the conditions of the labour market or on the specific characteristics of their jobs or careers. Inevitably, in order for men to be able to maintain their work schedules, many women will have to modify theirs. This, in turn, means that mothers will take on the role of main caregiver during weekdays, as reflected in the following quote:

*(3) INTERVIEWER: Do you think that both of you will make some sort of adjustment? Have you thought about what you said before? About trying to be in a job with ... flexibility?*

*UBERTO: how should I say it, I believe that the job that I may have will probably let me take the baby to daycare or wherever in the morning, and I also believe that it will allow me to leave a bit earlier in the evening so that I have time for his bath, meals, and putting him to bed.*

[Uberto (34 years old), university degree and Úrsula (30 years old), university degree]

Most of the men interviewed wanted to be «involved», but did not have clear ideas about the practical implications of doing so; as a matter of fact, they meant many different things by it. A man in favour of shared parenthood, for instance, defined it as sharing their free time equally once his wife took a full-time position. Actually, he planned to take his 15 days parental leave, whereas his partner planned to take her 16 weeks maternity leave followed by a part-time parental leave for a year. Such a lengthy leave seemed economically unfeasible to him, despite both of them having similar incomes. In this couple, traditional gender values played a key role in their planning for future parenthood, and this was reflected in their different meanings of a «good father/mother». The woman considered it normal to be the one reducing working time, even if it might damage her career prospects:

*(4) INTERVIEWER: and, according to you two, the reason for her taking a part-time parental leave is mainly economic or is there any other reason?*

*DELIA: Well no, the truth is that we never asked ourselves why, we took it for granted that I was going to take it. I think this is partly because, I don't know, because at my job those who take part-time parental leaves are women.*

*DELIA: Of course, I know that until my husband gets home I will be the person in charge of the baby because I'm the one with a part-time parental leave, I am also the one who is going to have less income, which will affect household spending, this is pretty typical, but of course, he... , maybe I'm the one who has limited my career more also, but I knew all that already, all that it entails and then, of course, I want to choose, and I choose to be with my daughter.*

[DELIA (32 years old) and Daniel (29 years old): both with university degrees]

To her, active parenthood meant establishing strong bonds with the child, which implied the need to spend «enough time» with him or her. For the father, it meant enjoying time with the child and trying not to miss anything in the child's upbringing. Different time commitments and different ideas about time were implied in their narrative. Furthermore, she introduced a sort of «gate-keeping» in the domain of care during the first year (Allen and Hawkins, 1999), as she presented herself as the legitimate caregiver:

(5) DELIA: *Yes, it is usually the mother who reduces the working day, I think, clearly, in this regard, how do you say, yeah, some people might think of it as a sexist society, but I think that the bond with the mother, I personally think that the bond with the mother has always been greater... particularly at the beginning, I think it's really important, you know? The mother being present during the.. the first, first year or second year. There are people who would consider this sexist, and that a man should participate more, but, I don't know, I mean, I do not really know what timetables other people have, I don't know, maybe they share. What I plan to do with my husband is sharing the tasks, that my husband takes him to school in the morning and I pick him up in the evening, and in this way the contact with the father and the mother is the same, you know? At least.*

[Delia (32 years old) and Daniel (29 years old): both with university degrees]

Linked to the «gate-keeper» role of mothers, some fathers are conscious of the need to break with traditional caregiving roles. This is expressed by those men who realistically anticipate changes in their daily life to fit in childrearing and attain a shared parenthood status. For them, being active and present fathers means sharing part of the power that the mother has over their children, both in terms of education and affection, as these expectant fathers put it:

(6) CARLOS: *«sure, no, no, no, I.. I take it for granted, I take for granted that this is going to be like one day..., that..., that many days I will rely on Luisa or Luisa will rely on me, that is, I am... I am very excited with the idea of connecting with... with my daughter, at the same level as Luisa, that is, I have.., I have the need, for me it is very important this child, for anything in particular, simply because I am tremendously excited and because it is..., it*

*is..., ... is a piece of emotion, that is, is, is one thing, yeah, I want to be with her, I want to play an active role, in other words, I don't want my work to take away from my time with my child, and as long as possible, and as long as possible I will do it, and if I have to be stuck on the phone [working at home]... in order to be with her I will do it.*

[Carlos (38 years old) and Luisa (37 years old): both with higher secondary education]

(7) *ÁNGEL: «I would like this to be much more balanced if possible, for example, things like..., not bathing her, but being able to spend time with her after school hours, giving her the afternoon snack, doing homework with her or taking her to the park; you go to the park and it is pathetic, there is one man for every ten thousand women. I ... I you know? or I would like to be the one who picks her up at school, those little plea[sures] which for me are going to... it's the day to day, something that I didn't have with this figure [the father] and I do not want her to have that emptiness, you know? It's not necessarily this way, you know. But that's my experience and so, this is something I don't want to happen to her».*

[Ángel (37 years old), higher secondary education. Verónica (31 years old), university degree]

There is a group of men for whom the family is perceived as a priority, and they have decided to play an active role in childcare. They are aware that their work schedule may hinder – in most cases – their active participation in childcare, and this makes them re-consider their relationship to their work. These fathers use different strategies to modify their involvement in the labour market in the short term: reducing their work hours; refusing to do overtime; changing their shifts; doing freelance work to have more flexibility; or even postponing looking for a job in the case of unemployment. These ideas are more common among men who do not have a strong attachment to their jobs or who are disappointed by what the labour market has to offer. For these men the decision to have a child has led to a re-evaluation of their preferences, and at times, confronting significant opportunity costs. This is the case, for instance, of Jorge, who talked to his boss about his working conditions before his partner got pregnant, and was fired as soon as the company knew about his intention to have children:



(8) JORGE: *Yes, yes, yes, I mean, we agreed, after a long holiday period, that after August last year we would start trying to have a child. Then, after the holidays, in September, I had a chat with my boss, in order to... Well, I told him, (he is) a normal person, I don't know, a normal boss, he was not a bastard or a tyrant, and well, I told him that we were trying to have a child and that I needed to know how things would be. And the next week I was sacked, and two weeks later we were pregnant. If it had been my choice we would have gotten pregnant on that same day, everything would have been the same, but with a job. But well, that did not depend on me and I knew she was very excited, very eager, and when I was sacked, for a moment I thought about telling her «let's forget it (having a child) for the time being», but I quickly realised that it would have been a mistake, obviously, because she was dying to get pregnant and I also want her to be happy, and she had been waiting almost a year.*

[Jorge (31 years old) and Natalia (32 years old): both with higher secondary education]

When we examine this group more closely, we find that those who are ready to take a more active father role have a lower or similar employment status (and earnings) to their female partner. For these men, paid work is not considered to be of utmost importance, in some cases because they found themselves on an unexpected career path (i.e. unemployed or working in a sector that they had not initially envisaged), or because they had unconventional occupations within the public sector or simply with flexible working hours. It is also common that these men value and praise the importance of their female partner's work.

Some men, for instance, express weak work-oriented values and prefer to be the primary caregivers of the child during the first year, rather than spending money for other people to take care of their child. For one man, paid work is described as simply instrumental in order to pursue other activities. One man (a civil servant) sees his work as a dead-end job and does not think that a reduction in work time will damage his career ambitions, which depend on him passing official exams («oposiciones»). In another case, the man plans to take part of the maternity leave and become the main caregiver so that his wife can concentrate on her demanding career. This type of discourse is not limited to fathers with

unappealing jobs. For instance, Romero, who works in the public sector and is highly educated, as is his partner, has been a latecomer to fatherhood (he is 44), and now perceives his job to be instrumental, anticipating strong changes to his working life, such as taking 15 days parental leave, annual holidays and then reducing his workday by a third during the first year. He also complained of not having the same status as mothers, as the midwife discouraged him to attend childbirth preparation courses:

(9) *INTERVIEWER: Apart from attending the childbirth classes...*

*ROMERO: [I attended] the first and the last class; Antonia (the midwife) didn't allow us to attend any other classes.*

*INTERVIEWER: she didn't let you go to more classes?*

*ROMERO: No, no, not the boys. She told us, we went to the first one and she told us, you know how she is: «well, boys, I don't want to see you here till the last day» (he laughs). We stayed there like saying «well, I don't know» (laughs); if that's the way it is... Well, mmm, I am getting ready; I'm trying to help her, although the truth is that I am not helping her much with the breathing techniques, breathing for the birth.*

[Romero (44 years old) and Olga (37 years old), both with university degrees]

Again, men's intention to become a primary caregiver is not necessarily related to which partner took the initiative in fertility decisions. This is illustrated by Federico (worker in public sector), who initially felt very insecure and too immature for fatherhood, but is now carefully planning to become a participating father. He complains about the difficulties in finding good role models in the media of fatherhood.<sup>(5)</sup> He is married to a highly educated woman with strong work-oriented values, while he feels more relaxed about his career ambitions. He enjoys a privileged work schedule (from 8:00 till 15:00) and anticipates spending every afternoon with his daughter. For him, being a fulfilled as a father means doing everything related to childcare:

(5) Studies conducted in France and the UK have also identified this general complaint about the way parenting guides cast fathers in a clearly secondary role to mothers, as parents and carers, while emphasizing men's natural lack in parental skills which places them in «uncharted territory» (Gregory and Milner, 2011).

(10) *FEDERICO: Which care activities? Well, I think that, for me, for me to feel fulfilled as a father I would like to take part in every thing she needs. I mean from changing diapers, to bathing her, or going for a walk with her, or going to the doctor, I mean, I would like to be involved in everything she needs and, and in a selfish way, I mean because at the end of the day, she is, mmm, your daughter, and I would like to participate in everything, but how many hours (puffs), I don't know, I don't know how much it could take.*

*(...) We have not focused on that, but it's like, it's the mothers' world, and we are there to help afterwards and I don't want to help, I want to, I want to be a father.*

*(...) Yes, I am very angry with the magazines, all of them. «Being parents today», at least this one includes you in the title, but they are all made for the mothers, except for one article or two I have read, it is only about how the mother reacts, how she feels, how, I don't know, how you have to make the father feel whatever, and the father, it is as if he doesn't exist.*

[Federico (30 years old), higher secondary education. Fabiola (30 years old): university degree]

In any case, we only find a minority of men who really plan for a shared parenthood. Few fathers expect to take time off from work during the first months after childbirth, and they anticipate that the mother will be the main caregiver. This is, in many cases, related to breastfeeding. Women are culturally identified as the centre of nurturing and care, and fathers join in this endeavour by becoming collaborative partners. Many mention dilemmas when considering whether to apply for the 15 days of leave. They know it is their right, but they think their employer will not like it. They describe their decision as «daring», or as a certain deviation from unwritten rules. By mentioning the dilemma, they are acknowledging the possible opportunity costs related to their work place or to their career. In some cases, men decide not to take the 15 days leave. This decision is sometimes justified by fear of the consequences, and so for these men there is a clear perception of opportunity costs. But often the justification is more related to the fathers' perception of being irreplaceable at work. In these cases there is a strong link between the individual's gender identity and the economic activity. This occurs not only among men in highly

skilled jobs, but also among those with more menial occupations. This is the case, for instance, of Samuel. He is a work-oriented and highly qualified man doing very well in his job, married to an equally qualified wife. He explicitly mentions the need to invest «quality time» in childcare – although, his partner was extremely sceptical about his presumed participation. Their conversation reflects disagreement over priorities and the perceived time required to take proper care of the child:

(11) *SAMUEL: Well, uh, we think, I think we will have the situation where we will have to use, we will have to hire someone to live here with us, to help us with the housework or to do all the housework, and we will try to compact our working day to get home earlier, not a lot earlier, but maybe significantly earlier. And also try to, well, to be more flexible at some points with the baby, to be able to work from home if everything stays as it is now, and well, the free time, dedicating a lot of that to the child.*

(...)

*Of course, I think that the more (time) you dedicate, the better, no doubt, but, taking that as given, that the more time the better, for the child and for the relationship, we also have to see the quality of the time that you devote, and so, I will try to devote more time and for that to be quality time, and so, well, I will try for quality to mean being there at the important moments or for the most fundamental moments.*

*INTERVIEWER: So you are not even thinking about cutting your working hours? It is not possible for you or you don't even consider that?*

*SAMUEL: No.*

*SARA: You're not even considering it.*

*SAMUEL: I can't even consider it, dear (puffs). It is, tsch, you know that already...*

*SARA: Yes, but...*

*SAMUEL: The thing is that, uh, being freelance has these problems, so no, I don't think it will be feasible for me to cut my working hours, I think it is feasible to, what I was telling you, to have some flexibility, or to be able to work from home more often when it is necessary, and so on, and of course, if I need to take one afternoon free or the whole day to see the child, I'll do that,*

*you know? But I don't think it is feasible to cut my working hours in an official way.*

*SARA: Because you would not manage to do it anyway.*

*SAMUEL: It would be very, very complicated.*

[Samuel (38 years old) and Sara (37 years old): both with university degrees]

Future fathers reveal an ambivalent attitude towards the changes that fatherhood will bring to their lives. In general, fathers imagine life with a child of an older age, which would permit a high level of interaction. They have more or less defined ideas about the activities they would like to undertake with the child at those ages, incorporating children into their own preferred leisure activities. For those fathers who will not take an active role during weekdays, the leisure activities on weekends are especially important. However, when asked to express their ideas about daily life with a baby, some men mention that having children means losing freedom, limiting their capacity to have time for themselves. These men argue that they have postponed childbearing because they wanted to devote time to other activities, including leisure.

*(12) BERNARDO: yes, deep inside it was clear for me, but there was a bit of laziness, which happens to everyone, I guess. If you think «no, I'll have to stop travelling, I won't be able to go out on the weekends». And well, I've done that for many years and it's no big deal if I do something different now.*

[Bernardo (33 years old): university degree. Beatriz (28 years old): higher secondary education]

In other cases men do not refer to specific activities, but they mention that having children means a change of life stage: from one centred around leisure and enjoyment to a stage more focused on the family. Thus, even if they have not explicitly anticipated the changes that will take place in their lives, they do believe in a vague way that having a child will alter their leisure patterns. This is well-illustrated by Gerardo:

*(13) GERARDO: «Yes, yes, yes, it was clear for me, yes, I mean that, I think this happens in stages, as you get older, and I think that, well, I'm 32 and that stage has ended for me, the stage of going out, enjoying so much, well not enjoying so much, but changing, and now, well, I'm looking forward to having children.»*

[Gerardo (32 years old): higher secondary education. Gabriela (27 years old): higher secondary education]

Men try to compensate for less leisure time by negotiating with their partners, or by anticipating care agreements so that one partner can have time for their desired leisure activities while the other partner takes care of the child. Their reflections about the need for such pacts reveals that future fathers are aware of the changes that childbearing will bring to their leisure time.

In short, most men talked about their future fatherhood as something that would be exciting and rewarding. Their idea of fatherhood is frequently based on their own experiences and those of their peers. Thus, expectant fathers hope to transmit the positive values learnt in their own family and improve on what they consider to be deficits, such as the lack of time spent with the father or reproducing outdated parenting styles. We do find evidence of an active fatherhood in our sample, but probably more in theory than in real practice. While few of the men interviewed adhered to the stereotype of an emotionally distant male-breadwinner figure, very few challenged traditional roles by anticipating important work adjustments.

Why do so few men anticipate in active parenthood? Beyond the persistence of traditional gender roles, institutional constraints clearly emerge as a barrier to alternative family models. First, the limited rights of fathers (work-family balance) provided within the national institutional framework are partly responsible for the slow pace of change amongst expectant parents. In our sample, for instance, some of the men had doubts about their actual entitlement to the 15 days of parental leave, while for women the 16 weeks of maternity leave is normally taken for granted, which is symptomatic of the traditional work culture. In addition, the design of the Spanish parental leave system (i.e., 16 weeks for the mother and 2 weeks for the father) actually institutionalises initial gender imbalances in childcare and hinders new parenting practices (Lapuerta, Baizán & González, 2011); a pattern that is later reinforced by maternal gate-keeping practices.

Secondly, the current economic crisis and attendant job insecurity limit the bargaining power of fathers in the workplace, as they fear employer

reprisals (if, for example, they ask for part-time parental leave), and are compelled to accept their working conditions in order to keep their job. Expectant fathers frequently mention that a 7 am to 3 pm working day is a difficult if not an impossible ideal; one year parental leave is perceived to be utopian, and being able to regularly take and pick up the child at nursery school, or even the whole family – the couple and the child – being together in the afternoon, is considered a privilege. Most unemployed men plan an active fatherhood, their unexpected unemployment status in some cases being interpreted as a unique opportunity to spend time with their child.

