Antonella Pinnelli
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Editors
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Genders in
the Life Course
Demographic Issues

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Genders in the Life Course

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# Genders in the Life Course 

## Demographic Issues

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## PREFACE

Although both demography and gender relations have been the focus of research for quite some time, the intersection of gender studies and demographic analysis is a more recent phenomenon. Fortunately, gender aspects of demography and demographic aspects of gender are two lines of research that have received increased attention in recent years, there is a growing group of researchers active in this area, and consequently, a growing body of publications of different kinds.

Despite this, books treating the topic of gender and demography in a more comprehensive fashion are rare. In fact, I can think of few examples since the publication of two edited volumes in the first half of the 1990s, namely Women's position and demographic change and Gender and family change in industrialized countries, both resulting from the activities of the International Union for the Scientific Study of Population. The editors of the current volume are therefore to be congratulated for taking the initiative to produce a much needed volume on gender and demography in developed countries (with a focus on Europe). The book covers a lot of ground, from the age at first intercourse over union formation and union dissolution to excess male mortality, and report important findings of empirical research, mostly based on comparative data from a number of European countries. The source of these comparative data is, in most cases, the Family and Fertility Surveys (FFS) carried out in the 1990s.

In addition to making good use of the FFS surveys, it is a great strength of this book that it emphasizes the relation aspect of studies of gender and demography. To quote a succinct formulation from the introductory chapter "introducing a gender perspective is not just a question of observing both men and women, instead of just women, but of observing the interaction between them and the influence of the gender contract on family and fertility behaviour". This deserves to be underlined, and I trust that this book will be an inspiration for further research in this area, not least among the junior researchers new beginning their careers.

It is to be hoped that new comparative data will soon be available to make it feasible to undertake empirical analysis of important demographic
trends in the last ten-fifteen years. It is my conviction that gender issues lie at the hearth of the demographic future of Europe, and we need to monitor closely what is happening, and to have a much better understanding of the interrelationship between gender issues and demographic trends. This book is an important contribution to this field of research.

# INTRODUCTION 

ANTONELLA PINNELLI, FILOMENA RACIOPPI<br>AND ROSELLA RETTAROLI

## 1 SOME HISTORY

The aim of this book is to contribute to the introduction of a gender perspective into demographic research on the developed countries, providing scientific evidence on the relations between the gender system and demographic behaviour, from the point of view of the life course. The behaviours studied are: sexual initiation, the formation and dissolution of partnerships, fertility, migration, the living conditions of the elderly and survival. There is also a discussion of the characteristics and trends of the gender system, the data and indicators available, advisable methodological strategies and research prospects. In most of the chapters there is a strong quantitative component, with the use of some large national and international data bases.

As we know, the concept of gender refers to the social and cultural aspect of the differences in behaviour between men and women, while the concept of sex makes reference to the biological sphere. Of all the different concepts used in the literature, such as women's status, female empowerment, roles and gender stratification, we shall make frequent use of the more general concept of gender system, as denoting the set of power relations between the sexes, and the rights, duties, expectations and roles which pertain to being a man or being a woman in any given society or culture.

Gender studies in demography are fairly recent. Some demographic phenomena have only been studied up until now for one of the two genders, either for convenience or for cultural reasons: fertility, for example, has usually been observed with reference to women (women have a much more precise minimum and maximum age for procreation, "mater semper certa" etc.), and migration with reference to men (in the past it was men who emigrated in the majority of cases, while the expatriation of women for purposes other than joining their families was rare). In other fields, on the other hand, there is a long tradition

[^0]of analysis of certain demographic phenomena distinguished by sex (mortality differences, for example).

It was only in the 1990s that a serious debate developed on how to incorporate gender issues into demographic research. This field of research has benefited from international initiatives both at a political level and at that of scientific research. The UN and the international bodies responsible for health, development, labour and women's status, have identified changing the gender system and female empowerment as two of the main goals for resolving demographic, health and social problems in the developing countries. Since 1985, the International Union for the Scientific Study of Population (IUSSP) has undertaken various initiatives to promote this field of studies. However, much of the research in recent years has been organized and funded for the developing countries, due to the urgency of understanding the mechanisms sustaining the still high levels of fertility and mortality, and the implications of the substantial migratory flows, while less has been done for the developed countries. The consequences of changes in the gender system on the demographic trends of developed countries have still been little analysed, and the consequences of the new forms of demographic behaviour on relations of symmetry/asymmetry between men and women have not yet been adequately investigated (for example the diversification of forms of partnership and their instability, immigration from developing countries or those of the former Communist bloc and the ageing of the population).