Expectant mothers face similar if not worse constraints and uncertainties in the labour market, but unlike their male partners, women cannot conceal their impending motherhood from their employer; thus, they often adopt different priorities or strategies to care for their child in the first year.

Differences in participation in childcare among first time parents have several implications for their relationship with their partner and with their child. Tanaka and Waldfogel (2007), for instance, examined the effects of leave-taking and work hours on fathers' involvement using data from the first wave of the Millennium Cohort Study, which covers a large birth cohort of children in the UK from age 8 to 12 months. This study concluded that taking leave and working shorter hours were related to fathers being more involved with the baby and young children. According to this study, shared parenthood can not only encourage gender equality both in the couple and the labour market, as it sends the signal that both members are equally devoted to care, but it also strengthens the relationship between parents and children.

## 6.6. Conclusions

A new fatherhood model is emerging in Western countries, and this is likely to affect the decision to have children. According to our sample, regardless of who takes the initiative to have the first child, men anticipate very different strategies for taking care of the newborn child depending on their gender values, work environment (work time), job prospects (the

centrality of employment) and their partners' job situation. Working conditions and the rigidities of the labour market seem to play a very important role in fathers' decisions, but these constraints are often considered in a gendered way: women are subject to the same rigidities but are more prepared to take time off from work, even if it can be damaging to their careers. There are some exceptions to this rule, given that men in some couples are willing to be more involved in parenting tasks so that their partners can focus on their careers, thus reversing traditional roles.

The rejection, at least ideally, of the male breadwinner model as an outdated and negative form of fathering is sometimes rooted in men's own childhood experiences. In fact, they usually express a critical view of their parents' rigid gender based division of labour, which in many cases entailed an absent father and a full-time mother with whom they established a closer relationship. But, as mentioned, this propensity towards an active fatherhood usually remains an ideal, at least in the fathers' narratives. Most men appear to be excited about the arrival of their first child and say they want to be involved; yet this is understood in very different ways. Many men are resigned to playing the role of a «weekend father», a situation that is justified mostly in terms of their job situation. Even if men argue in favour of an egalitarian share of childcare, it is often the case, that women plan to make difficult adjustments in their jobs during the first year in order to have a long period of time with their child, while men only plan moderate adjustments, such as trying to get home earlier or perhaps taking time off when needed. Many reasons are given to explain why men and women give different meanings to the idea of shared parenthood. Women feel more entitled to be temporarily absent from work, since this is perceived to be normal for women, particularly because of breastfeeding. As a consequence, many men feel entitled to continue with the same work routines after the birth of their child, only introducing small adjustments to the organization of their working hours.

As a result, these men's effort to be involved in childcare may seem minor compared to the adjustments that women make, but even this is a great change from the conventional father. The effort required to be a participating father is often measured against the very low standards in their family of origin. Therefore, even when little time is spent with the



child, this may be perceived as a significant change. Women, in contrast, face very high standards regarding motherhood, as measured by their own experiences with their mothers. For them, being the main caregiver in the first months after birth – thanks to the four months of maternity leave, the time off for breastfeeding and an additional month for holidays – is frequently perceived as «the minimum package».

In short, shared parenthood appears to be more an illusion than a reality in our sample, at least in the first years of the child's life; although, we have found a small group of fathers who plan to reverse traditional roles and be active in childcare. The main implication of the anticipated differences in the time that mothers and fathers will spend with their child is that this represents the foundation of future gender inequalities in the partnership. Attitudes in favour of a more involved fatherhood have gained popularity, but the institutional context and the hardship of the current economic crisis hinder most attempts at innovative and egalitarian practices. Even if fathers show some willingness to change, most of them will not be able to spend much time with their children during the first year, and they will find justifications based on biological differences for the adoption of a traditional division of roles in job and care activities. The economic crisis, despite all its negatives aspects, also introduces certain positive elements in the construction of fatherhood, as some men begin to look for other sources of fulfilment outside of paid work and may contest unfriendly work environments. To conclude, more research needs to be done to understand the potential impact of future family policies on fathers' behaviour in terms of involvement in childcare and fertility plans. This is an essential step toward establishing policies that will support both men and women's work-family plans and involvement.

## VII. Public policies, gender values and fertility across European countries

---

Pau Baizán, Bruno Arpino and Carlos Eric Delclòs

### 7.1. Introduction

As discussed in Chapter 1, the shift from a negative to a positive correlation between female employment and fertility has triggered much debate. A broadly shared explanation for this is that societies with high female employment levels have also introduced measures that help reconcile motherhood with careers (Bernhard, 1993; Brewster and Rindfuss 2000).

Research has highlighted two dimensions, namely the organization of work and the provision of childcare. Gender relations are also crucial since they influence the degree to which mothers working and fathers being involved in childcare and housework are accepted (Lewis 1998; Hakim, 2000; Gershuny 2000). The debate on work-family reconciliation has perhaps been overly focused on women's roles while neglecting men's.

In this chapter our focus is on the fertility effects of institutions and policy. An extensive literature has studied the effect of changes in *family* policies on fertility (see Gauthier, 2007 for a review) and the results are rather ambiguous. On balance, only a weak positive relation between reproductive behavior and a range of policies has been found. An initial contribution of this chapter is to broaden the institutional and policy context and consider several dimensions of government intervention related to care services, labour market conditions, income transfers and taxation.

We also consider the influence of gender values, for two reasons. First, gender equity dynamics could be associated with policy changes and, secondly, the two may interact. Bonoli (2008) argues that family-friendly policies cannot be expected to impact positively on fertility in a traditional

society. We therefore examine whether the effects of policies differ according to the degree of gender egalitarianism prevalent in the society.

A second contribution of this chapter is to use individual-level data to examine how policy effects vary according to individual characteristics. This, we believe, may especially be the case across levels of education. Some policies (e.g., leaves, formal childcare) can promote gender equality by reducing the opportunity costs of children. Other policies, like child benefits, may only help reduce the direct costs of children.

By examining fertility effects across women's education level we try to bridge the gap between macro-level studies that show a positive relationship between labour force participation and fertility and micro-level studies that typically find a negative relationship between the two (Brewster and Rindfuss 2000; Ahn and Mira 2002).

The macro level changes have generally been attributed to institutional and policy changes. At the micro level, fertility is usually inversely related to education. But in some countries, like Sweden, highly educated women now exhibit higher, or at least not lower, fertility than the less educated (Andersson, 2000). The same pattern may be unfolding in a number of countries (Kravdal and Rindfuss 2008; Shang and Weingberg, 2013).

## 7.2. The policy context of fertility

Comparative macro-level analyses based on aggregate data suggest a positive correlation between Total Fertility Rate (TFR) and public spending on family policies and childcare availability (e.g., Finch and Bradshaw 2003; Bonoli 2008). But a number of studies find weak or even contradictory effects (Castles 2003; Gauthier 2007; Hoem 2008).

Studies using micro-level data also provide mixed evidence. Rindfuss et al (2007) find that childcare services have a positive effect on the timing of first births in Norway; Baizán (2009) finds that childcare enrollment has a substantial effect on first births as well as higher order births in Spain. However, a study by Rønsen (2004) reports no statistically significant impact of childcare costs and its availability. Aassve et al. (2006) find that child benefits also have an effect on birth timing, but they do not find clear

evidence regarding their effect on overall fertility levels. Kalwij (2010) analyzes the impact of changes in expenditures on family allowances, maternity- and parental-leave benefits, and childcare subsidies on fertility. He finds no significant effects of family allowances, but maternity and parental leaves as well as childcare provision cause women to have children earlier in life and to have more children. In her review, Anne Gauthier (2007) highlights that in the majority of these studies if a significant effect of policies on fertility is found, it is related more to the timing of fertility, and the effects are usually small. Moreover, especially in the case of cash benefits, the effects are stronger for higher order births.

This mixed evidence can be partially explained by methodological problems (see Neyer and Andersson, 2008). Several authors highlight the possibility that policies may be endogenous to fertility in the sense that the implementation of any given policy can be a response to an actual or anticipated trend in birth behavior (Hoem 2008). For example, while it is commonly assumed that public childcare influences childbearing, it may instead be the case that in societies with higher levels of fertility there is more pressure to expand childcare. On the other hand, policymakers may respond to declining fertility by introducing pro-natal reforms.

Policy changes over time and variations across countries may also reflect other underlying phenomena, such as an adaptation to changing gender relations. Esping-Andersen and Billari (2012) depict the gender equality revolution as a process of diffusion of new norms. A recovery of fertility is expected when gender equity becomes dominant. The starting point is triggered by the rise in women's education. Some institutional characteristics of societies (such as trust and stratification) may speed up or hinder that process.

McDonald (2004) explains the very low levels of fertility existing in many advanced societies as the result of differences in the degree of gender equity embedded in different institutional spheres. He argues that gender equity in both societal institutions and in the family is necessary for fertility to rise – otherwise the costs of fertility fall disproportionately on women. Arpino and Tavares (2013) provide empirical evidence that where gender equity only prevails in individual-oriented institutions, fertility is likely to remain low.

Along these lines, Myrskylä et al. (2011) show that gender equality is a necessary condition for the relationship between fertility and high development to shift from negative to positive. This is consistent with the idea that some countries are heading towards a new equilibrium because they have gradually broken free from the fertility constraints associated with the growth of female labour market participation.

During this transition in gender roles, governments can implement policies to promote gender equality by making it easier for parents (especially mothers) to combine work and family responsibilities. This, in turn, helps households have the number of children they desire at the time of their choosing (Thévenon and Luci 2012). The evolution of gender norms seems to be closely related to variations in the institutional context of support to working parents (Anxo et al. 2007): for example, countries with greater childcare coverage tend to have higher maternal labour force participation rates and less rigid gender roles. We must underline the role of institutional arrangements, not only in creating new opportunity structures for making family formation decisions, but also in influencing family values in a dynamic way (Bowles, 1998; Jakee and Sun, 2001).

Family policies, gender norms and labour market conditions are interrelated, and this has to be taken into account when studying the relationship between policies and fertility. It is therefore not surprising that past studies find contradictory results. The differences in welfare regimes (Esping-Andersen 1999, 2009) capture how different societies provide family care. Generally speaking the Southern and Eastern European countries show the lowest levels of de-familialization, and Denmark the highest (Saraceno 2010). Even if we focus exclusively on family policies, many different «packages» can be adopted by each country. But focusing only on a single aspect of the policy mix can be misleading. Thévenon (2011) employs principal component analysis to identify clusters of countries with broadly comparable family policy packages.

Pascall and Lewis (2004) identify five components – paid work, care, income, time and voice – within which gender equity policies must be constructed. The «care regimes» identified by Bettio and Plantenga (2004) partially overlap with the typology of policy regimes initially proposed by Esping-Andersen (1990).

Welfare states vary considerably in terms of their pace in introducing policies such as parental leaves, public childcare, services for the elderly, and family allowances. According to Pfau-Effinger, national differences in family policies can largely be explained by the fact that in each welfare state two types of welfare arrangements overlap. On the one hand, there are policies directed at family and gender relations, and, on the other, those concerning social security. Both vary in different ways in West European welfare states (Pfau-Effinger, 2004). This author proposes five ideal-typical family models: the family economy model, the housewife model; the (female) part-time caring model, the dual breadwinner/state care model, and the dual breadwinner/dual career model (Pfau-Effinger 2004). Crompton (1999) adds a dual-earner/marketized-caregiver model, which seems to be the dominant model in the US. Gender ideologies tend to be related to state welfare policy packages (Gornick and Meyers, 2003).

In some countries these policy models have been substantially modified in the last decade. Germany has greatly expanded childcare provision and has implemented a new parental leave policy implying a shorter period of absence from work for women and the encouragement of paternal child care. These steps constitute a break with past practice, such as half-day school timetables and a male breadwinner oriented tax system (Bujard, 2011). Also in Spain several regions have significantly increased the availability of childcare, and a (short) father's leave has been introduced.

### **Policy changes and the unfolding of the gender transition**

In recent decades, then, societies have moved in the direction of more gender equality. Cross-national variations are substantial, but it is possible to summarize overall policy trends in four stages, starting from the situation in the 1960s when all countries were dominated by the male breadwinner model. In the first stage of the gender transition, women enter the labour market, but there is no institutional adaptation to women's participation. This often leads to a «double shift» scenario with declining fertility.

In the second stage, there is some institutional adaptation to women's new roles. This may include the promotion of part-time jobs, the introduction of parental leaves and the expansion of formal childcare provision. At this stage men's roles change only marginally (Kan, Sullivan and Gershuny, 2011).

In the third stage, institutional adaptation begins to focus more on men's roles, including the promotion of fathers' leaves or adapting the work environment to the growing caring role of men – such as shorter working hours or more flexible time schedules. Men take an increasing responsibility for care and domestic work and their labour market involvement starts to change, for instance by increasing their use of paternity leave.

The fourth stage would be a transition to a fully egalitarian model, in which both men and women are workers and carers to a similar extent (the «dual earner/dual caregiver» society). Of course no society has reached this stage yet. Increasing rates of female employment have narrowed the gender gap in labour force participation, but gender differences persist in such areas as career breaks, occupational segregation, working hours and pay. And although men's engagement in domestic work and caregiving has increased in many countries, nowhere does it match women's influx into paid employment.

In reality, the 4 stages overlap, and the timing of changes is likely to be particularly important for fertility outcomes. If change comes late but very rapidly, as in the Spanish case, this might provoke very low fertility. If institutions begin to adapt early, as in Scandinavia, then a higher fertility level is easier to sustain.

Differences across welfare regimes also reflect variations in the way countries have experienced the gender transition. Liberal and social democratic regimes have promoted part-time employment and external childcare; in more familialistic countries, we observe greater resistance to change (less labour market flexibility, less availability of formal childcare, etc). Some countries, notably France and Belgium, are in an intermediate position and have fairly well-developed childcare provisions.

### **Differential impact of policies**

We expect that the effect of gender equalizing policies will depend on the degree to which there is normative receptivity. It is, for example, widely documented that higher educated couples are far more disposed towards gender egalitarianism (Coltrane 2000; Hook 2010). Less educated women not only face lower opportunity costs of interrupting careers but are also

more likely to find themselves in precarious labour market situations, making conventional gender roles appear more attractive.

We would therefore expect that welfare states with a strong gender egalitarian profile should help narrow the fertility gap between higher and lower educated women. More specifically, we hypothesize the following:

- a) The availability of formal childcare should have a stronger positive effect on the fertility of high educated women than on that of low educated women, to the extent that their involvement in paid work is greater and because they face higher opportunity costs of childbearing.
- b) Well-paid leaves have a positive effect on fertility, especially for higher educated women. A higher replacement rate (e.g., 100 per cent instead of 80 per cent of the salary) means a reduction of the opportunity cost of childbearing and may therefore have a positive effect on fertility (Gauthier and Hatzius, 1997). This effect is expected to be stronger for highly educated women who face higher opportunity costs.
- c) Policies that promote men's involvement in childcare and domestic work have a positive effect on the fertility of highly educated couples. A large number of standard working hours for men can be a barrier to their involvement. We therefore expect that this indicator affects fertility negatively.
- d) The availability of part-time work facilitates reconciliation and should therefore have a positive effect on fertility. In the early stages of the gender transition, a large fraction of women may prefer this arrangement (Hakim, 2000). However, part-time work also favors a gender specialization model in which women are secondary earners and main caregivers, which may not be very attractive to highly educated women. Furthermore, part-time work characteristics differ considerably between countries. In Southern Europe it is often associated with precarious working conditions, while in the Nordic countries and the Netherlands it is more compatible with career jobs, potentially enhancing fertility of relatively higher educated women. These contradictory effects make it difficult to predict the effects of this variable.
- e) Child benefits and tax deductions can be designed in a way that does not create disincentives for women's labour force participation



(Gustavsson and Stafford 1994). However, they often reflect the logic of the conventional male breadwinner model (Orloff, 2002). On the whole, these kinds of policies can be hypothesized to have a higher positive impact on fertility levels among low educated women.