Indeed, in addition to introducing a gender perspective into demography, it would also be appropriate to introduce demography into gender studies, given that many demographic indicators are unambiguous markers of the system of relations between men and women: the decrease in the age differences between girls and boys at first sexual intercourse informs us of a more egalitarian way of embarking upon sexual relations between the two sexes; the greater difficulties experienced by educated and working women in forming and maintaining a partnership and having children are an indicator of the competing demands which exist only for women between professional success and family fulfilment, while the cancellation of these inequalities demonstrates the effect of more woman-friendly institutions and partners; sex differences in survival suggest that men experience serious difficulties, and the results of studies on the living conditions of the elderly demonstrate the effect of women's transition from imposed roles to chosen ones, and confirm that this kind of reconciliation of women's different roles pays off, both in terms of survival and in terms of intergenerational reciprocity of assistance and care. The vitality of women's role and its positive function in the quality of personal life and in that of the other members of the family is also evident in the experience of woman immigrants, who are active both in providing economic support and in weaving networks
of solidarity and relations contributing to the integration of the family into the social fabric of the host country.

## 2 THE THEORETICAL FRAMEWORK OF REFERENCE

The theoretical framework of reference for gender studies in demography is already well known and well structured in its aspects concerning family and reproductive behaviour, and many of the chapters of this book refer to it.

The main theory is that of the "new home economics", i.e. of the economic and opportunity cost rationale: a woman in possession of resources becomes less dependent for her personal economic security on the traditional models of behaviour in the sphere of life as a couple and the formation of a family, with a consequent increase in the opportunity costs associated with domestic chores and the bringing up of children. As certain studies have demonstrated, women with their own resources are less interested in marriage, limit their family obligations either by not having any children or by limiting their number and are more likely to get a divorce. Economic and demographic fluctuations may accentuate the need for women to study and work, reinforcing the impact on family and reproduction. From this theory it derives that more egalitarian couples will feature less traditional family behaviour.

A second theoretical line might be termed structural. We may distinguish two main arguments in it. The first concerns the marriage market: for women who are better educated and integrated into the labour market at high levels, it may be difficult to find a suitable partner on the marriage market if her expectations are that the partner's status should be equal to or higher than her own. This aspect may partly explain these women's lower rate of nuptiality. Indeed, traditional models of behaviour for the matching of couples dictate that men should be older, better educated and in a higher professional position than their partners, something which is rendered increasingly difficult by the increase in women's level of education (in many countries they are now better educated than men on average) and by their entry into the labour market in more substantial numbers and at higher positions. If there is no change in the rules of couple matching, it could become particularly difficult for women at the top to find men with the desired characteristics, as they are required to choose from a much more restricted group than that available to men (women choose from the upper part of the social pyramid, which is narrower, while men choose from the lower part, which is broader). Moreover, if a woman's earning power can make her a more attractive partner, this same quality will however be in conflict with her reproductive ability and sometimes preferred to it, and as a result might lead her to limit her fertility. Finally, the woman's increased need and ability to negotiate the division of roles and the care of any children with her partner could make it
more difficult for her to find a partner willing to undertake greater domestic and parental commitment. These observations show that working women either find it more difficult to achieve and maintain life as a couple and a large family, or are less interested in doing so.

The second argument of the structural theory, of no less importance, is related to the change over time of the structure of the female population by education and occupation. The increase in women's education and their integration into the labour market leads to a mechanical delay, so to speak, in the building of a family and in the birth of children. For women, this delay can amount to renunciation for various reasons, not least biological ones: the biological limit for reproduction is much stricter for women than it is for men, given that women's fecundity starts to decline from the age of thirty, and markedly so from that of thirty-five, ages at which it is becoming increasingly frequent to have the first child. It might not be possible to make up for an initial delay in later years. In addition to this biological reason, fertility may also decrease due to the increase in the competition between the desire to build a family and other interests, the longer a woman has been involved in a career.

A third theoretical line is that of the ideational shift towards greater individual autonomy in ethical, political and religious spheres. The development of movements of emancipation in the area of gender relations is an important part of these ideational changes. There is an ideational component in the decision to cohabit, to get divorced and to limit one's fertility. We may expect working women to be selected from the point of view of the value structures of reference, and thus less likely to undertake traditional female roles (wife, mother, caregiver).

A fourth theoretical line for the interpretation of gender differences in family and reproductive behaviour concerns the importance of the institutions: the laws which regulate the rights and obligations of the two genders in society and in the family, and the institutional support given to the family for functions of care provision. Different studies show that the force of constraints varies among countries with different institutional systems and, in particular, that the results of the delays caused by the prolongation of women's education and by the greater instability of partnerships are less serious or even non-existent in countries with more favourable contexts. The comparison between geographical areas with different institutional set-ups undertaken in all the chapters meets the need to hold constant the influence of different geographical/institutional contexts on the family behaviour of women and men.

There is no theoretical framework so articulated from the point of view of the gender perspective for other aspects of demographic behaviour. The gender system involves a difference between males and females in their sexual life: males embark upon sexual activity before females, but the differences in behaviour over time, within each country and among countries, shows that
there are different individual and social determinants of the onset of sexual activity for the two genders. There are gender issues related to the ageing of the population. Women more often experience solitude in their old age, and for longer, due to male supermortality, the age difference between spouses, which is normally to men's advantage and the lower incidence of new partnerships for widows compared to widowers. They end up having to undertake roles which they have never previously performed, and at ages in which health conditions may not favour the assumption of new responsibilities. The link between gender system (on which these differences in mortality, age at beginning of partnership, probability of forming a new partnership etc., partly depend) and the problems of old ages is evident. The theoretical models concerning gender differences in old ages in the receiving of help or assistance from children contrast family solidarity (I help you because you are my father or my mother, independently of any other considerations) with individual solidarity (I help you because you need it, because I love you, independently of your sex and of what I have received from you), or concern the exchange of resources (I help my parents with a view of receiving something in exchange, a house or an inheritance, i.e. I help you if you have something) and integration (I help whoever has been closest to me). In old ages, then, women on their own might receive more than men on their own because they are more integrated into the family network, while men might receive more if utilitarian considerations prevail, since they usually possess more. On the other hand, there shouldn't be any differences in a society where the family sentiment prevails.

Economic development, the development of the transport system, globalization and the increase in the level of education have created greater possibilities of geographical mobility and encouraged independent female migration, with consequences on the gender system in this case too. But are we sure that the greater autonomy achieved by women in migration will be conserved upon their return to the country of origin?

If we look at the gender analysis of mortality, then factors related to biology and to structural conditions of a social type come into play (education, labour market, nosological picture), but also ideological and institutional aspects: laws and measures of social policy can alter mortality differences between the sexes, e.g. by imposing speed limits or the wearing of helmets and banning smoking or the use of alcohol in certain circumstances, thus encouraging a reduction in male mortality. It is a proven fact that women enjoy a biological advantage in survival, but this advantage is assessed at around two years of life expectancy. If the real difference is lower, we may be sure of the existence of discrimination against the female gender, while if it is greater (as happens more often) it means that men are at a disadvantage, both for social reasons
(e.g. regarding work and its related hazards or lifestyles more generally) and for cultural ones (more frequent harmful behaviour, lack of attention to health).

So, in order to analyse the various aspects of demographic behaviour from a gender perspective, we must always bear in mind the influence of the development, in the broad sense, of ideologies and institutions.

## 3 DATA AND METHODS

### 3.1 Focus on Gender Differences: The Micro Data

Most of the chapters make use of the data of the Family and Fertility Surveys (FFS).

The FFS project was born in the second half of the 1980s as an answer to the research questions generated by the extreme variety and heterogeneous nature of the patterns of family behaviour observed in Europe, both in terms of modality and in terms of timing. The aim of the project was to acquire knowledge targeted at policies - on determinants and consequences of the changes which have taken place in the formation of partnerships and in reproductive behaviour in Europe and in the other developed countries.

The project was launched at the end of the 1980s on the initiative of the Population Activity Unit of the UN Commission for Europe (PAU-UNECE) in Geneva, in sequel to the two other international projects: the Comparative Fertility Survey (CFS) and the World Fertility Survey (WFS), which had similar goals but different specific features. The goals of formulating family policies, with particular attention to fertility, are more explicit on this occasion, together with the goals of comparison, for the analysis of the process of family formation. This time the collection of life histories bears witness to the careful attention paid to the longitudinal perspective of analysis. In 1992, the PAU presented a core questionnaire consisting of ten sections plus four optional modules. This was constructed on the basis of the questionnaires used by Norway, Finland, Belgium and Poland, which had previously conducted surveys with similar goals. The contents of the questionnaire range from information on the characteristics of the respondent's current family and family of origin to partnerships, pregnancies and children, contraception, opinions on the family and children, education and occupation of respondents.

Conducted in 24 countries (all European with the exception of Canada, the US and New Zealand) between July 1988 and October 1999, the survey is based on an elaborate sample design, with samples of men and women of every marital status, with age limits under 50 for women and under 55 for men. The minimum age interval common to all countries is $20-39$. The samples vary
in size, but the male one, where included, is usually smaller than the female one (cf. Table 1). The project was formally concluded in May 2000 with the FFS-Flagship Conference, organized in Brussels.

In this book few of the countries mentioned have never been included in the analyses (cf. Table 2), given the attention to aspects of a comparative nature required by the research. In particular, we attempt to represent at least those European areas exhibiting the greatest differences with respect to changes in family behaviour and the gender system, as identified in Chapter 1 [Di Giulio, Pinnelli]. Other sources of micro data are used in the chapters which explore particular features ${ }^{1}$. Chapter 9 [Farina, Terzera] analyses the population which has immigrated to Italy from Egypt