### **7.3. Methods, data and descriptive statistics**

We utilize the EU-SILC longitudinal data for the years 2004 to 2009 for 16 Western and Southern European countries for which we also have contextual information. We restrict our analyses to women aged 36 to 44 years old, yielding a working sample of 69,213 women (the number of women per country ranges from 2,326 to 13,871). The dependent variable used in all analyses is the total number of own children living in the same household as the mother at the time of the interview. This variable approximates the completed fertility of women.

#### **Independent variables**

The explanatory variables include, first, the respondent's age at the time of the survey and the highest educational level attained. We have coded education into three categories: some secondary education or less; completed secondary and/or post-secondary education (reference category), and university studies.

We complement the micro-level data with country-level data on policies, labour market conditions and values. We include data on family benefits, leaves and childcare. Data for the first two are taken from the Comparative Family Policy Database (see Gauthier 2011 for details on the indicators and sources of data), while data on childcare enrolment are obtained from Eurostat, which aggregates micro-level data from the EU-SILC. For most indicators data are available until recent years. We use contextual information reflecting the situation in the mid 1990s (1992-98) when, on average, our sample of women had their children. When data are not available for this period, we consider the oldest data available. In any case, variations over time on country-specific indicators are very limited.

Regarding family benefits, we include the following indicators:

- *Monthly family allowances* in US dollars (PPP adjusted) for the second child. We also tested for allowances for the first and third child but results were very similar to those reported for the second child.
- Value of *tax and benefit transfers* in US dollars (PPP adjusted) to a two-child family (one-earner-two-parent two-child families).

Measuring leave benefits is difficult. There are important cross-country variations regarding overall length, level of compensation and eligibility criteria of maternity and parental leave (Ray et al. 2010; Wall, 2007). Saraceno and Keck (2009) note that some countries, like France, offer very long and generous leaves (see also Table 1). Others, like Spain, offer quite long leaves but earnings-compensation is of limited duration. Still others, such as Greece, offer leaves that are comparatively short. Moreover, while almost all developed countries ensure maternity leave, some countries also offer parental and/or child-care leaves, i.e., optional leave periods available after the period covered by the maternity leave scheme and usually not only for mothers. Similarly to Gornick and Meyers (2003), our indicator takes into account these three types of leave, their duration and level of compensation. In particular, we consider:

- The sum of weeks of *maternity, paternity and child-care leave* weighted by the level of cash benefits paid during each type of leave. Like Gauthier (2011), this is measured as the percent of female wages in manufacturing. The indicator can be interpreted as the total equivalent number of leave weeks with a compensation rate of 100% of average female earnings.

To measure childcare availability we would have preferred data on supply of childcare places, but such data are not easily available. Instead our indicator is:

- The percent of *children aged 0-2 enrolled in formal childcare* in 2005. Despite the fact that this indicator has some limitations (for a discussion see Saraceno and Keck, 2009), it is widely used in the literature.

To capture labour market conditions, we include two indicators:

- Standard number of *working hours per week for men*, year 2000. Percentage of *women working part-time*, year 2000.

Finally, in order to measure the spread of gender egalitarian values we utilize (as in Chapter 5) data from the World Values Survey and the European Values Study. We include data from the oldest wave for which our indicator is available (1999). Our measure of gender equality is based on a single item, exactly as in Chapter 5: «When jobs are scarce, men should have more right to a job than women». The questionnaire offers three possible answers: 1 ‘agree’, 2 ‘disagree’ and 3 ‘neither’. We recode the variable into a binary response: 0 is ‘agree’ or ‘neither’ and 1 is ‘disagree’ and calculate the percentage at the country level. From now on, we will refer to this measure as the gender equality indicator.

Table 1 shows the values of the macro-level independent variables described above and the average level of TFR for the period 1992-1998. Countries are ranked by decreasing level of (average) TFR.

TABLE 7.1

### TFR and macro indicators by country

COUNTRY	TFR	FAMILY ALLOWANCES	TAX AND BENEFITS TRANSFERS	WEIGHTED LEAVE WEEKS	CHILDCARE ENROLLMENT	MEN WORKING HOURS	%WOMEN ON PART- TIME	GENDER EGALITARIAN VALUES
Ireland	1.91	32.89	2,357.33	9.80	20.00	41.56	32.77	74.50
Norway	1.86	100.22	3,498.30	41.19	33.00	37.99	33.37	84.85
Finland	1.79	100.01	2,513.59	79.01	27.00	40.09	14.27	87.07
Sweden	1.77	74.14	1,753.46	49.95	53.00	39.11	20.29	94.95
Denmark	1.76	65.05	3,902.45	32.23	73.00	38.53	21.60	91.60
United Kingdom	1.74	54.51	2,044.02	7.79	29.00	42.79	38.73	73.17
France	1.71	110.93	2,424.82	76.17	32.00	38.92	24.02	72.65
Luxembourg	1.70	150.89	6,274.37	42.00	22.00	40.83	28.19	73.80
Belgium	1.59	128.72	5,934.14	24.17	42.00	40.85	34.29	68.55
Netherlands	1.57	79.50	2,974.99	15.43	40.00	36.43	59.09	81.10
Portugal	1.47	21.21	918.31	13.53	30.00	41.26	8.59	68.40
Austria	1.44	98.54	3,674.28	49.64	4.00	40.62	27.11	61.85
Greece	1.33	14.56	2,049.72	7.79	7.00	44.99	10.60	80.10
Germany	1.30	79.57	4,676.07	39.71	16.00	40.60	35.55	73.03
Italy	1.24	79.61	2,223.06	25.00	25.00	41.36	24.59	65.00
Spain	1.21	24.55	1,152.96	14.86	39.00	41.82	16.56	75.90
<b>Mean</b>	<b>1.59</b>	<b>75.93</b>	<b>3,023.24</b>	<b>33.02</b>	<b>31.15</b>	<b>40.65</b>	<b>25.53</b>	<b>75.27</b>

Note: for TFR, family allowances, tax and benefit transfers and weighted leave weeks we report the average value for the period 1992-1998. For the other variables data refer to a specific year (the closest available to 1998): 2000 for Childcare enrollment, 2005 for Men working hours and Women share part-time and 1999 for Gender egalitarian values.

One can see how countries tend to cluster. The Northern European countries, with the highest fertility levels, score high on all policy-related domains and, in particular, with regard to childcare enrollment and gender egalitarian values. Other countries are characterized by high values on only one indicator. For example, Luxembourg and Belgium are characterized by generous family allowances and transfers, while the Netherlands has the highest share of women in part-time jobs.

At the low end of the TFR distribution we find Southern Europe, plus Austria and Germany. They are characterized by low levels of gender equality and unfavorable policy and labour market contexts. Interestingly, Italy shows relatively high levels of public spending on family allowances but low levels of childcare enrollment, long working hours, low part-time rates, and also a low score on the gender equality index. Spain performs poorly on all family benefit and labour market indicators, but scores relatively high in terms of childcare enrollment.

## Methods

Since our dependent variable is a count variable, we employ Poisson regression models (Cameron and Trivedi, 1998) to estimate the association between contextual variables and fertility.<sup>(1)</sup> We use multi-level random effects models to take into account the non-independence of observations of individuals living in the same country.

### 7.4. Interaction between education, gender equality and policies

Table 7.2 presents the results of the Poisson multilevel models predicting the number of children a woman has at ages 36-44. Models 1 to 8 show the main effects of several contextual variables, considered one by one, taking into account the effects of women's age and education. As can be seen, the effect of education is negative since higher educated women have fewer children. The estimated variance of the country-level random effect (last row of Table 2) is statistically significant in all models, meaning that there is substantial variation across countries in the average number of children.

(1) We use the Vuong test to check for the presence of zero-inflation. Since, the test was rejected for each considered model specification, we employed the poisson model.

TABLE 7.2

### Results of the regression models that estimate completed fertility (main effects of the variables)

MODEL	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Educational level								
Low	0.094***	0.094***	0.094***	0.094***	0.094***	0.094***	0.094***	0.094***
Middle (ref.)								
High	-0.041***	-0.041***	-0.041***	-0.040***	-0.041***	-0.040***	-0.041***	-0.041***
Family allowances		-0.002**						
Tax and benefits trans.			-0.000**					
Weighted leave weeks				0.002				
Child care enrollment					0.003			
Men working hours						-0.029*		
Women share part-time							0.002	
Gender egalitarian values								0.009***
Constant	-3.163***	-3.143***	-3.137***	-3.218***	-3.244***	-2.003***	-3.208***	-3.879***
<b>Var (country)</b>	<b>0.013***</b>	<b>0.009***</b>	<b>0.008***</b>	<b>0.012***</b>	<b>0.011***</b>	<b>0.010***</b>	<b>0.012***</b>	<b>0.006***</b>

Note: + p<0.10 \* p<0.05 \*\* p<0.01 \*\*\* p<0.001.

We can also observe a negative effect for family allowances for the second child on completed fertility. This also holds for family allowances for first and third births (not shown). When we introduce the interaction term between family allowance for the second child and mother's education we notice that the effect differs by levels of education: for all education groups the effect is negative, but for low educated women the effect is weaker (Table 3, Model 1).<sup>(2)</sup> In fact, the effect of family allowance for the reference category (medium level of education) is negative (-0.00182) and statistically significant. The interaction with low education is positive and statistically significant but lower in magnitude, so that also the effect for low education remains negative. A similar result is obtained using tax and benefit transfers (Table 2, Model 3 and Table 3, Model 2) and allowances directed to second and third births (not shown).

(2) These interaction coefficients are computed without including other contextual variables in the model.

TABLE 7.3

**Results of the regression models that estimate completed fertility, showing the interaction effects of education with the context-level variables**

MODEL	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Educational level							
Low	0.07658***	0.07428***	0.12642***	0.12251***	-0.69959***	0.16258***	0.41312***
Middle							
High	-0.03248***	-0.03146***	-0.04858***	-0.10117***	0.31254*	-0.03429+	-0.25994***
Family allowances							
Low X fa	0.00038***						
High X fa	-0.00070***						
Tax and benefits trans.							
Low X tb		0.00001***					
High X tb		-0.00003***					
Weighted leave weeks							
Low X WI			0.00182				
High X WI			-0.00115**				
Child care enrollment							
Low X ch.care				0.00229			
High X ch.care				-0.00096+			
Men working hours							
Low X m_hhw					-0.03064*		
High X m_hhw					0.01937***		
Women share part-time							
Low X part						0.00249	
High X part						-0.00273***	
Gender egalitarian values							
Low X value							0.00935***
High X value							-0.00435***
Constant	-3.14042***	-3.13490***	-3.22441***	-3.23331***	-1.92308***	-3.23168***	-3.87877***
<b>Var (country)</b>	<b>0.00847***</b>	<b>0.00793***</b>	<b>0.01202***</b>	<b>0.01146***</b>	<b>0.01016***</b>	<b>0.01344***</b>	<b>0.00466***</b>

Note: + p<0.10 \* p<0.05 \*\* p<0.01 \*\*\* p<0.001.

The effect of leaves is not significant in Table 2 (model 4). But when the interaction with education is considered (Table 3 model 3), consistent with expectations, the effect of leaves increases with the level of education. However, the effect for the reference category (0.00182) is not statistically significant while the differential effect of leaves for low educated women is statistically significantly lower than for medium educated women.

A similar pattern is found for childcare. Model 4 in Table 3 shows that the effect of childcare is positive for all education groups. However, again its effect is not statistically significant for medium educated women (0.00229), while the differential negative and positive effects for low and high educated women, respectively, are statistically significant.

Consistent with our expectations is the overall effect of men's working hours. Long hours have a clear negative impact on the number of children (Table 2, Model 6). While men's longer working hours affect fertility negatively for all education groups, the effect is especially strong for tertiary educated women (Table 3, Model 5).

The degree to which women have access to part-time jobs does not appear to have any major effect in general. But, once again, the effect differs across education levels: it is negative only for women with low levels of education.

And what is the influence of gender egalitarian norms in the population? As also found in Chapter 8, the more widespread gender egalitarian attitudes are in a country, the higher fertility is (Table 2, Model 8). And once again, the effect differs sharply by education (Table 3, Model 7). The effect of gender egalitarian attitudes is positive for all education groups but is strongest for women with high education, the education group with the lowest probability of adhering to a traditional family model and the most likely to gain from gender egalitarian attitudes.

Finally, we expected that reconciliation policies would have a stronger effect the more gender equal a society is. Table 4 shows that the only significant interaction between gender egalitarian values and the policy variables is found for family allowances. For low levels of gender equality, the effect of family allowances is positive. As gender equality increases, its effect decreases and in egalitarian societies it actually turns negative.

TABLE 7.4

**Results of the regression models that estimate completed fertility, showing the interaction effects of gender values with the context-level variables**

MODEL	(1)	(2)	(3)	(4)	(5)	(6)
Educational level						
Low	0.09475***	0.09443***	0.09448***	0.09439***	0.09445***	0.09474***
Middle (ref.)						
High	-0.04061***	-0.04074***	-0.04060***	-0.04060***	-0.04061***	-0.04060***
Family allowances	0.10838**					
Gender equality values	0.00757***	0.00780***	0.00804**	0.00997*	-0.05168	0.01400*
Fa X values	-0.00169**					
Tax and benefits tr.		0.00059				
Tb X values		-0.00001+				
Weighted leave weeks			0.00078			
Wl X values			0.00000			
Child care enrollment				-0.00148		
C.care X values				0.00001		
Men working hours					-0.13330	
M_hhw X values					0.00149	
Women part time work						0.01698
Part_time X values						-0.00019
Constant	-3.70347***	-3.73411***	-3.86800***	-3.90222***	1.57039	-4.30871***
<b>Var (country)</b>	<b>0.00306**</b>	<b>0.00432***</b>	<b>0.00590***</b>	<b>0.00359**</b>	<b>0.00616***</b>	<b>0.00550***</b>

Note: + p<0.10 \* p<0.05 \*\* p<0.01 \*\*\* p<0.001.

## 7.5. Conclusions

What is the impact of public policies on fertility? Compared to most analyses, our policy focus has been more comprehensive; in addition, we have not framed the work-family conflict as an exclusively female issue. Moreover, we have also considered the influence of gender norms. Gender equity norms and the policy context may interact, potentially leading to stronger or weaker effects of policies, depending on the prevalence of gender egalitarian values in the population.



We cannot make any strong causal claims, but our findings do suggest that policies which support a gender egalitarian model have a positive effect on fertility. For example, we find that shorter working days for men have a positive effect on fertility. But it is evident that policy effects differ markedly across education levels. Statistically significant interactions were found between education and all policy variables and gender norms. Finally, we find that policies directed at sustaining a traditional role for women, like family allowances, may have a positive effect on fertility only in countries where gender egalitarian values have not yet spread.

# Conclusions

---

Gøsta Esping-Andersen

All advanced nations have experienced a major drop in fertility over the past half century. Admittedly, the decline occurred in the backdrop of unexpectedly high birth rates in the decades that followed the Great Depression and World War Two.

But there are marked differences in how the fertility transition occurred. In one group of countries, the decline was comparably modest and was then followed by a clear and sustained recovery. Canada and the United States and a number of European countries (Britain, France, the Netherlands and the Scandinavian countries) appear to have settled into a stable 2-child fertility equilibrium.

In another group, the decline was far steeper and here we have yet to see any serious recovery. This 'lowest-low' fertility syndrome is evident in the Mediterranean countries, and certainly includes Spain. There were signs of a recovery after 2000. But, as we document in Chapter 2, it proved to be feeble and short-lived. To be sure, there are many other societies that appear locked into a seemingly unbreakable and self-reproducing low fertility equilibrium. Germany has now seen more than 3 decades with a TFR rate around 1.4.

The question that above all has guided this study is: what are the main conditions that must be met for a country to embark on a serious fertility recovery? But this question begs another one: why should we be so concerned about birth rates in the first place?

In the debates that have raged over the past decade, the dominant concern has been with ageing effects of persistent low fertility on the population. And this concern is surely warranted in light of predicted future old-age

dependency ratios and the attendant consequences for long-term economic growth. It is estimated that population ageing will cause the EU's annual GDP growth to be 0.7 percent lower than would otherwise have been the case. Spain is an extreme case; its old-age dependency ratio is scheduled to increase approximately 140 percent by 2050.