Table 1. Structure of Fertility and Family Surveys (FFS) Project

|  | Sample design |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Country | Women | Men | Age | Execution period |  |
| Austria | 4500 | 1500 | $20-54$ | Dec-95 | May-96 |
| Belgium | 3200 | 2200 | $21-40$ | Mar-91 | Dec-92 |
| Bulgaria | 2500 | - | $18-40$ | Nov-97 | Mar-98 |
| Canada90 | 4900 | 4100 | $15-54$ | Jan-90 | Mar-90 |
| Canada95 | 4200 | 3700 | $15-54$ | Jan-95 | Dec-95 |
| Czech Republic | 1700 | 700 | $15-44$ | Oct-97 | Dec-97 |
| Estonia | 2000 | 1000 | $20-69$ | Jan-94 | Mar-97 |
| Finland | 4200 | 1700 | $22-51$ | Aug-89 | Jan-90 |
| France | 2900 | 1900 | $20-49$ | Jan-94 | Apr-94 |
| Germany | 6000 | 4000 | $20-39$ | Jul-92 | Jul-92 |
| Greece | 3000 | 1000 | $18-50$ | Jan-99 | Jul-99 |
| Hungary | 3600 | 1900 | $18-41$ | Nov-92 | Dec-93 |
| Italy | 4800 | 1200 | $20-49$ | Nov-95 | Jan-96 |
| Latvia | 2700 | 1500 | $18-49$ | Sep-95 | Oct-95 |
| Lithuania | 3000 | 2000 | $18-49$ | Oct-94 | Dec-95 |
| Netherlands | 4500 | 3700 | $18-42$ | Feb-93 | Jun-93 |
| New Zealand | 3000 | - | $20-59$ | Oct-95 | Oct-95 |
| Norway | 4000 | 1500 | $20-43$ | Oct-88 | May-89 |
| Poland | 4200 | 4300 | $18-49$ | Dec-91 | Dec-91 |
| Portugal | 6000 | 3000 | $15-54$ | Apr-97 | Jun-97 |
| Slovenia | 2800 | 1800 | $15-45$ | Dec-94 | Dec-95 |
| Spain | 4000 | 2000 | $18-49$ | Nov-94 | Nov-95 |
| Sweden | 3300 | 1700 | $23-43$ | Oct-92 | May-93 |
| Switzerland | 3900 | 2100 | $20-49$ | Oct-94 | May-95 |
| United States | 10500 | - | $15-44$ | Jan-95 | Oct-95 |
| Total | 102400 | 47500 | $15-69$ | Oct-88 | Jul-99 |

Table 2. Contexts Considered in the Chapters

|  | Chap. 1 | Chap. 2 | Chap. 3 | Chap. 4 | Chap. 5 | Chap. 6 | Chap. 7 | Chap. 8 | Chap. 9 | Chap. 10 | Chap. 11 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Developed countries | X |  |  |  |  |  |  |  |  |  | X |
| Sweden |  |  |  |  | X |  |  | X |  |  |  |
| Norway |  | X |  |  |  |  |  |  |  |  |  |
| Finland |  |  | X |  |  |  | X | X |  |  |  |
| UK |  |  |  |  |  |  |  |  |  | X |  |
| Netherlands |  |  |  |  |  |  |  |  |  |  |  |
| Belgium |  | X |  |  |  |  |  |  |  |  |  |
| Germany |  |  |  |  |  |  |  |  |  |  |  |
| Austria |  |  |  |  |  | X | X | X |  |  |  |
| Switzerland |  | X | X | X |  |  |  | X |  |  |  |
| Hungary |  | X | X | X | X | X | X | X |  |  |  |
| Czech Republic |  | X |  |  |  |  |  |  |  |  |  |
| Poland |  |  |  |  |  |  |  |  |  |  |  |
| Lithuania |  | X |  |  |  |  |  |  |  |  |  |
| Latvia |  | X | X | X |  |  | X | X |  |  |  |
| France |  | X |  |  | X |  |  |  |  |  |  |
| Italy |  | X | X | X | X | X | X | X | X | X |  |
| Spain |  | X |  | X |  |  | X | X |  |  |  |
| Portugal |  |  |  |  |  |  |  |  |  |  |  |
| Slovenia |  | X |  | X |  |  |  |  |  |  |  |
| Ghana, Egypt |  |  |  |  |  |  |  |  | X |  |  |

[^1]and Ghana and compares it with return migrants and the population of those who have never emigrated, while Chapter 10 [Tomassini, Glaser] compares the conditions of the elderly in Italy and Great Britain.

### 3.2 Focus on Contexts and on The Gender System: Macro Data

The importance and centrality of those dimensions which concern the individual - decisions, attitudes, choices, patterns of behaviour, opinions etc., fundamental in a study on gender for the establishment of its differences and specific qualities - has not prevented us from concentrating much attention also on those macro dimensions of phenomena which help to better define groups and areas, i.e. context. In particular, then, when attention is shifted from roles and gender differences to the gender system, there is a transition from micro to macro, though this does not preclude the possibility of switching back (what effect or function does the gender system have on behaviour? How does context contribute to the definition of behaviour and roles?). We may say that substantial use has been made for this purpose of international sources of macro variables and indicators ${ }^{2}$. Two chapters in particular [Di Giulio, Pinnelli, Chap. 1; Nobile, Chap. 11] process indicators concerning the countries, with the explicit aims of analysing the levels of the phenomena, characterizing contexts, synthesizing structure and making international comparisons. In other chapters, the macro data deriving from international sources is used to better frame the phenomena and to make comparisons.

The experience gained within the study, working on these data sets, has opened up spaces for further and more incisive reflection on the information required by gender studies, and has provided the opportunity to recapitulate the current state and prospects of data collection in developed countries and among the international coordinating bodies. Section 1 in the Appendix [Pinnelli et al.] presents a useful review on the data available and the data needed for research from a gender perspective.

### 3.3 Methodological Tools

The topical nature of the subjects tackled in the entire project and the complexity and wealth of data used are reflected in the up-to-date nature and variety of the methodological apparatus used in the various chapters.

The eleven chapters involve empirical analyses and hence the use of statistical methods: univariate and bivariate statistical tools, such as association
measures, chi-square and nonparametrical tests, as well as multivariate statistical methods (event history analysis, logistic regression, factorial analysis) (cf. Table 3).

Within the volume, it may be said that the methodological approach is fairly homogeneous, given the goals of the research. In the first place, there is the unanimous choice to use methodology of a quantitative nature, given also the sources of data examined. Attention is mainly on individual behaviour rather than macro characteristics, with a consequent prevalence of the micro approach, with an equal emphasis on description and interpretation. Description generally precedes interpretation.

As regards interpretation, it is the causality of relations which is at the centre of the elaborations performed, as a natural consequence of a research strategy which pays great attention to the variability of behaviour, its determinants and the dynamics of individual decision-making processes. It is precisely on these bases that we may indicate the other fundamental element of the methodological approach, which lies in the analysis of event histories, one of the most advanced approaches for the complete and integrated study of behaviour, which recognizes in the longitudinal dimension the only way of taking account of the complexity of the paths which are interwoven in the life of an individual, determining its various specific features. Indeed, an individual's life cycle is that natural arena in which gender identity takes form, where roles and differences are defined and, as each life history interacts with the others and with the characteristics of the environment, the individual contributes to the evolution of the system of relations and gender behaviour.

The main orientations of a methodological nature within this volume are therefore:

Table 3. Statistical Methods Used Within the Volume

| Univariate and bivariate statistics <br> Measures of association, Chi-squared, <br> Non-parametric tests | N. chapters |
| :--- | :---: |
| Decomposition of differences <br> Multivariate statistics <br> Event History Analysis (duration models, <br> Cox, piecewise constant exponential <br> model, mixture models) | 3 |
| Logistic regression | 1 |
| Factorial analysis (Correspondences, <br> Principal Components, Multiway) | 5 |

- dependence analysis;
- event history analysis (EHA).

At least five studies make use of the methods of event history analysis, also resorting to most advanced techniques such as mixture models [Pinnelli, Di Giulio, Chap. 5] in order to distinguish estimates of the effects of covariates on intensities from those on the timing of the avoidable phenomena observed.

The individual perspective which certainly prevails in this text is nonetheless sufficiently backed up by a macro level approach which satisfies the need to treat gender issues also in terms of the social system in which the collectivity recognizes itself; in particular, use is made in Chap. 1 [Di Giulio, Pinnelli] of multiway methods of analysis (analyses of several matrices of indicators relative to different events in time), in order also to highlight the temporal dynamic of the macro gender system in developed countries.

Moreover, more traditional forms of exploratory factor analysis (e.g. of multiple correspondence analysis) are used for preliminary descriptions of the structure of the groups examined (in two chapters).

Some chapters of the volume [Pasquini, Samoggia, Chap. 4; Farina, Terzera, Chap. 9] are oriented towards an "analysis strategy", an approach which has yet to be adopted on a broad scale. It involves the use of various methods, no longer individually or at any rate in an isolated and independent manner, but according to a strategy which, through the application to the same set of data of various methods combined in parallel or in sequence (thus exploiting, on each occasion, the results previously obtained), makes it possible to make maximum use of all the information available and reduces errors and redundancies to a minimum.

Finally, section 2 in the Appendix, provides some suggestions on the statistical techniques - most useful to identify gender differences and assess the effects of the gender system on demographic behaviour. While there is no specific statistical method for gender studies, it is nonetheless possible to discern those with the best gender-oriented potential, in the sense of being particularly suited for exigencies of comparison and synthesis in order to better outline the different gender systems.

## 4 POSSIBLE INTERPRETATIONS OF THE RESULTS

### 4.1 The Gender System in Different Contexts: Macro and Micro Aspects

Analysis of the gender system in Europe highlights the existence of four groups of countries, on the basis of women's status (human capital, participation in the labour market, political representation), men and women's time use, the criteria of couple matching and related family behaviour, and survival [Di Giulio,

Pinnelli, Chap. 1; Nobile, Chap. 11]. The first group consists of the Scandinavian countries: these already had a gender system which was more favourable to women in the 1970s: high levels of education and political representation, a high rate of participation in the labour market (with the frequent use of part-time employment, flexibility and positive segregation), greater involvement of the partner in domestic and family activities and more time for self. We know that also in the Scandinavian countries there are some negative aspects in the gender system: for instance, women face many obstacles to reaching the top level of their career being relatively absent at the higher levels of business, industry and academic life, although they are well represented in the government and in the parliament. Anyhow the status of Scandinavian women is very good in comparison to the other countries.

Associated with this status is the greater de-institutionalization of the family and a relatively high rate of fertility, a low rate of mortality and malefemale life-expectancy differentials which are contained or decreasing.