In this study we highlight a different concern. We see low fertility as a welfare issue. What does this entail? As we document, it is evident that citizens' child preferences throughout the advanced world converge around the 2+ child-norm. Indeed, this ideal has been extraordinarily stable since the postwar decades and varies very little from nation to nation. The proportion of women (or men) who prefer to remain childless is marginal everywhere. And, yet, we see an often dramatic gap between preferred and realized fertility. Twenty percent of Italian women remain childless – in Spain 12 percent. Thirty percent of Spanish women fail to move beyond the first child. This welfare gap is, in comparison, very small in Scandinavia. Why?

As discussed in Chapter 1, both dominant theories that guide fertility research predict a similar scenario of fertility decline. In Gary Becker's influential economic theory, this is because the opportunity costs of motherhood rise as women attain ever more education and pursue careers. The post-modernist thesis predicts, similarly, an ever weaker preference for children that is driven not by economic concerns but rather by new values that privilege individualism and greater scope for self-realization.

We believe the evidence contradicts both theories head-on. Not only does data on child preferences (and intentions) show remarkable stability and invariance. But the strongest fertility recovery is seen in exactly those cases (like Northern America and Scandinavia) where almost all women work and where one might expect postmodern values to be most advanced. Lowest-low fertility is very much concentrated in more traditional societies with relatively low female employment rates. To paraphrase Livi-Bacci once again, too much family goes together with too few children.

An equally telling piece of evidence lies in the possibility that the educational gradient of fertility is being reversed. This is occurring in

Scandinavia and in the U.S. If so, the credibility of the economic opportunity cost thesis and the postmodernist thesis are further undermined. Women with higher education must obviously face steeper opportunity costs. And one would expect postmodern values to be stronger in this group. We have indeed witnessed a truly spectacular surge in women's educational attainment over the past decades, not least in Spain. Will this further erode fertility? Or, is it the case that education matters less in terms of fertility behavior? This is obviously a central issue, and this is why we dedicated an entire chapter to it.

The sharp contrasts in childbearing across the group of advanced rich nations suggests that some societies harbor conditions that are favorable for a fertility recovery, while others, including Spain, clearly do not. Our aim is to understand what drives the lowest-low fertility syndrome and what conditions might permit a society to revert back to a situation where the welfare gap narrows or disappears altogether. It is for this reason that a comparative research design is *sine qua non*. In all the separate analyses found throughout this book – with the exception of Chapter 6 – we deliberately included at least one nation that represents a clear case of fertility reversal.

### The lessons we have learned

And what have we learned from our research? Those readers who have had the patience to read the entire book will most certainly agree with me that we are not in a position to conclude with any *Eureka!* Our findings have, by and large, added additional support to some of the key arguments presented in the most recent demographic literature. Before I turn to our more concrete conclusions, I think that our chief results point to two major issues in particular: one, the importance of altering gender relations in the direction of more equality – not only within partnerships and families, but also in the public realm; and, two, the conditions that govern labour markets and employment relations appear to be far more important than has, so far, been realized.

Before going into the details I would like to highlight a few new and also highly surprising findings that did emerge from our research. The notion of a common Mediterranean model that is so widely accepted among

contemporary social scientists turns out to be problematic. Firstly, a closer examination reveals that the *pattern* of Spain's lowest-low fertility differs markedly from the Italian. In Spain, as noted, childlessness is a comparably limited occurrence – almost half the rate found in Italy or Germany. In fact, the data examined in Chapter 2 suggests that the primary difficulty that Spanish women face is not maternity per se, but rather progressing beyond the first child.

The second great surprise lies in the evolving pattern of Spanish cohabitation. This emerged very clearly in Chapter 4. Starting basically from zero, co-habitation has increased remarkably over the past two decades – again in sharp contrast to Italy. Not only is it becoming common, but it also appears to converge more with the nature of cohabitation found in Scandinavia: a functional equivalent to marriage. Compared to most other European countries, Spanish cohabiting couples are relatively stable over time and, most interestingly, display fertility behavior quite similar to our Norwegian comparison group – at least as far as 1st births are concerned. As with married Spanish couples, cohabiting couples also have difficulty progressing to higher parities. In any case, these findings underscore once again that the decline of marriage does not automatically imply a decline of fertility.

### **Employment Conditions**

In three of our chapters, the analyses conclude quite clearly that labour market factors play a prominent role in either promoting or hindering childbearing. Spain's persistently high unemployment levels coupled with a pervasive degree of job insecurity, especially among younger workers, emerges as an important barrier to family formation. We found additionally (in Chapter 4) that this effect is especially negative for higher educated women. The logic is quite straightforward: both unemployment and job insecurity postpone the transition from education to stable careers, which, in turn, delays economic independence and the decision to have children. In fact, our findings are very much in line with OECD-based research. As discussed in Chapter 1, the OECD has simulated that if Spain were to boast a school-to-work transition model similar to the Danish, the Spanish TFR could jump to 1.7.

Childbearing has always been closely connected to economic security. Traditionally, this depended primarily on the male breadwinner's status; today, it embraces both partners. But labour market related effects also extend to issues related to job flexibility, a matter of special importance for women who attempt to reconcile careers with motherhood.

Two facets of this issue that we gave particular attention are the role that part-time options play and the potential positive effects of a large public sector. Although in Scandinavia part-time work has changed from being the norm across women's life course to being a convenient bridge between maternity leave and the return to full-time employment, it is still an important vehicle for flexibility and reconciliation. And, as discussed in Chapter 1, Scandinavian research shows that women with strong fertility intentions deliberately favor public sector employment because of its far greater promise of flexibility. Indeed, our empirical findings give support to the thesis that both part-time and public employment availability influence birth rates positively.

The debate on job and working hours flexibility is often overly female biased. This is perhaps less the case in Scandinavia where recent policy has begun to focus also on facilitating a more active paternal care model. The evidence presented in Chapters 6 and 7 suggests that flexibility is indeed also an issue of major importance for fathers' ability to become more actively involved in their children's lives. Indeed, this theme emerged quite prominently from the interviews with Spanish men (in Chapter 6).

## Gender Equality

Our study has very much stressed the growing centrality of gender equalization for fertility decisions. Not surprisingly, this has become perhaps the single most dominant focus of demographic analysis in the last decade. As is now well-understood, there are two facets to gender equalization: relations within the family and egalitarianism embedded in societal institutions. It is only when both have adequately adapted to women's new roles that we should expect genuinely strong fertility effects.

The impact of gender relations on parenthood has been a dominant theme throughout all chapters. In fact, we included a special study

(Chapter 6) dedicated to fatherhood, a much neglected side of the coin. And Chapter 5 tests directly how gender egalitarianism – here identified via values – influences fertility. Here, the evidence points to a double logic. On the one hand, gender egalitarian values need to be strong and broadly diffused for them to have any substantial effect. On the other hand, their distribution matters. Where there are large gaps, either between the sexes or by education level, there will be less fertility. Put differently, it would appear that a return to desired fertility – i.e. closing the welfare gap – requires that gender equality becomes normatively dominant in society.

Here we return to a theme very much emphasized in Chapter 1. In contrast to the ‘less family’ scenario depicted in the postmodernist and Beckerian theories, it is much more likely that low fertility (together with declining marriage rates and couple instability) is a transitory phenomenon, provoked by normative uncertainty. Where a hegemonic normative order prevails, as was the case in the traditional male breadwinner society, we see high fertility rates. It is tempting to believe that this will come to prevail also in a society where gender egalitarianism approaches hegemonic status.

Still, the link between gender equality and fertility is clearly not straightforward or one-directional. In fact, the evidence suggests that there are two distinct pathways to fertility recovery. One, exemplified by the Nordic countries, does appear to be based on greater gender equality. But we witness a different kind of pathway in much of the Anglo-Saxon world – like Britain and Ireland – where gender egalitarianism is not particularly advanced. Indeed, as shown in Chapter 2, what primarily drives these countries’ higher fertility rates is the comparatively very high fertility among low-SES populations (as well as immigrants).

As always, gender relations intersect with social (class) inequalities. As we saw in Chapter 5, core gender egalitarian values have diffused pretty much across all social strata in the Nordic countries. But in other countries, the socio-economic gap is noticeable. What seems to characterize the ‘Anglo’ model is a bi-modality: the low educated enter into motherhood very early and tend to have many children. Teenage pregnancy and lone motherhood are prevalent. Less educated women’s

gender role perceptions tend to conform to traditional motherhood ideals. To illustrate, the employment rate of British lone mothers is around 50 percent, compared to 80+ in Denmark and Sweden. In contrast, in the Anglo model the higher educated not only postpone maternity but also have fewer children. All in all, the patterns of family formation within this group of countries conform very much to the ‘diverging destinies’ notion described by Sarah McLanahan (2004) and Kiernan et al. (2011).

### **Can Policies make a Difference?**

From a policy-making perspective it would obviously be desirable if there existed one clear and undisputed remedy to the fertility malaise. But it is abundantly evident that there is no single ‘smoking gun’ and, therefore, no ready-made magic formula. This does not imply, however, that there is nothing policy makers can do. The conclusions we draw in this study are generally very consistent with an emerging consensus regarding which concrete policies appear to be the most effective in promoting fertility.

In the demographic community it is now widely accepted that societal adaptation to new gender relations is a precondition for a better functioning of families. Legislative reforms are, at first glance, unlikely to influence how wives and husbands, fathers and mothers, interact on a daily basis. Or maybe they are? In a direct way, probably not, but, indirectly they may very well do so.

What are the primary policy challenges? Our results, and the findings in Chapter 7 in particular, highlight a number of priorities. Women’s commitment to education and life-long employment is here to stay, and this means that society needs to adapt. A policy model that continues to adhere to the old male breadwinner logic and traditional familialism will, without doubt, perpetuate the fertility crisis.

A general priority, as emphasized in Chapter 2, is to redefine the nexus between private and collective responsibilities: in a sense, to redistribute the costs of children. Spain is a clear exponent of the Mediterranean model as far as family policy is concerned. It lacks any serious child or family benefit scheme, parental leaves are too short, and access to early



childcare falls far below demand. The 3000 Euro baby-premium that was introduced by the last Socialist government was, to put it bluntly, ill-conceived. It smacked of pro-natalist ideology. It may have had some minor effects, not in terms of restoring fertility levels but most likely only a *tempo-effect*, i.e. inducing women to have a child earlier than foreseen.

The evidence is quite clear that monetary transfers to families do not have any serious effect on fertility levels. Nor is this what child benefits are meant to do in the first place. Instead, as in the Nordic countries (where family benefits are comparatively generous), their role is defined as a public recognition that children are a positive societal good; the associated costs must therefore be shared by all. Whether we have children ourselves, we nevertheless gain if society's children grow up healthy, well-nourished and educated. Do not forget that today's children will be paying for your and my old age pension tomorrow.

There is, however, one area where sharing the costs of children will produce significant fertility gains, namely investing in early childcare. This emerges in all research, including our own, as probably the single most effective policy tool. In the case of Spain, we did see a positive trend towards childcare expansion in the 2000s, but not anywhere close to meeting demand.

Some policy makers do not see the urgency of this, pointing to the availability of family members (the grandmother) or private market solutions. Neither option is likely to solve the problem; since female employment is indeed becoming the norm, the reservoir of grandmother-carers will soon dry up, and the cost of (good quality) private childcare is beyond the reach of the majority of families.

We also hear quite often from policy makers that budgetary constraints simply prohibit any greater expansion of subsidized childcare. But dynamic accounting demonstrates that the initial public outlays will eventually be returned to the exchequer via mothers' enhanced labour supply, life-time earnings and hence tax payments (Esping-Andersen, 2009). There is a good case to be made in favor of defining childcare expenditure as investments rather than as current government consumption.

This last point is even more evident when we take into account that high-quality early childcare has very positive effects on children's cognitive development and, hence, subsequent school performance – a point very much emphasized by Nobel prize winning economist, James Heckman.

A second policy priority area lies in labour market adaptation, as discussed earlier. The institutional mix characteristic of the Spanish labour market is clearly sub-optimal from a fertility point of view. Besides very high unemployment rates, so concentrated among young people, there is too much insecurity and inadequate flexibility with regard to reconciling parenthood and employment. A reform of part-time contracts would appear urgent as would better job protection for working mothers. A feature that is unique to Spain is the excessively long work-day (interrupted by an excessively long lunch break). This practice is a clear example of how institutions remain locked in the old male breadwinner philosophy. Moving towards a Northern European work-day norm would have hugely beneficial effects for parents trying to reconcile work and family life.

Thirdly, parental leave policy needs to be reconsidered. Spain's 4-month maternity leave is very much in line with the practice in many other EU member states. But this does not make it optimal. Although the direct effects of leave schemes on fertility are unclear, their design has very important indirect effects since they are a key ingredient in the broader reconciliation package.

There are two key issues related to their design. Firstly, there are strong arguments in favor of redefining them as *parental leaves*, with built-in incentives for fathers to also interrupt employment. Indeed, we saw (in Chapter 6) that many Spanish fathers lament the lack of ability to care more for their children. And, as we noted, research from Sweden shows that leaves for fathers exert a very positive effect on second births.

The second issue has to do with defining the optimal duration. It is abundantly clear that too long (paid) leaves have adverse effects in terms of women's life-long work attachment. Too short leaves may, paradoxically, produce a similar effect since mothers may find themselves forced to abandon their jobs to care for the child. There exists no clear consensus

as to what constitutes the ideal duration of leaves. Perhaps Denmark (with 9 months) represents an optimal solution considering that basically *all* mothers return to work at the end of their leave. This, we should not forget, is very much facilitated by easy access to (transitory) part-time arrangements in the Danish labour market.

To sum it all up, countries like Spain have a long way to go if they aim to restore fertility to levels that match citizens' aspirations and, coincidentally, also to levels that will ensure against overly rapid population ageing and decline. The currently severe budgetary limitations make it difficult to imagine a major concerted reform program. Under such conditions, where should policy makers begin? A reform of the workday would require no public expenditures, so this is a clear win-win strategy – as would be a reform of part-time contracts. On balance, our findings suggest that childcare expansion must figure prominently on the priority list.

## References

---

- AASSVE, A., F. BILLARI and L. PESSIN (2012): «Trust and family dynamics», Dondena Centre for Research on Family Dynamics Working Paper, 55.
- , F. BILLARI and Z. SPEDER (2006): «Societal transition, policy changes and family formation: evidence from Hungary», *European Journal of Population*, 22(2), 127-152.
- , A. GOISIS and M. SIRONI (2012): «Happiness and childbearing across Europe», *Social Indicators Research*, 108: 65-86.
- ABRIL, P., P. AMIGOT, C. BOTÍA, M. DOMÍNGUEZ, M.J. GONZÁLEZ, T. JURADO, I. LAPUERTA, T. MARTÍN, J. MONFERRER and M. SEIZ (2012): «Decisiones de empleo y cuidado en parejas de dos ingresos en España», DemoSoc Working Paper, 49.
- ADSERA, A. (2004): «Changing fertility rates in developed countries. The impact of labor market institutions», *Journal of Population Economics*, 17, 17-43.
- (2006): «An economic analysis of the gap between desired and actual fertility: the case of Spain», *Review of Economics of the Household*, 4(1), 75-95.
- (2011): «Where are the babies? Labor market conditions and fertility in Europe», *European Journal of Population*, 21(1), 1-32.
- AHN, N., and P. MIRA (2002): «A note on the changing relationship between fertility and female employment rates in developed countries», *Journal of Population Economics*, 15(4), 667-682.
- ALLEN, S., and A. HAWKINS (1999): «Maternal gatekeeping: mothers' beliefs and behaviors that inhibit greater father involvement in family work», *Journal of Marriage and Family*, 61(1), 199-212.
- ANDERSON, A.M. (1996): «Factors influencing the father-infant relationship», *Journal of Family Nursing*, 2(3), 306-324.
- ANDERSSON, G. (2004): «Childbearing after migration: fertility patterns of foreign-born women in Sweden», *International Migration Review*, 38(3), 747-774.