The second group of countries consists of those of eastern Europe: in the 1970s these experienced an apparently more egalitarian situation between men and women from the point of view of employment/education/power, with traditional patterns of family behaviour (also in the modalities of couple matching, with the man considerably older than the woman) and a relatively high rate of fertility. Since the crisis of the Communist regimes, these countries still exhibit small gender differences in employment and education, but women have lost out in terms of political representation and have less personal time compared to the other countries, to the evident detriment of their quality of life. The patterns of family behaviour associated with this situation are fairly traditional, but fertility has fallen greatly and mortality is relatively high, with high and generally increasing differences in life expectancy between the sexes.

The third group of countries consists of those of southern Europe, where the gender system was very traditional in the 1970s and progress over the last thirty years has been slow: women's human capital was and is inferior compared to the other countries and there are low levels of political representation and participation in the labour market; there is a traditional allocation of roles and women have less personal time as they devote more of it to family commitments. The patterns of family behaviour associated with this situation are traditional (stable marriage as the virtually exclusive form of partnership), but marriages are scarce and late and fertility is very low. In compensation, mortality is low and differences in life expectancy between the sexes are not pronounced, though the trends vary between the countries.

Finally, the fourth group consists of the countries of western Europe, which feature a situation in between the Scandinavian countries and those of
southern Europe, from the various points of view, both in the 1970s and in the more recent period.

While the Scandinavian countries can be taken as a point of reference for better women's status and a fairer gender system, their experience shifts the goal to be reached by women from an idea of equality to one of equality of opportunities and possibilities of choice, and proposes a model of compatibility between social and family responsibilities, thanks to the support of the institutions (niches of the labour market suited to women with children, generous entitlement to leave and availability of services) and to the partner's participation in family tasks. An evolution of the gender system in this direction makes it possible to achieve fertility at close to replacement level. Low mortality and a minimum difference in life expectancy between men and women complete the picture of a high quality of life, both for men and for women.

Are there signs of any such evolution in those countries which are still a long way from what would currently appear to be the ideal scenario? One chapter looks for signs of change in this direction, analysing the characteristics and trends of gender socialization in childhood: Di Giulio and Carrozza [Chap. 6] examine the role of the father in Italy, Austria and Hungary, which are taken as examples of three of the four groups of countries illustrated above, and find that children live in families where gender roles are traditional and fathers participate to a limited extent in the care of their children, almost exclusively in playing with them and helping them with their homework and rarely in the more central tasks of childcare. All the rest is up to the mothers. Children therefore perceive a traditional division of roles in their families, and will be inclined to reproduce it. The signs of change are very limited: younger fathers with medium-high levels of education (though if the level is very high they hire assistance instead of providing it themselves) and with working female partners (but not everywhere), give greater collaboration. One finding is surprising: while religious mothers require less help from their partner, religious fathers participate more in childcare. This prompts us to interpret religiousness as a condition of greater individual responsibility towards children, and undermines the stereotype which regards it as a characteristic which is backward and traditional compared to the secular world.

### 4.2 The Accelerators of Change

It is no easy undertaking to treat, in a single study, role asymmetries between the genders in the most important social-demographic processes. It may seem hazardous to give priority to the comparison of results for a lot of countries from different geographical and social-political spheres, as happens in this volume. Nonetheless, what emerges from a cross-sectional reading of the various chapters is a big photograph of the statistical variability present in

Europe, from which common elements nonetheless emerge which are tending to attenuate role asymmetries between men and women and to increase women's autonomy.

We have termed these aspects the accelerators of change: their existence is clearly identifiable in every area and for each of the forms of behaviour or choices investigated, even though their effect does not always act in the same direction, and they does not always exhibit the same importance or intensity. The variables which may be described as accelerators are: generations, secularization, education, participation in the labour market, residence in urban centres, legislation and institutions, and migration.

It should be stressed that each of the elements listed is interrelated with the others, and one of the goals of the analyses is to seek to measure the single contribution of each of them.

The positive role of the generation effect in decreasing gender inequalities emerges in most of the contributions. Male and female behaviour tends to become more similar as we pass from the older generations to the more recent ones, starting with those born immediately after the Second World War, down to those born in the early 1980s. A respondent's generation may be interpreted as a proxy of the social norms specific to the historical period in which he has experienced his adolescence [Coppola, Chap. 2]. Western societies' evolution towards modernity has involved a particularly fast sprint for women, who have exhibited more rapid rates of change in behaviour compared to men. In the case of first intercourse, the transition from generation to generation has seen a transformation of female behaviour over time towards an earlier debut, which is more significant and more marked than that of men [Coppola, Chap. 2]. In the case of autonomous choices, such as exit from the family of origin and experimentation of first partnerships, innovation is concentrated mainly among the younger generations: there is a significant increase down the generations in the proportion of women who, prior to the transition to marriage, experience periods of independence, both economically and in terms of housing, or opt for partnership forms other than marriage [Impicciatore, Rettaroli, Chap. 3]. The tendency for women's behaviour to change at a greater pace may also be noted in those countries where gender asymmetries are less pronounced. The acceleration of transformations for the younger female generations may also be detected in their increased tendency to renegotiate couple roles in the family: younger fathers participate more in childcare [Di Giulio, Carrozza, Chap. 6], independently of national contexts, which nonetheless determine differences in average levels of participation.

The inter-generational transition is necessarily accompanied, in most of the contexts examined, by an increase in the level of education, especially for women. It is precisely the increase in the number of years of study which
necessarily causes a delaying effect on subsequent choices, given the specific sequences in the phases of passage to adult life prescribed in the various societies. Higher levels of education are synonymous, especially for women, with a greater degree of human capital, which may be brought to bear in every choice: it becomes easier to leave home for an independent life as opposed to marriage, forms of partnership other than marriage are chosen more frequently, cohabitation is converted into marriage less frequently and people are more likely to dissolve a partnership and less inclined to start a new one. Education also appears to be a significant brake and delaying element: as its level rises, there is a corresponding delay in entry into adult sexual behaviour, exit from the family, the starting of the first partnership and the birth of the first and subsequent children. There is a strong connection between education and the marriage market: the modes of couple matching change with the growth in average levels, with an increase in the number of cases in which the women is more educated than the man, even though this delays marriage. To greater gains in education correspond stronger expectations as regards the working sphere, with the rejection in most cases of choices which do not include the seeking of employment and professional fulfilment. We shall deal with the close relations between participation in the labour market and female autonomy in the following section.

Other dimensions influencing changes in behaviour between the genders are secularization, in the sense of a moving away from religious observance and traditional values, and urban residence [Pasquini, Samoggia, Chap. 4]. Although the abandonment of religious conviction/observance and life in an urban centre (in the sense of greater opportunities of transmission of information and a lesser degree of social control) also have an effect on male behaviour, there is always a significant link between such characteristics and demographic behaviour in the case of women, once again representing a point of discontinuity, even with the more recent past.

The role played by legislation and the institutions should also be stressed. It is not measured quantitatively in the studies presented in this volume, but it may nonetheless be deduced indirectly from the selection of countries observed, according to the geographical picture highlighted in Chap. 1 [Di Giulio, Pinnelli]. Overall, in those countries where the institutional framework determines a greater possibility of women's reconciling domestic and extra-domestic commitments, women's choices appear to be less limited: while there is a delaying effect between older and younger generations often visible in the formation of a stable partnership or the birth of the first or subsequent children, it hardly ever translates into renunciation, as it does in those societies more tied to traditional patterns of gender relations. In these areas, the lack of any decisive impetus towards the renegotiation of roles still all too often means renunciation of the family for women.

One tool which is certainly revealed as being effective in increasing the autonomy of women from contexts very different from those of Europe appears to be the experience of migration [Farina, Terzera, Chap. 9]. Women with an experience of migration are more likely to be the principal agents of the decisions and choices affecting their own lives. The acquisition of a greater level of psychological and often also economic autonomy remains a patrimony which cannot be totally altered and also finds expression upon return to the countries of origin. Such a change may represent the beginning of a long process of reviewing of gender roles and relations.

### 4.3 Opting for Autonomy: the Importance of Employment

In all western countries, the high levels of education achieved by women have created ever higher expectations of stable participation in the labour market. Productive collaboration in the occupational sphere and the knowledge and expertise which may be acquired therein have necessarily pushed in the direction of equality in relations with men, at least (and primarily) in the sphere of employment.

Limiting ourselves to an interpretation of the results, what emerges are several interesting points as regards the relation between women's employment and demographic and social behaviour, which are worth highlighting.

In almost all of the contributions dealing with the variable of employment [Di Giulio, Pinnelli, Chap. 1; Impicciatore, Rettaroli, Chap. 3; Pasquini, Samoggia, Chap. 4; Pinnelli, Di Giulio, Chap. 5; De Rose, Di Cesare, Chap. 7; Angeli, De Rose, Chap. 8; Farina, Terzera, Chap. 9], the influence of extra-domestic work is interpreted as representing the possibility of both economic and psychological autonomy for women.

If we are to outline an ideal life history describing transitions of status from the point of entry into adult life and thus, in most of the countries examined, from the abandonment of full-time education, the accumulation of professional and psychological experience provided by employment seems significantly linked to the choices made in each transition in the life course.

In countries with a family-oriented culture, such those of the Mediterranean, economic autonomy and aspirations towards professional fulfilment are at the basis of changes in the courses of women's lives representing the transition from youth to adult age. In this case, marriage is reached in a condition of greater symmetry: experiences of work and cohabitation eliminate economic and psychological subjection.

And the effect of employment also seems to emerge clearly in the long and complex process leading to the formation of the first partnership [Impicciatore, Rettaroli, Chap. 3]: both in the more traditional societies (such as those
of the Mediterranean) and in the more liberal ones, or in those formed under Communist regimes, the direct relation between employment and partnership formation (employment precedes access to a partnership) is always strong in the case of the man, especially in the case of marriage. The strength of this relation also seems to increase the more a country features asymmetrical relations within the couple, i.e. the further south one goes, but also in countries of central Europe such as Switzerland and Hungary.