- (2000): «The impact of labour-force participation on childbearing behaviour: pro-cyclical fertility in Sweden during the 1980s and the 1990s», *European Journal of Population*, 16(4), 293-333.
- , J. HOEM and A. DUVANDER (2006): «Social differentials in speed-premium effects in childbearing in Sweden», *Demographic Research*, 14, 51-70.
- , M. RØNSEN, M.L. KNUDSEN, T. LAPPEGÅRD, G. NEYER, K. SKREDE, K. TESCHNER and A. VIKAT (2009): «Cohort fertility patterns in the Nordic countries», *Demographic Research*, 20(14): 313-352.
- ANXO, D., L. FLOOD, L. MENCARINI, A. PAILHÉ, A. SOLAZ and M.L. TANTURRI (2007): «Time allocation between work and family over the life-cycle: a comparative gender analysis of Italy, France, Sweden and the United States», IZA Discussion Paper, 3193, Bonn.
- ARIZA, A., S. DE LA RICA and A. UGIDOS (2005): «The effect of flexibility in working hours on fertility: a comparative analysis of selected European countries», *Public Finance and Management*, 5(1), 110-151.
- ARPINO, B., and L. P. TAVARES (2013): «Fertility and values in Italy and Spain: a look at regional differences within the European context», *Population Review*, 52(1), 62-86.
- AZEVEDO, J. (2011): «WBOPENDATA: Stata module to access World Bank databases», Statistical Software Components S457234, Boston College Department of Economics, 1-38.
- AZMAT, G., M. GÜELL and A. MANNING (2004): «Women looking for work», *Centrepiece*, 9(2), 20-27.
- BAGAVOS, C. (2010): «Education and childlessness: the relationship between educational field, educational level, employment and childlessness among Greek women born in 1955-1959», *Vienna Yearbook of Population Research*, 8, 51-75.
- BAIZÁN, P. (2009): «Regional child care availability and fertility decisions in Spain», *Demographic Research*, 21, 803-842.
- (2005): «The impact of labour market status on second and higher-order births. A comparative study of Denmark, Italy, Spain and United Kingdom», Universitat Pompeu Fabra: DemoSoc Working Paper, 11.
- , A. AASSVE and F. BILLARI (2004): «The interrelationship between cohabitation, marriage and first births in Germany and Sweden», *Population and Environment*, 25, 531-561.

- , A. AASSVE and F. BILLARI (2003): «Cohabitation, marriage and first birth: family formation events in Spain», *European Journal of Population*, 19, 147-169.
- BALBO, N., F.C. BILLARI and M. MILLS (2013): «Fertility in advanced societies: a review of research», *European Journal of Population*, 29, 1-38.
- BEAUJOUAN, E., and A. SOLAZ (2008): «Childbearing after separation: do second unions make up for missing births? Evidence from France», INED Working Paper, 155.
- BECKER, G.S. (1981): *A treatise on the family*, Cambridge, MA: Harvard University Press.
- (1960): «An economic analysis of fertility», in G.S. BECKER (ed.): *Demographic and economic change in developed countries*, Princeton, NJ: Princeton University Press, 209-231.
- and H. LEWIS (1973): «On the interaction between quantity and quality of children», *Journal of Political Economy*, 81, 279-288.
- BEGALL, K., and M. MILLS (2011): «The impact of subjective work control, job strain and work-family conflict on fertility intentions: a European comparison», *European Journal of Population*, 27(4), 433-456.
- BERNARDI, F., and J.I. Martínez-Pastor (2011): «Divorce risk factors and their variation over time in Spain», *Demographic Research*, 24-31, 771-800.
- BERNHARDT, E. (1993): «Fertility and employment», *European Sociological Review*, 9(1), 25-42.
- and F. GOLDSCHIEDER (2006): «Gender equality, parenthood attitudes and first births in Sweden», *Vienna Yearbook of Population Research 2006*, 19-39.
- BERNINGER, I., B. WEISS and M. WAGNER (2011): «On the links between employment, partnership quality, and the intention to have a first child: the case of West Germany», *Demographic Research*, 24(24), 579-610.
- BETTIO, F., and J. PLANTENGA (2004): «Comparing care regimes in Europe», *Feminist Economics*, 10(1), 85-113.
- BILLARI, F.C. (2005): «Partnership, childbearing and parenting: trends of the 1990s», in M. MACURA, A.L. MACDONALD and W. HAUG (eds.): *The new demographic regime: population challenges and policy responses*, Geneva: United Nations, 63-94.
- , M. CASTIGLIONI, T. CASTRO-MARTÍN, F. MICHIELIN and F. ONGARO (2002): «Household and union formation in a Mediterranean fashion: Italy and Spain», in E. KLIJZING and M. CORIJN (eds.): *Dynamics of fertility and*

- partnership in Europe: insights and lessons from comparative research*, Geneva: United Nations, 17-42.
- and H.P. KOHLER (2004): «Patterns of low and very low fertility in Europe», *Population Studies*, 58(2), 161-176.
- , H.P. KOHLER, G. ANDERSSON and H. LUNDSTRÖM (2007): «Approaching the limit: long-term trends in late and very late fertility», *Population and Development Review*, 33(1), 149-170.
- , A.C. LIEFBROER and D. PHILIPPOV (2006): «The postponement of childbearing in Europe: driving forces and implications», *Vienna Yearbook of Population Research 2006*, 1-17.
- BLOSSFELD, H.P., E. KLIJZING, M. MILLS and K. KURZ (eds.) (2005): *Globalization, uncertainty and youth in society*, London: Routledge.
- and A. TIMM (2003): «Who marries whom?: educational systems as marriage markets in modern societies», *European Studies of Population*, Kluwer Academic.
- BONET, R., C. CRUZ, F. KRANZ and R. JUSTO (2013): «Temporary contracts and work-family balance in a dual labour market», *Industrial and Labor Relations Review*, 66(1), 55-75.
- BONGAARTS, J. (2002): «The end of the fertility transition in the developed world», *Population and Development Review*, 28(3), 419-443.
- (2001): «Fertility and reproductive preferences in post-transitional societies», in R.A. BULATAO and J.B. CASTERLINE (eds.): *Global fertility transition*, New York: Population Council, 260-281.
- and G. FEENEY (1998): «On the quantum and tempo of fertility», *Population and Development Review*, 24(2); 271-291.
- and T. SOBOTKA (2012): «A demographic explanation for the recent rise in European fertility», *Population and Development Review*, 38(1), 83-120.
- BONOLI, G. (2008): «The impact of social policy on fertility: evidence from Switzerland», *Journal of European Social Policy*, 18(1), 64-77.
- BOWLES, S. (1998): «Endogenous preferences: the cultural consequences of markets and other economic institutions», *Journal of Economic Literature*, 36(1), 75-111.
- BREITMANN, J., J. KLUGE and S. SCHAFFNER (2009): «Women's fertility and employment decisions under two political systems – Comparing East and West Germany before reunification», *Ruhr Economic Papers*, 149.

- BREWSTER, K.L., and R.R. RINDFUSS (2000): «Fertility and women's employment in industrialized nations», *Annual Review of Sociology*, 26, 271-296.
- BRIEN, M., L. LILLARD and L. WAITE (1999): «Interrelated family-building behaviors: cohabitation, marriage, and non-marital conception», *Demography*, 36, 535-551.
- BUCHMANN, M.C., and I. KRIESI (2011): «Transition to adulthood in Europe», *Annual Review of Sociology*, 37, 481-503.
- BUJARD, M. (2011): «Family policy and demographic effects: the case of Germany», *Demografia*, English Edition, 54(5), 56-78.
- BUMPASS, L.L. (1990): «What is happening to the family? Interactions between demographic and institutional change», *Demography*, 27(4), 483-498.
- CALDWELL, J.C. (1982): *A theory of fertility decline*, New York: Academic Press.
- CAMERON, A.C., and P.K. TRIVEDI (1998): *Regression analysis of count data*, Cambridge: Cambridge University Press.
- CASTLES, F.G. (2003): «The world turned upside down: below replacement fertility, changing preferences and family-friendly public policy in 21 OECD countries», *Journal of European Social Policy*, 13(3), 209-227.
- CASTRO-MARTÍN, T. (2010): «Single motherhood and low birthweight in Spain: narrowing social inequalities in health?», *Demographic Research*, 22, 863-890.
- , M. DOMÍNGUEZ-FOLGUERAS and T. MARTÍN-GARCÍA (2008): «Not truly partnerless: non-residential partnerships and retreat from marriage in Spain», *Demographic Research*, 18: 443-468.
- and L. ROSERO-BIXBY (2011): «Maternidades y fronteras. La fecundidad de las mujeres inmigrantes en España», *Revista Internacional de Sociología*, 69(1), 105-137.
- CAVALLI, L. (2012): «Fertility intentions of employed mothers in Italy: does the choice of public versus private sector matter?», Working Papers, 27, University of Verona, Department of Economics.
- CHESNAIS, J.-C. (1993): *The demographic transition*, Oxford: Oxford University Press.
- CLARKE, L., and C. ROBERTS (2002): «Policy and rhetoric: the growing interest in fathers and grandparents in Britain», in A. CARLING and S. DUNCAN (eds.): *Analysing families: morality and rationality in policy and practice*, London and New York: Routledge, 165-182.



- COHN, D.A., D. SILVER, C.P. COWAN, P.A. COWAN and J. PEARSON (1992): «Working models of childhood attachment and couple relationships», *Journal of Family Issues*, 13(4), 432-449.
- COLLIER, R. (1999): «'Feminising' the workplace? Law, the 'good parent' and the 'problem of men'», in A. MORRIS and T. O'DONNELL (eds.): *Feminist perspectives on employment law*, London: Cavendish.
- and S. SHELDON (2008): *Fragmenting fatherhood*, Oxford and Portland, OR: Hart.
- COLTRANE, S. (2000): «Research on household labor: modeling and measuring the social embeddedness of routine family work», *Journal of Marriage and the Family*, 62, 1208-1233.
- CONNELL, R. (1995): *Masculinities*, Cambridge: Polity.
- COOKE, L.P. (2009): «Gender equity and fertility in Italy and Spain», *Journal of Social Policy*, 38, 123-140.
- (2004): «The gendered division of labour and family outcomes in Germany», *Journal of Marriage and the Family*, 66, 1246-1259.
- COPPOLA, L., and M. CESARE (2008): «How fertility and union stability interact in shaping new family patterns in Italy and Spain», *Demographic Research*, 18(4), 117-144.
- COWAN, C.P., and COWAN, P.A. (1992): *When partners become parents: the big life change for couples*, New York: Basic Books.
- CRAIG, L. (2006): «Does father care mean fathers share? A comparison of how mothers and fathers in intact families spend time with children», *Gender & Society*, 20(2), 259-281.
- CROMPTON, R. (1999): «Discussions and conclusions», in R. CROMPTON (ed.): *Restructuring gender relations and employment: the decline of the male breadwinner*, Oxford: Oxford University Press.
- DALLA ZUANNA, G. (2000): «The banquet of Aeolus: a familistic interpretation of Italy's lowest low fertility», *Demographic Research*, 4-5, 133-162.
- and R. IMPICCIATORE (2010): «Fertility and education in contemporary Northern and Southern Italy», Departmental Working Papers, Department of Economics, Management and Quantitative Methods at Università degli Studi di Milano.
- DALY, K.J. (1996): *Families and time: keeping pace in a hurried culture*, Thousand Oaks, CA: Sage.

- DATTA GUPTA, N., and N. SMITH (2002): «Children and career interruptions. The family gap in Denmark», *Economica*, 69, 609-629.
- DAVIS, KINGSLEY (1945): «The world demographic transition», *Annals of the American Academy*, 1-11.
- DE LA RICA, S., and A. IZA (2005): «Career planning in Spain: do fixed-term contracts delay marriage and parenthood?», *Review of Economics of the Household*, 3, 49-73.
- DE MOUZON, J. *et al.* (2010): «Assisted reproductive technology in Europe, 2006: results generated from European registers by ESHRE», *Human Reproduction*, 25, 1851-1862.
- DEAVE, T., and D. JOHNSON (2008): «The transition to parenthood: what does it mean for fathers?», *Journal of Advanced Nursing*, 63(6), 626-633.
- DEL BOCA, D. (2002): «The effect of childcare and part time opportunities in participation and fertility of Italian women», *Journal of Population Economics*, 15, 549-573.
- , R. AABERGE, U. COLOMBINO, J. ERMISCH, M. FRANCESCONI, S. PASQUA and S. STRØM (2005): «Labour market participation of women and fertility: the effect of social policies», WP Fondazione Rodolfo De Benedetti.
- DELAAT, J., and A. SEVILLA SANZ (2006): «Working women, men's home time and lowest-low fertility», ISER Working Paper, 23.
- DOMÍNGUEZ-FOLGUERAS, M., and T. CASTRO-MARTÍN (2013): «Cohabitation in Spain: no longer a marginal path to family formation», *Journal of Marriage and Family*, 75, 422-437.
- DROBNIČ, S., and A.M. GUILLÉN RODRÍGUEZ (2011): «Tensions between work and home: job quality and working conditions in the institutional contexts of Germany and Spain», *Social Politics*, 18(2), 232-268.
- DUVANDER, A., and G. ANDERSSON (2003): «Gender equality and fertility in Sweden», *Marriage and Family Review*, 39, 121-142.
- , T. LAPPEGAARD and G. ANDERSSON (2010): «Family policy and fertility», *Journal of European Social Policy*, 20, 45-57.
- EASTERLIN, R. (1966): «On the relation of economic factors to recent and projected fertility changes», *Demography*, 3(1), 131-153.
- , R. POLLAK and M. WACHTER (1980): «Toward a general economic model of fertility determination. endogenous preferences and natural fertility», in R. EASTERLIN (ed.): *Population and economic change in developing countries*, Chicago: University of Chicago Press.

- ENGELHARDT, H., and A. PRSKWETZ (2004): «On the changing correlation between fertility and female employment over space and time», *European Journal of Population*, 20(1): 35-62.
- ENGLAND, P. (2010): «The gender revolution: uneven and stalled», *Gender & Society*, 24(2), 149-166.
- and N. FOLBRE (1999): «Who should pay for the kids?», *The Annals of the American Academy of Political and Social Science*, 563(1): 194-207.
- ERIKSON, R., and J. JONSSON (1996): *Can education be equalized? The Swedish case in comparative perspective*, Boulder, CO: Westview.
- ERMISCH, J. (1988): «An econometric analysis of birth rate dynamics in Britain», *Journal of Human Resources*, 23(4), 563-576.
- ESPING-ANDERSEN, G. (2009): *The incomplete revolution. Adapting to women's new roles*, Cambridge: Polity.
- (2007): *Family formation and family dilemmas in contemporary Europe*, Madrid: Fundación BBVA.
- (1999): *Social foundations of postindustrial economies*, Oxford: Oxford University Press.
- (1990): *The three worlds of welfare capitalism*, Cambridge: Polity.
- and F.C. BILLARI (2012): «Re-theorizing family demographics», Universitat Pompeu Fabra working paper.
- , D. BOERTIEN, J. BONKE and P. GARCIA (2013): «Couple specialization in multiple equilibria», *European Sociological Review*, 29, 1-15.
- ESTEVE, A., J. GARCÍA-ROMÁN and I. PERMANYER (2012): «The gender-gap reversal in education and its effect on union formation: the end of hypergamy?», *Population and Development Review*, 38, 535-546.
- EUROPEAN COMMISSION (2005): *Confronting demographic change: a new solidarity between the generations*, Brussels: Communication of 16 March 2005, COM(2005)94.
- (1997): *The young Europeans*. Special Eurobarometer 114/Wave 47.2, [http://ec.europa.eu/public\\_opinion/archives/ebs\\_114\\_en.pdf](http://ec.europa.eu/public_opinion/archives/ebs_114_en.pdf).
- EUROPEAN DEMOGRAPHIC DATA SHEET (2012), Wittgenstein Centre for Demography and Global Human Capital.
- EUROSTAT (2013): *Statistic Database Online*, European Commission.
- FEATHERSTONE, B. (2009): *Contemporary fathering: theory, policy and practice*, Bristol: Policy Press.

- FINN, M., and K. HENWOOD (2009): «Exploring masculinities within men's identificatory imaginings of first-time fatherhood», *British Journal of Social Psychology*, 48(3), 547-562.
- FOLBRE, N. (2008): *Valuing children: rethinking the economics of the family*, Cambridge, MA: Harvard University Press.
- FORTIN, N. (2005): «Gender role attitudes and women's labour market outcomes across OECD countries», *Oxford Review of Economic Policy*, 21(3), 416-438.
- FREJKA, T. (2008): «Parity distribution and completed family size in Europe: incipient decline of the two-child family model?», *Demographic Research*, 19(4): 47-72.
- FRIEDMAN, D., M. HECHTER and S. KANAZAWA (1994): «A theory of the value of children», *Demography*, 31(3), 375-401.
- GAUTHIER, A.H. (2011): *Comparative family policy database, version 3* [computer file]. Netherlands Interdisciplinary Demographic Institute and Max Planck Institute for Demographic Research (distributors). Retrieved from: [www.demogr.mpg.de](http://www.demogr.mpg.de).
- (2007): «The impact of family policies on fertility in industrialized countries: a review of the literature», *Population Research and Policy Review*, 26, 323-346.
- and J. HATZIUS (1997): «Family benefits and fertility: an econometric analysis», *Population Studies*, 51, 295-306.
- GEISLER, T., and M. KREYENFELD (2011): «Against all odds: fathers' use of parental leave in Germany», *Journal of European Social Policy*, 21, 88-99.
- GERSHUNY, J. (2000): *Changing times: work and leisure in postindustrial society*, Oxford: Oxford University Press.
- GILLIS, J. (2000): «Marginalization of fatherhood in Western countries», *Childhood*, 7(2), 225-238.
- GIMENEZ-NADAL, J.I., J. MOLINA and A. SEVILLA-SANZ (2011): «Social norms, partnerships and children», *Review of the Economics of the Household*, 10, 215-236.
- GOLDSCHIEDER, F.K. (2000): «Men, children and the future of the family in the third millennium», *Futures*, 32, 525-538.
- GOLDSTEIN, J.R., T. SOBOTKA and A. JASILIONIENE (2009): «The end of lowest-low fertility?», *Population and Development Review*, 35(4), 663-700.
- GONZÁLEZ, M.J., and T. JURADO-GUERRERO (2006): «Remaining childless in affluent economies: a comparison of France, West Germany, Italy and Spain, 1994-2001», *European Journal of Population*, 22(4), 317-352.

- GORNICK, J.C., and M. MEYERS (2003): *Families that work: policies for reconciling parenthood and employment*, New York: Russell Sage Foundation.
- GREGG, P., and E. WASHBROOK (2003): «The effects of early maternal employment on child development in the UK», University of Bristol: CMPO Working Paper Series.
- GREGORY, A., and S. MILNER (2011): «What is ‘new’ about fatherhood? The social construction of fatherhood in France and the UK», *Men and Masculinities*, 14(5), 588-606.
- (2005): «Fatherhood: comparative Western perspectives», in *Sloan Work and Family Research Network Encyclopedia*, USA: Sloan Foundation.
- (2004): «La masculinité en mutation, la paternité en (re)construction: une comparaison franco-britannique», *Recherches et Prévisions*, 76, 63-78.
- GUINNANE, T. (2010): «The historical fertility transitions», Yale University Economics Department Working Papers, 84.
- GUTIÉRREZ-DOMÈNECH, M. (2008): «The impact of the labour market on the timing of marriage and births in Spain», *Journal of Population Economics*, 21, 83-110.
- GUSTAVSSON, S., and F. STAFFORD (1994): «Three regimes of childcare: the United States, the Netherlands, and Sweden», in R. BLANK (ed.): *Social protection versus economic flexibility*, Chicago: University of Chicago Press, 333-362.
- HABBEMA, J.D., M.J. EIJKEMANS, G. NARGUND, G. BEETS, H. LERIDON and E.R. TE VELDE (2009): «The effect of in vitro fertilization on birth rates in Western countries», *Human Reproduction*, 24(6), 1414-1419.
- HAKIM, C. (2000): *Work-lifestyle choices in the 21st century: preference theory*, Oxford: Oxford University Press.
- HALL, W.A. (1994): «New fatherhood: myths and realities», *Public Health Nursing*, 11, 219-228.
- HANK, K., and M. KREYENFELD (2002): «A multi-level analysis of childcare and the transition to motherhood in Germany», Max Planck Institute for Demographic Research Working Paper, 290.
- HANTRAIS, L. (1994): «Comparing family policies in Britain, France and Germany», *Journal of Social Policy*, 23(2), 135-160.
- HÄUSERMANN, S., and H. SCHWANDER (2011): «Varieties of dualization. Labor market segmentation and insider-outsider divides across regimes», in P. EMMENEGGER *et al.* (eds.): *The age of dualization. Structures, policies, politics*, New York: Oxford University Press.

- HAZAN, M., and Z. HOSNY (2011): «Do highly educated women choose smaller families?», CEPR Discussion Paper 8590, London: Centre for Economic Policy Research.
- HEATON, T., C. JACOBSON and K. HOLLAND (1999): «Persistence and change in decisions to remain childless», *Journal of Marriage and Family*, 61: 531-539.
- HECKMAN, J., and J. WALKER (1990): «The relationship between wages and the timing and spacing of births: evidence from Swedish longitudinal data», *Econometrica*, 58, 1411-1441.
- HENWOOD, K., and J. PROCTER (2003): «The ‘good father’: reading men’s accounts of paternal involvement during the transition to first-time fatherhood», *British Journal of Social Psychology*, 42, 337-355.
- , F. SHIRANI and J. KELLETT (2011): «On delayed fatherhood: the social and subjective ‘logics’ at work in men’s lives», in G. BEETS, J. SCHIPPERS and E.R. TE VELDE (eds.): *The future of motherhood in Western societies. Late fertility and its consequences*, Dordrecht: Springer.
- HOBSON, B. (2002): *Making men into fathers: men, masculinities and the social politics of fatherhood*, Cambridge: Cambridge University Press.
- and D. MORGAN (2002): «Introduction», in B. HOBSON (ed.): *Making men into fathers: men masculinities and the social politics of fatherhood*, Cambridge: Cambridge University Press, 1-24.
- HOEM, J.M. (2008): «The impact of public policies on European fertility», *Demographic Research*, 19(10), 249-260.
- (2005): «Why does Sweden have such high fertility?», *Demographic Research*, 13(22), 559-572.
- , G. NEYER and G. ANDERSSON (2006): «The relationship between educational field, educational level and childlessness among Swedish women born in 1955-59», *Demographic Research*, 14(15), 331-380.
- , A. PRSKAWETZ and G. NEYER (2001): «Autonomy or conservative adjustment? The effect of public policies on third births in Austria», *Population Studies*, 55, 249-261.
- HOLDSWORTH, C., and M. IRAZOQUI SOLDA (2002): «First housing moves in Spain: an analysis of leaving home and first housing acquisition», *European Journal of Population*, 18(1), 1-19.
- HOOK, J.L. (2010): «Gender inequality in the welfare state: sex segregation in housework, 1965-2003», *American Journal of Sociology*, 115(5), 1480-1523.

- HOTZ, J., J. KLERMAN and R. WILLIS (1997): «The economics of fertility in developed countries», in M. ROSENZWEIG and O. STARK (eds.): *Handbook of population and family economics*, vol. 1A, Amsterdam: Elsevier, 276-347.
- and R. MILLER (1988): «An empirical analysis of life cycle fertility and female labour supply», *Econometrica*, 56, 91-118.
- HUMAN FERTILITY DATABASE, Max Planck Institute for Demographic Research (Germany) and Vienna Institute of Demography (Austria). Available at [www.humanfertility.org](http://www.humanfertility.org) [July 3rd, 2012].
- IACOVOU, M., and L.P. TAVARES (2011): «Yearning, learning, and conceding: reasons men and women change their childbearing intentions», *Population and Development Review*, 37(1), 89-123.
- IBAÑEZ, Z. (2011): «Part-time employment in Spain: a victim of the ‘temporality culture’ and a lagging implementation», in A.M. GUILLÉN and M. LEÓN (eds.): *The Spanish welfare state in European context*, Farnham: Ashgate, 165-186.
- JAKEE, K., and SUN G.-Z. (2001): «Adaptive preferences and welfare state dynamics: a simple model», Max-Planck-Institute for Research into Economic Systems (Jena, Germany), *Papers on Economics and Evolution*, 2.
- JONES, G.W. (2011): «Recent fertility trends, policy responses and fertility prospects in low fertility countries of East and Southeast Asia», United Nations, Population Division, Expert Paper, 5.
- JONES, L., and M. TERTILT (2008): «An economic history of fertility in the United States, 1826-1960», in P. RUPERT (ed.): *Frontiers of family economics*, Bingley: Emerald, 165-230.
- KALMUSS, D., A. DAVIDSON and L. CUSHMAN (1992): «Parenting expectations, experiences, and adjustment to parenthood: a test of the violated expectations framework», *Journal of Marriage and Family*, 54(3), 516-526.
- KALWIJ, A. (2010): «The impact of family policy expenditure on fertility in Western Europe», *Demography*, 47(2), 503-519.
- KAN, M.Y., O. SULLIVAN and J. GERSHUNY (2011): «Gender convergence in domestic work: discerning the effects of interactional and institutional barriers from large-scale data», *Sociology*, 45(2), 234-251.
- KECK, W., and C. SARACENO (2011): «Comparative childcare statistics in Europe. Conceptual and methodological fallacies», *Multilinks Insights*, 1, Berlin: Wissenschaftszentrum Berlin für Sozialforschung.
- KERTZER, D.I., M.J. WHITE, L. BERNARDI and G. GABRIELLI (2009): «Italy’s path to very low fertility: the adequacy of economic and second demographic

- transition theories», *European Journal of Population/Revue Européenne de Démographie*, 25(1), 89-115.
- KIERNAN, K.E. (2002): «Cohabitation in Western Europe: trends, issues and implications», in A. BOOTH and A.C. CROUTER (eds.): *Just living together. Implications of cohabitation on families, children, and social policy*, Mahwah, NJ: Lawrence Erlbaum, 3-31.
- (2001): «The rise of cohabitation and childbearing outside of marriage in Western Europe», *International Journal of Law, Policy and the Family*, 15, 1-21.
- , S. McLANAHAN, J. HOLMES and M. WRIGHT (2011): «Fragile families in the US and UK», Princeton University WP11-04FF.
- KNEALE, D., and H. JOSHI (2008): «Postponement and childlessness: evidence from two British cohorts», *Demographic Research*, 19, 1935-1968.
- KNEIP, T., and G. BAUER (2007): «Effects of different divorce probabilities on female labor force participation and fertility», Mannheim Zentrum für Europäische Sozialforschung (MZES) Working Paper, 102, 1-24.
- KODZ, J. (2003): «Working long hours: a review of the evidence», *Employment Relations Research Series*, 16, Brighton: The Institute for Employment Studies.
- KÖGEL, T. (2004): «Did the association between fertility and female employment within OECD countries really change its sign?», *Journal of Population Economics*, 17, 45-65.
- KOHLER, H.P., and J.A. ORTEGA (2002): «Tempo-adjusted period parity progression measures, fertility postponement and completed cohort fertility», *Demographic Research*, 6(6), 91-144.
- , J. BEHRMAN and A. SKYTTE (2005): «Partner + children = happiness? The effects of partnership and fertility on well-being», *Population and Development Review*, 31, 407-445.
- , F.C. BILLARI and J.A. ORTEGA (2002): «The emergence of lowest-low fertility in Europe during the 1990s», *Population and Development Review*, 28(4), 641-680.
- KRAVDAL, Ø. (2008): «Effects of current education on second- and third-birth rates among Norwegian women and men born in 1964: substantive interpretations and methodological issues», *Demographic Research*, 17(17), 211.
- (2001): «The high fertility of college educated women in Norway: an artefact of the separate modelling of each parity transition», *Demographic Research*, 5(6), 187-216.



- (1996): «How the local supply of daycare influences fertility in Norway», *Population Research and Policy Review*, 15(3).
- and R.R. RINDFUSS (2008): «Changing relationships between education and fertility: a study of women and men born 1940 to 1964», *American Sociological Review*, 73, 854.
- KREYENFELD, M. (2010): «Uncertainties in female employment careers and the postponement of parenthood in Germany», *European Sociological Review*, 26, 351-366.
- (2004): «Fertility decisions in the FRG and GDR: an analysis with data from the German Fertility and Family Survey», *Demographic Research*, 3(11), 276-318.
- (2002): «Time-squeeze, partner effect or self-selection? An investigation into the positive effect of women's education on second birth risks in West Germany», *Demographic Research*, 7(2), 15-48.
- LAPPEGÅRD, T. (2000): «New fertility trends in Norway». *Demographic Research*, 2(3).
- and M. RØNSEN (2005): «The multifaceted impact of education on entry into motherhood», *European Journal of Population*, 21, 31-49.
- LAPUERTA, I. (2012): *Employment, motherhood and parental leaves in Spain*, Doctoral Thesis, Barcelona: Universitat Pompeu Fabra, mimeo [accessed September 2012].
- LAPUERTA, I., P. BAIZÁN and M.J. GONZÁLEZ (2011): «Individual and institutional constraints: an analysis of parental leave use and duration in Spain», *Population Research and Policy Review*, 30(2), 185-210.
- LEÓN, M., and M. MIGLIAVACCA (2013): «Italy and Spain: still the case of familistic welfare models?», *Population Review*, 52(1), 25-42.
- LERIDON, H. (2008): «A new estimate of permanent sterility by age: sterility defined as the inability to conceive», *Population Studies*, 62(1), 15-24.
- LESTHAEGHE, R. (1998): «On theory development: applications to the study of family formation», *Population and Development Review*, 24, 1-14.
- (1995): «The second demographic transition in Western countries: an interpretation», in K. OPPENHEIM MASON and A.-M. JENSEN (eds.): *Gender and family change in industrialized countries*, Oxford: Clarendon, 17-62.
- LEWIS, J. (2002): «Gender and welfare state change», *European Societies*, 4(4), 331-357.

- (1998): *Gender, social care and welfare state restructuring in Europe*, Aldershot: Ashgate.
- (1992): «Gender and the development of welfare regimes», *Journal of European Social Policy*, 2, 159-173.
- LIEFBROER, A. (2005): «The impact of perceived costs and rewards of childbearing on entry into parenthood», *European Journal of Population*, 21, 367-391.
- and F.C. BILLARI (2010): «Bringing norms back in: a theoretical and empirical discussion of their importance for understanding demographic behaviour», *Population, Space and Place*, 16(4), 287-305.
- LILLARD, L.A., and L.J. WAITE (1993): «A joint model of marital childbearing and marital disruption», *Demography*, 30(4), 653-681.
- LIVI-BACCI, M. (2001): «Too few children and too much family», *Daedalus*, 130(3), 139-156.
- LUCI, A., and O. THÉVENON (2012): «The impact of family policy packages on fertility trends in developed countries», Paris: INED, Documents de travail 174, [www.ined.fr/fichier/t\\_publication/1572/publi\\_pdf2\\_174.pdf](http://www.ined.fr/fichier/t_publication/1572/publi_pdf2_174.pdf).
- (2010): «Does economic development drive the fertility rebound in OECD countries?», Working Papers HAL-00520948, HAL.
- LUKE, B., and M.B. BROWN (2007): «Elevated risks of pregnancy complications and adverse outcomes with increasing maternal age», *Human Reproduction*, 22(5), 1264-1272.
- LUPTON, D., and L. BARCLAY (1999): «The experiences of new fatherhood: a socio-cultural analysis», *Journal of Advanced Nursing*, 29(4), 1013-1020.
- (1997): *Constructing fatherhood: discourses and experiences*. London: Sage.
- LUTZ, W., and S. SCHERBOV (2002): «Can immigration compensate for Europe's low fertility?», Interim report, IR-02-052, Vienna Institute of Demography of the Austrian Academy of Sciences, European Demographic Research Papers, 1.
- LYNGSTAD, T.H., and M. JALOVAARA (2010): «A review of the antecedents of union dissolution», *Demographic Research*, 23(10), 257-292.
- MALPAS, N., and P.V. LAMBERT (1993): «Les Européens et la famille [Europeans and the family]», *Special Eurobarometer 77/Wave 39. European Commission*, [http://ec.europa.eu/public\\_opinion/archives/ebs\\_77\\_fr.pdf](http://ec.europa.eu/public_opinion/archives/ebs_77_fr.pdf).
- MANDEL, H., and M. SEMYONOV (2006): «A welfare state paradox: state interventions and women's employment opportunities in 22 countries», *American Journal of Sociology*, 111(6), 1910-1949.

- MANLOVE, J., S. RYAN, E. WILDSMITH and K. FRANZETTA (2010): «The relationship context of nonmarital childbearing in the U.S.», *Demographic Research*, 23(22), 615-654.
- MARSIGLIO, W., P. AMATO, R.D. DAY and M.E. LAMB (2000): «Scholarship on fatherhood in the 1990s and beyond», *Journal of Marriage and the Family*, 62, 1173-1191.
- MARTIN, S. (2000): «Diverging fertility among U.S. women who delay childbearing past age 30», *Demography*, 37: 523-533.
- MARTIN-GARCIA, T. (2010): «The impact of occupational sex-composition on women's fertility in Spain», *European Societies*, 12(1), 113-133.
- (2009): «The effect of education on women's propensity to be childless in Spain: does the field of education matter?», Carlo Alberto Working Papers, 114.
- and P. BAIZÁN (2006): «The impact of the type of education and of educational enrolment on first births», *European Sociological Review*, 22(3), 259-276.
- and T. CASTRO-MARTÍN (2013): «Do women working in the public sector have it easier to become mothers in Spain?», *Population Review*, 52(1), 149-171.
- (2008): «The ideal and de facto timetable for transition to adulthood in Europe: a comparative view from the ESS», poster presented at the European Population Conference, Barcelona, 9-12 July.
- MATYSIAK, A., and D. VIGNOLI (2008): «Fertility and women's employment. A meta-analysis», *European Journal of Population*, 24, 363-384.
- MCDONALD, P. (2002): «Low fertility: unifying the theory and the demography», paper presented at Population Association of America Meetings, Atlanta, 9-11 May.
- (2000): «Gender equity in theories of fertility transition», *Population and Development Review*, 26(3), 427-439.
- and H. MOYLE (2010): «Why do English-speaking countries have relatively high fertility?», *Journal of Population Research*, 27, 247-273.
- MCDOWELL, L. (1997): *Capital culture: gender at work in the city*, Oxford: Blackwell.
- MCLANAHAN, S. (2004): «Diverging destinies: how children are faring under the second demographic transition», *Demography*, 41(4), 607-627.
- MELO-MARTÍN, I.D. (2009): «Assisted reproductive technology in Spain: considering women's interests», *Cambridge Quarterly of Healthcare Ethics*, 18(3), 228-235.

- MENCARINI, L., and M. TANTURRI (2006): «High fertility or childlessness. Micro-level determinants of reproductive behaviour in Italy», *Population*, 61, 389-416.
- MILKIE, M.A., S.M. BIANCHI, M. MATTINGLY and J. ROBINSON (2002): «Gendered division of childrearing: ideals, realities, and the relationship to parental well-being», *Sex Roles*, 47, 21-38.
- MILLER, A.R. (2010): «The effect of motherhood timing on career path», *Journal of Population Economics*, 24(3), 1071-1100.
- MILLER, W.B., L.J. SEVERY and D.J. PASTA (2004): «A framework for modelling fertility motivation in couples», *Population Studies*, 58(2), 193-205.
- MILLER TORR, B., and S. SHORT (2004): «Second births and the second shift: a research note on gender equity and fertility», *Population and Development Review*, 30, 109-130.
- MILLS, M. (2010): «Gender roles, gender (in)equality and fertility: an empirical test of five gender equity indices», *Canadian Studies in Population*, 37(3-4), 445-474.
- and K. BEGALL (2010): «Preferences for the sex-composition of children in Europe: a multilevel level examination of its effect on progression to a third child», *Population Studies*, 64(1), 77-95.
- , R.R. RINDFUSS, P. MCDONALD and E. TE VELDE (2011): «Why do people postpone parenthood? Reasons and social policy incentives», *Human Reproduction Update*, 17(6), 848-860.
- , M. TANTURRI and K. BEGALL (2008): «Gender equity and fertility intentions in Italy and the Netherlands», *Demographic Research*, 18, 1-26.
- MINCER, J. (1963): «Market prices, opportunity costs and income effects», in C.F. CHRIST (ed.): *Measurement in economics*, Stanford: Stanford University Press, 67-82.
- MODENA, F., C. RONDINELLI and F. SABATINI (2011): «Economic insecurity and fertility intentions: the case of Italy», MPRA Paper 36353, University Library of Munich.
- MOFFIT, R. (1984): «Profiles of fertility, labour supply and wages of married women. A complete life-cycle model», *The Review of Economic Studies*, 51, 263-278.
- MORGAN, K. (2003): «The politics of mothers' employment: France in comparative perspective», *World Politics*, 55(2), 259-289.
- MORGAN, S.P. (1985) «Individual and couple intentions for more children: a research note», *Demography*, 22(1), 125-132.

- and R. BERKOWITZ KING (2001): «Why have children in the 21st century? Biological predispositions, social coercion, rational choice», *European Journal of Population*, 17(1), 3-20.
- MYERS, S. (1997): «Marital uncertainty and childbearing», *Social Forces*, 75, 1271-1289.
- MYRDAL, G., and A. MYRDAL (1934): *Kris i Befolkningsfrågan*, Stockholm: Tiden.
- MYRSKYLÄ, M., F.C. BILLARI and H.P. KOHLER (2011): «High development and fertility: fertility at older reproductive ages and gender equality explain the positive link», MPIDR Working Papers WP-2011-017, Max Planck Institute for Demographic Research, Rostock, Germany.
- , J.R. GOLDSTEIN and Y.A. CHENG (2013): «New cohort fertility forecasts for the developed world: rises, falls, and reversals», *Population and Development Review*, 39(1), 31-56.
- , H.P. KOHLER and F.C. BILLARI (2009): «Advances in development reverse fertility declines», *Nature*, 460(7256), 741-743.
- NALDINI, M., and T. JURADO (2013): «Family and welfare state reorientation in Spain and Italy from a European perspective», *Population Review*, 52(1), 43-61.
- NASH, M. (1991): «Pronatalism and motherhood in Franco's Spain», in G. BOCK and P. THANE (eds.): *Maternity and gender policies: women and the rise of the European welfare state*, London: Routledge, 160-177.
- NENTWICH, J.C. (2008): «New fathers and mothers as gender troublemakers? Exploring discursive constructions of heterosexual parenthood and their subversive potential», *Feminism Psychology*, 18(2), 207-230.
- NERMO, M. (2010): «Models of cross-national variation in occupational sex segregation», *European Societies*, 2(3), 295-333.
- NEYER, G., and G. ANDERSSON (2008): «Consequences of family policies on childbearing behavior: effects or artifacts?», *Population and Development Review*, 34(4), 699-724.
- , T. LAPPEGÅRD and D. VIGNOLI (2011): «Gender equality and fertility: which equality matters?», *Stockholm Research Report on Demography*, 9.
- NÍ BHROLCHÁIN, M., and E. BEAUJOUAN (2012): «How real are reproductive goals? Uncertainty and the construction of fertility preferences», paper presented at the Annual Meeting of the Population Association of America.
- NOGUERA, C.S., K. GOLSCH and N. STEINHAGE (2002): «Increasing uncertainty in the Spanish labor market and entry into parenthood», *Genus*, 58, 77-119.

- O'BRIEN, M. (2005): «Studying individual and family development: linking theory and research», *Journal of Marriage and Family*, 67(4), 880-890.
- OAKLEY, A. (1974): *The sociology of housework*, New York: Pantheon/Random House.
- OECD (2011): *Doing better for families*, Paris: OECD Publishing.
- (2007): *Babies and bosses. Reconciling work and family life*, Paris: OECD Publishing.
- OLÁH, L.S. (2003): «Gendering fertility: second births in Sweden and Hungary», *Population Research and Policy Review*, 22, 171-200.
- and E.M. BERNHARDT (2008): «Sweden: combining childbearing and gender equality», *Demographic Research*, Special Collection 7, 1105-1144.
- OPPENHEIMER, V.K. (1988): «A theory of marriage timing», *American Journal of Sociology*, 94(3), 563-591.
- ORLOFF, A.S. (2002): «Women's employment and welfare regimes globalization, export orientation and social policy in Europe and North America», Social Policy and Development Programme Paper, 12, Geneva: United Nations Research Institute for Social Development.
- (1996): «Gender in the welfare state», *Annual Review of Sociology*, 22, 51-78.
- ÖRSAL, D.D.K., and J.R. GOLDSTEIN (2010): «The increasing importance of economic conditions on fertility», MPIDR Working Papers WP-2010-014, Max Planck Institute for Demographic Research, Rostock, Germany.
- PFAU-EFFINGER, B. (2004): *Development of culture, welfare states and women's employment in Europe*, Aldershot: Ashgate.
- PHILIPPOV, D. (2009): «Fertility intentions and outcomes: the role of policies to close the gap», *European Journal of Population*, 25, 355-361.
- PLECK, J.H. (1997): «Paternal involvement. Revised conceptualization and theoretical linkages with child outcomes», in M.E. LAMB (ed.): *The role of father in child development*, New York: Wiley, 58-93.
- POLAVIEJA, J.G. (2006): «The incidence of temporary employment in advanced economies: why is Spain different?», *European Sociological Review*, 22(1), 61-78.
- PRESTON, S., and C. STEN (2008): «The future of American fertility», NBER Working Paper, 14498.
- QUESNEL-VALLEE, A., and MORGAN, S.P. (2003): «Missing the target: correspondance of fertility intentions and behavior in the U.S.», *Population Research and Policy Review*, 22(5-6), 497-525.

- RALEY, R.K. (2001): «Increasing fertility in cohabiting unions: evidence for the second demographic transition in the United States?», *Demography*, 38, 59-66.
- RAY, R., J.C. GORNICK and J. SCHMITT (2010): «Who cares? Assessing generosity and gender equality in parental leave policy designs in 21 countries», *Journal of European Social Policy*, 20(3), 196-216.
- REHER, D.S. (1998): «Family ties in Western Europe: persistent contrasts», *Population and Development Review*, 24(2), 203-234.
- RENDALL, M. *et al.* (2010): «Increasingly heterogeneous ages at first birth by education in Southern European and Anglo-American family-policy regimes: a seven-country comparison by birth cohort», *Population Studies*, 64(3), 209-227.
- RIJKEN, A., and A. LIEFBROER (2009): «The effects of relationship quality on fertility», *European Journal of Population*, 25, 27-44.
- and E. THOMSON (2011): «Partners' relationship quality and childbearing», *Social Science Research*, 40, 485-497.
- RINDFUSS, R.R., D. GUILKEY, P. MORGAN, Ø. KRAVDAL and K.B. GUZZO (2007): «Child care availability and first-birth timing in Norway», *Demography*, 44(2), 345-372.
- , D. GUILKEY, P. MORGAN and Ø. KRAVDAL (2010): «Child-care availability and fertility in Norway», *Population and Development Review*, 36(4), 725-748.
- , S. MORGAN and K. OFFUT (1996): «Education and the changing age pattern of American fertility, 1963-1989», *Demography*, 33, 277-290.
- , S.P. MORGAN and G. SWICEGOOD (1988): *First birth in America: changes in the timing of parenthood*, Berkeley: University of California Press.
- ROIG VILA, M., and T. CASTRO-MARTÍN (2007): «Childbearing patterns of foreign women in a new immigration country: the case of Spain», *Population-E*, 62(3), 351-380.
- RØNSEN, M. (2004): «Fertility and public policies – Evidence from Norway and Finland», *Demographic Research*, 10, 143-170.
- and K. SKREDE (2010): «Can public policies sustain fertility in the Nordic countries? Lessons from the past and questions for the future», *Demographic Research*, 22(13), 321-346.
- ROSINA, A., and M.R. TESTA (2009): «Couples' first child intentions and disagreement: an analysis of the Italian case», *European Journal of Population*, 25(4), 487-502.

- RYDER, N.B. (1964): «The process of demographic transition», *Demography*, 1(1), 74-82.
- SÁNCHEZ-BARRICARTE, J.J., and R. FERNÁNDEZ-CARRO (2007): «Patterns in the delay and recovery of fertility in Europe», *European Journal of Population*, 23, 145-170.
- SARACENO, C. (2010): «Social inequalities in facing old-age dependency: a bi-generational perspective», *Journal of European Social Policy*, 20(1), 32-44.
- and W. KECK (2011): «Towards an integrated approach for the analysis of gender equity in policies supporting paid work and care responsibilities», *Demographic Research*, 25(11), 471-306.
- (2009): «The institutional framework of intergenerational family obligations in Europe: a conceptual and methodological overview», *Report of the Multilinks Project*.
- SAYER, L.C., S.M. BIANCHI and J.P. ROBINSON (2004): «Are parents investing less in children? Trends in mothers' and fathers' time with children», *American Journal of Sociology*, 110(1), 1-43.
- SCHMITT, C. (2012): «Labour market integration, occupational uncertainties, and fertility choices in Germany and the UK», *Demographic Research*, 26(12), 253-292.
- SCHULTZ, T. (1986): «The value and allocation of time in high-income countries: implications for fertility», *Population and Development Review*, 12, 87-108.
- SCHWARTZ, C., and R. MARE (2005): «Trends in educational assortative marriage from 1940 to 2003», *Demography*, 42(4), 621-646.
- SCOTT, J., and M. BRAUN (2006): «Individualization of family values?», in P. ESTER, M. BRAUN and P. MOHLER (eds.): *Globalization, value changes and generations*, Leiden: Brill.
- SELMAN, P. (2012): «The rise and fall of intercountry adoption in the 21st century: global trends from 2001 to 2010», in J. GIBBONS and K. ROTABI (eds.): *Intercountry adoption: policies, practices, and outcomes*, Farnham: Ashgate.
- SELTZER, J.A. (2000): «Families formed outside of marriage», *Journal of Marriage and the Family*, 62, 1247-1268.
- SEVILLA-SANZ, A. (2010): «Household division of labor and cross-country differences in household formation rates», *Journal of Population Economics*, 23(1), 225-249.
- SHANG Q. and B.A. WEINBERG (2013): «Opting for families: recent trends in the fertility of highly educated women», *Journal of Population Economics*, 26(1), 5-32.



- SHORTER, E. (1973): «Female emancipation, birth control and fertility in Europe», *The American Historical Review*, 78, 605-640.
- SIGLE-RUSHTON, W. (2008): «England and Wales: stable fertility and pronounced social status differences», *Demographic Research*, 19(15), 455-502.
- SKIRBEKK, V. (2008): «Fertility trends by social status», *Demographic Research*, 18(5), 145-180.
- SLEEBOS, J. (2003): «Low fertility rates in OECD countries: facts and policy responses», OECD Labour Market and Social Policy Occasional Papers, 15, Paris: OECD.
- SMART, C., and B. NEALE (1999): «‘I hadn’t really thought about it’: new identities/new fatherhoods», *Explorations in Sociology*, 57, 118-141.
- SOBOTKA, T. (2010): «Shifting parenthood to advanced reproductive ages: trends, causes and consequences», in J.C. TREMMEL (ed.): *A young generation under pressure?*, Berlin: Springer, 129-154.
- (2004a): «Is lowest-low fertility explained by the postponement of childbearing?», *Population and Development Review*, 30(2), 195-220.
- (2004b): *Postponement of childbearing and low fertility in Europe*, Amsterdam: Netherlands University Press.
- , M.A. HANSEN, T.K. JENSEN, A.T. PEDERSEN, W. LUTZ and N.E. SKAKKEBÆK (2008): «The contribution of assisted reproduction to completed fertility: an analysis of Danish data», *Population and Development Review*, 34(1), 79-101.
- , V. SKIRBEKK and D. PHILIPPOV (2011): «Economic recession and fertility in the developed countries», *Population and Development Review*, 37, 267-306.
- , K. ZEMAN, R. LESTHAEGHE and T. FREJKA (2011): «Postponement and recuperation in cohort fertility: new analytical and projection methods and their application», Vienna Institute of Demography of the Austrian Academy of Sciences, European Demographic Research Papers, 2.
- SOLERA, C., and F. BETTIO (2013): «Women’s continuous careers in Italy: the education and public sector divide», *Population Review*, 52(1), 129-148.
- STIER, H., and N. LEWIN-EPSTEIN (2003): «Time to work: a comparative analysis of preferences for working hours», *Work and Occupations*, 30(3), 302-326.
- , N. LEWIN-EPSTEIN and M. BRAUN (2001): «Welfare regimes, family supportive policies, and women’s employment along the life course», *American Journal of Sociology*, 106(6), 1731-1760.
- SULLIVAN, O. (2011): «An end to gender display through the performance of housework? A review and reassessment of the quantitative literature using

- insights from the qualitative literature», *Journal of Family Theory & Review*, 3(1), 1-13.
- SUNDSTRÖM, M., and A.-Z.E. DUVANDER (2001): «Gender division of childcare and the sharing of parental leave among new parents in Sweden», *European Sociological Review*, 18(4), 433-447.
- TANAKA, S., and J. WALDFOGEL (2007): «Effects of parental leave and work hours on fathers' involvement with their babies», *Community, Work and Family*, 10(4), 409-426.
- TANFER, K., and F. MOTT (1997): «The meaning of fatherhood for men», *NICHD Workshop: Improving data on male fertility and family formation*, Urban Institute, Washington D.C., January 16-17.
- TANTURRI, M.L., and L. MENCARINI (2008): «Childless or childfree? Paths to voluntary childlessness in Italy», *Population and Development Review*, 34(1), 51-77.
- TEITELBAUM, M.S., and J.M. WINTER (1985): *The fear of population decline*, London: Academic Press.
- TESTA, M.R. (2012a): «Family sizes in Europe: evidence from the 2011 Eurobarometer Survey», *European Demographic Research Papers*, 2, Vienna Institute of Demography.
- (2012b): «Women's fertility intentions and level of education: why are they positively correlated in Europe?», *European Demographic Research Papers*, 3, Vienna Institute of Demography.
- (2006): «Childbearing preferences and family issues in Europe», Vienna Institute of Demography.
- THÉVENON, O. (2011): «Family policies in OECD countries: a comparative analysis», *Population and Development Review*, 37(1), 57-87.
- and A. LUCI (2012): «Reconciling work, family and child outcomes: what implications for family support policies?», *Population Research and Policy Review*, 31, 855-882.
- THOMSON, E., and J. HOEM (1998): «Couple childbearing plans and births in Sweden», *Demography*, 35(3), 315-322.
- , E. McDONALD and L.L. BUMPASS (1990): «Fertility desires and fertility: hers, his, and theirs», *Demography*, 27(4), 579-588.
- , M. WINKLER-DWORAK, M. SPIELAUER and A. PRSKAWETZ (2012): «Union instability as an engine of fertility? A microsimulation model for France», *Demography*, 49(1), 175-195.

- THORNTON, A. (1978): «Marital dissolution, remarriage, and childbearing», *Demography*, 15(3), 361-380.
- TOBIÓ, C. (2001): «Working and mothering. Women's strategies in Spain», *European Societies*, 3(3), 339-371.
- TOULEMON, L., A. PAILHÉ and C. ROSSIER (2008): «France: high and stable fertility», *Demographic Research*, 19(16): 503-556.
- and M. TESTA (2005): «Fertility intentions and actual fertility», *Population and Societies*, 415, 4.
- TOWNSEND, N.W. (2002): *The package deal: marriage, work and fatherhood in men's lives*, Philadelphia: Temple University Press.
- UNESCO (2010): *Global Education Digest*. UNESCO.
- UNITED NATIONS (2011): *World population prospects: the 2010 revision*, New York: United Nations Population Division.
- (2010): *World population policies (2009)*, New York: United Nations Population Division.
- (2009): *Child adoption: trends and policies*, New York: United Nations Population Division.
- VAN BAVEL, J. (2012): «The reversal of gender inequality in education, union formation and fertility in Europe», *Vienna Yearbook of Population Research*, 10, 127-154.
- (2010a): «Subreplacement fertility in the West before the baby boom: past and current perspectives», *Population Studies*, 64(1), 1-18.
- (2010b): «Choice of study discipline and the postponement of motherhood in Europe: the impact of expected earnings, gender composition, and family attitudes», *Demography*, 47(2), 439-458.
- VAN DE KAA, D.J. (2001): «Postmodern fertility preferences: from changing value orientation to new behavior», *Population and Development Review*, 27 (Supplement: Global Fertility Transition), 290-331.
- (1988): «The second demographic transition revisited: theories and expectations», paper presented at the Population and European Society, Commission of the European Economic Community – European University Institute, Florence, 7-9 December.
- (1987): «Europe's second demographic transition», *Population Bulletin*, 42(1).
- VIGNOLI, D. (2011): «Human capital and the entry to motherhood in Italy», WP 2011/06, [www.ds.unifi.it](http://www.ds.unifi.it).

- , S. DREFAHL and G. DE SANTIS (2012): «Whose job instability affects the likelihood of becoming a parent in Italy? A tale of two partners», *Demographic Research*, 26(2), 41-62.
- WAITE, L.J., and L.A. LILLARD (1991): «Children and marital disruption», *American Journal of Sociology*, 96(4), 930-953.
- WALDFOGEL J., W.-J. HAN and J. BROOKS-GUNN (2002): «The effects of early maternal employment on child development», *Demography*, 39(2), 39-392.
- WALL, K. (2007): «Leave policy models and the articulation of work and family in Europe», in P. MOSS and K. WALL (eds.): *International review of leave policies and related research*, Employment Relations Research Series, 80, London: BERR, 25-43.
- WHITE, L.K. (1990): «Determinants of divorce: a review of research in the eighties», *Journal of Marriage and Family*, 52(4), 904-912.
- WILLIS, R. (1973): «A new approach to the theory of fertility behavior», *Journal of Political Economy*, 81, 14-64.
- WILSON, W.J. (1987): *The truly disadvantaged*, Cambridge, MA: Harvard University Press.
- WINKLER-DWORAK, M., and L. TOULEMON (2007): «Gender differences in the transition to adulthood in France: is there convergence over the recent period?», *European Journal of Population*, 23, 273-314.
- WU, Z., and C.M. SCHIMMELE (2005): «Repartnering after first union disruption», *Journal of Marriage and Family*, 67, 27-36.
- YAMAMURA, E., and A. ANDRES (2011): «Trust and fertility: evidence from the OECD countries», MPRA paper 29978, Munich.

# Index of Tables and Graphs

---

## Tables

1.	Tertiary-level education and female employment, 1970-2008	16
2.1	Total fertility rate (TFR) in year of lowest fertility, 2008 and 2011. Selected low fertility countries	49
3.1	Meta-sample composition – number of coefficients reported	87
3.2	Public employment, part-time employment and temporary employment (in percentages), 2005	93
3.3	Results of the Multilevel analysis	99
4.1	The probability of a first birth: Discrete-time event history analysis	117
4.2	Discrete-time event history models predicting second birth	119
5.1	Values of the gender equality index, adjusted gender and education gaps and TFR	125
6.1	Main Sample Characteristics: Individuals (Men and Women) in Dual-Earner Couples Expecting their First Child	143
6.2	Sample Description: Individuals in Dual-Earner Couples Expecting a First Child, according to Who Took the Initiative in the Decision	144
7.1	TFR and macro indicators by country	171
7.2	Results of the regression models that estimate completed fertility (main effects of the variables)	173
7.3	Results of the regression models that estimate completed fertility, showing the interaction effects of education with the context-level variables	174

7.4 Results of the regression models that estimate completed fertility, showing the interaction effects of gender values with the context-level variables	176
---	-----

## Graphs

1. Trends in Total Fertility Rate (TFR), 1900-2011	16
2.1 Past and future estimated trends in total fertility rate (TFR) in major world regions, 1950-2100	47
2.2 Age-specific fertility rates, Spain 1980-2010	52
2.3 Mean ideal age for women's early family transitions. European Social Survey 2006/2007	54
2.4 Trends in the number of international and national adoptions, Spain 1998-2010	55
2.5 Completed cohort fertility, female birth cohorts 1900-1965	58
2.6 Definitive childlessness by female birth cohort	58
2.7 Family size distribution of female cohorts that have completed their childbearing by 2010	60
2.8 Parity progression ratios for cohorts 1940 to 1965	61
2.9 Total fertility rates of native and foreign women in Spain, 2002-2011. Age-specific fertility rates by nationality, Spain 2002 and 2011	63
2.10 Mean personal ideal. Ultimately intended and actual number of children	65
2.11 Mean personal ideal, ultimately intended and actual number of children by level of education, women and men aged 20-49, Spain and Sweden 2011	66
2.12 Distribution of the population aged 15-64 and 25-34 by educational attainment, Spain and EU-25, 2011	68
2.13 Birth timing by women's education, 2010	69
2.14 Correlation trends between TFR and some labour indicators, 1970-2010	72
2.15 Cross-country correlation between the percentage of nonmarital births and the total fertility rate, OECD countries, 2009	76

2.16	Percentage of births to married, cohabiting and lone mothers by mother's level of education, Spain 2010	78
3.1	Female students enrolled in tertiary education (ISCED 5-6) as a percentage of all students in tertiary education, in 1971, 1992 and 2010	83
3.2	Probability of being childless, all countries, birth cohorts 1935-1974	89
3.3	Probability of being childless, Nordic (a) and other European Countries (b), birth cohorts, 1935-1974	89
3.4	Probability of having a second child, all countries, birth cohorts 1935-1974	90
3.5	Probability of having a second child, Nordic (a) and other European Countries (b), birth cohorts 1935-1974	90
3.6	The effect of education varies by country	97
4.1	General Trends in Crude Divorce Rate (CDR) – 1990 to 2010	106
4.2	General Trends in Total Fertility Rate (TFR) – 1990 to 2010	107
4.3	Comparative trends in Cohabitation (as percent of all unions)	111
4.4	Kaplan Mayer Survival Curves for couples	112
4.5	Transitions to the first child. Kaplan Mayer Survival Curves	113
4.6	Transitions to a Second Child. Kaplan Mayer Survival Curves	115
4.7	Age-specific probabilities of first and second conceptions in Spain	118
5.1	Fertility and gender equality	123
5.2	Average level of gender equality by country and across waves	128
5.3	TFR vs. level of gender equality by wave	131
5.4	TFR vs. gender and education gaps in wave 1990-1993	132
5.5	TFR vs. gender and education gaps in wave 1999-2000	133
5.6	TFR vs. gender and education gaps in wave 2006-2009	134

## Social Studies Collection

Available on the internet: [www.laCaixa.es/ObraSocial](http://www.laCaixa.es/ObraSocial)

### Published titles

1. FOREIGN IMMIGRATION IN SPAIN (*Out of stock*)  
Eliseo Aja, Francesc Carbonell, Colectivo Ioé (C. Pereda, W. Actis and M. A. de Prada), Jaume Funes and Ignasi Vila
2. VALUES IN SPANISH SOCIETY AND THEIR RELATION TO DRUG USE (*Out of stock*)  
Eusebio Megías (director)
3. FAMILY POLICIES FROM A COMPARATIVE PERSPECTIVE (*Out of stock*)  
Lluís Flaquer
4. YOUNG WOMEN IN SPAIN (*Out of stock*)  
Inés Alberdi, Pilar Escario and Natalia Matas
5. THE SPANISH FAMILY AND ATTITUDES TOWARD EDUCATION (*Out of stock*)  
Victor Pérez-Díaz, Juan Carlos Rodríguez and Leonardo Sánchez Ferrer
6. OLD AGE, DEPENDENCE AND LONG-TERM CARE (*Out of stock*)  
David Casado Marín and Guillem López and Casasnovas
7. YOUNG PEOPLE AND THE EUROPEAN CHALLENGE  
Joaquim Prats Cuevas (director)
8. SPAIN AND IMMIGRATION  
Victor Pérez-Díaz, Berta Álvarez-Miranda and Carmen González-Enríquez
9. HOUSING POLICY FROM A COMPARATIVE EUROPEAN PERSPECTIVE  
Carme Trilla
10. DOMESTIC VIOLENCE (Out of stock)  
Inés Alberdi and Natalia Matas
11. IMMIGRATION, SCHOOLING AND THE LABOUR MARKET  
Colectivo Ioé (Walter Actis, Carlos Pereda and Miguel A. de Prada)
12. ACOUSTIC CONTAMINATION IN OUR CITIES  
Benjamín García Sanz and Francisco Javier Garrido
13. FOSTER FAMILIES  
Pere Amorós, Jesús Palacios, Núria Fuentes, Esperanza León and Alicia Mesas
14. PEOPLE WITH DISABILITIES AND THE LABOUR MARKET  
Colectivo Ioé (Carlos Pereda, Miguel A. de Prada and Walter Actis)
15. MOSLEM IMMIGRATION IN EUROPE  
Victor Pérez-Díaz, Berta Álvarez-Miranda and Elisa Chuliá
16. POVERTY AND SOCIAL EXCLUSION  
Joan Subirats (director)
17. THE REGULATION OF IMMIGRATION IN EUROPE  
Eliseo Aja, Laura Díez (coordinators)
18. EUROPEAN EDUCATIONAL SYSTEMS: CRISIS OR TRANSFORMATION?  
Joaquim Prats and Francesc Raventós (directors), Edgar Gasòliba (coordinator)
19. PARENTS AND CHILDREN IN TODAY'S SPAIN  
Gerardo Meil Landwerlin



20. SINGLE PARENTING AND CHILDHOOD  
Lluís Flaquer, Elisabet Almeda and Lara Navarro
21. THE IMMIGRANT BUSINESS COMMUNITY IN SPAIN  
Carlota Solé, Sònia Parella and Leonardo Cavalcanti
22. ADOLESCENTS AND ALCOHOL. THE PARENTAL VIEW  
Eusebio Megías Valenzuela (director)
23. INTERGENERATIONAL PROGRAMMES. TOWARDS A SOCIETY FOR ALL AGES  
Mariano Sánchez (director)
24. FOOD, CONSUMPTION AND HEALTH  
Cecilia Díaz Méndez y Cristóbal Gómez Benito (coordinators)
25. VOCATIONAL TRAINING IN SPAIN. TOWARD THE KNOWLEDGE SOCIETY  
Oriol Homs
26. SPORT, HEALTH AND QUALITY OF LIFE  
David Moscoso Sánchez and Eduardo Moyano Estrada (coordinators)
27. THE RURAL POPULATION IN SPAIN. FROM DISEQUILIBRIUM TO SOCIAL SUSTAINABILITY  
Luis Camarero (coordinator)
28. CARING FOR OTHERS A CHALLENGE FOR THE 21ST CENTURY  
Constanza Tobío, M.<sup>a</sup> Silveria Agulló Tomás, M.<sup>a</sup> Victoria Gómez and M.<sup>a</sup> Teresa Martín Palomo
29. SCHOOL FAILURE AND DROPOUTS IN SPAIN  
Mariano Fernández Enguita  
Luis Mena Martínez and Jaime Riviere Gómez
30. CHILDHOOD AND THE FUTURE: NEW REALITIES, NEW CHALLENGES  
Pau Mari-Klose, Marga Mari-Klose, Elizabeth Vaquera and Solveig Argeseanu Cunningham
31. IMMIGRATION AND THE WELFARE STATE IN SPAIN  
Francisco Javier Moreno Fuentes  
María Bruquetas Callejo
32. INDIVIDUALIZATION AND FAMILY SOLIDARITY  
Gerardo Meil
33. DISABILITY AND SOCIAL INCLUSION  
Colectivo Ioé (Carlos Pereda, Miguel Ángel de Prada, Walter Actis)
34. THE TRANSITION TO ADULTHOOD IN SPAIN: ECONOMIC CRISIS AND LATE EMANCIPATION  
Almudena Moreno Mínguez (coordinator)
35. CRISIS AND SOCIAL FRACTURE IN EUROPE. CAUSES AND EFFECTS IN SPAIN  
Miguel Laparra and Begoña Pérez Eransus (coords.)
36. THE FERTILITY GAP IN EUROPE: SINGULARITIES OF THE SPANISH CASE  
Gøsta Esping-Andersen (Editor), Bruno Arpino, Pau Baizán, Daniela Bellani, Teresa Castro-Martín, Mathew J. Creighton, Maike van Damme, Carlos Eric Delclòs, Marta Domínguez, María José González, Francesca Luppi, Teresa Martín-García, Léa Pessin, Roberta Rutigliano

Since the second half of the 20th century, the decline in fertility has been a constant in practically all advanced societies. This study increases our understanding of the multidimensional character of this phenomenon, addressing educational and labour market factors, the impact of public policies, the transformation of gender roles and new family configurations.

Spain is the object of this in depth analysis because it exhibits behaviour that deviates from other cases of low fertility. Women in Spain postpone motherhood; they face difficulties in balancing family and career; support from the welfare state for families is insufficient and couples doubt if they should have children due to economic and social uncertainties. Spain also has a very high unemployment rate, in particular, among young people, and has seen a spectacular increase in the rates of divorce and cohabitation.

The authors analyse the factors that explain the uniqueness of the Spanish case, comparing it not only with the reality in Nordic and Anglo-Saxon countries, but also with Spain's mediterranean neighbours.



**Welfare Projects**  
"la Caixa" Foundation