In the case of female employment, on the other hand, the formation of the couple presents a different picture. Employment has a delaying effect on the formation of the family in the more family-oriented societies, in the case of the more traditional types of partnership and where the employment of women is lower in incidence and may be regarded as a recent gain [Impicciatore, Rettaroli, Chap. 3; Pasquini, Samoggia, Chap. 4]. Alongside the familiar picture of the relation between employment and the likelihood of forming a formal or informal partnership, a less well known situation exists in the countries of eastern Europe, where women's participation in employment has long been fully attained. For these countries, the employment of women is a structural element of society (the gender-oriented effects of recent variations in economic situation are not dealt with here) which is partly imposed and not always chosen, rather than a fact of emancipation. In this case it is therefore interesting to explore whether this element has had any influence on the processes of forming a family and on the gender contract. What seems to emerge from the analyses contained in this volume is a substantial degree of independence between the two spheres in the case of the countries of the East or, where a relation exists, what is underlined is the importance of a double income in the upkeep of a family. The extent to which double income and "double presence" are related for women in these countries might constitute the object of future research. In any case, the picture which emerges is one of a greater symmetry of roles as regards employment in the case of those opting for cohabitation as opposed to marriage, and this aspect appears to be independent of the type of society, as it affects the Scandinavian countries just as much as it does those of central and southern Europe.

That decision-making processes are oriented by gender is an aspect which also emerges from the contribution of Pasquini and Samoggia [Chap. 4]: the ideational system has a strong impact in all countries, and its effect differs between men and women. In the contexts in which the values of reference are more traditional (Italy, Spain and Switzerland), there appears to be a strong effect of secularization, i.e. of departure from traditional values and religious observance; the importance of such ideational aspects is not however usually isolated from the strong effect that employment status always has for women, as intensifying their effect on individual choices.

Employment affects the choices and decisions regarding fertility [Pinnelli, Di Giulio, Chap. 5]: it usually delays the arrival of children for women. It has been demonstrated that in some contexts women in high-level professional positions limit family responsibilities and the number of children, while in the case of men the action-reaction is exactly the opposite. Both Becker's economics-oriented approach and Lesthaeghe and Moors's theory of changes in ideology and values come to the same conclusion: fertility control is greater when the woman is in permanent and responsible employment outside the family, or at any rate is involved in domains of occupational life requiring a high expenditure of individual energies.

The delaying of life paths caused by the mainly female increase in education, often magnified by the greater expectations in the sphere of work which such an increase usually creates, is a familiar element which has been proven in many quantitative and qualitative studies. To the increase in the amount of time devoted to education should be added the time spent looking for a job which corresponds to personal expectations; it may certainly be affirmed that the postponement of formation of a family and children is a phenomenon which unites most of the western developed countries. What remains less clear is whether the search for and practice of the desired occupation have a similar effect on this delay in all cases, and whether or not it constitutes the inevitable start of renouncing having the desired number of children, for example.

Chapter 5 of this volume [Pinnelli, Di Giulio] contains some interesting points of reflection in this respect: for men, employment status is no obstacle to having more than one child, while in the case of women it often creates a delaying effect on the birth of both first and subsequent children. In Europe, this delay is transformed into renunciation as we proceed from north to south, especially in the case of the second or third child. While in Sweden, the employment-related delay of the birth of the first child does not result in the putting off by women of having at least a second child, in Italy the delay more often means stopping at the first child. The conclusion underlined by the authors is strongly related to the action of the institutional context: organizational situations which are more favourable towards the reconciliation of work and the family mean fewer limits to fertility for women, but also increased constraints for men, given that they must take partial responsibility for running the family.

Women's employment renders the duration and continuity of a partnership more uncertain. In countries where the traditional family still represents an important value, such as Italy, " the greater a women's commitment to work, the greater is the risk of the partnership's dissolving" [De Rose, Di Cesare, Chap. 7]. Conversely, employment represents an element of stability for men. Even in areas with better organized institutions for the support of the family and maternity (Switzerland and Hungary), women's participation in extra-domestic work nonetheless constitutes a risk to the stability of the couple's relationship. In
this case, the effect of the economic and psychological independence developed outside the domestic sphere gives rise to choices which, while traumatic, are no longer regarded by both partners as being unthinkable.

The construction of personal economic independence may be of use in choices in every phase of the life history. It may be strategic [Angeli, De Rose, Chap. 8] in the case of a decision regarding the formation of a second partnership, when the existence of a personal income may render a new family collocation less urgent; there is also a substantial independence between the two careers in the case of men. In the case of breakdown of a partnership, however, the woman's need to work may be the fruit of a pre-existing economic inequality, indicating a more acute worsening of living standards than for the man.

Women's participation in extra-domestic work may, in conclusion, be seen as an element contributing to making gender a social construct. The studies collected here show that development in the sphere of women's autonomy, which has been extremely rapid over the past decades, alters the bases of gender relations, whatever the social context in which one moves. Difficult as it may be to compare situations with different institutional set-ups and social-economic conditions, what the above-mentioned chapters confirm is that women's participation in paid employment outside the home and the consequent accumulation of personal income tend to alter relations between men and women in the basic areas of autonomy, power, roles and access to and control of resources.

### 4.4 The Settling of Scores

While family and reproductive behaviour highlight disadvantages for the independent woman, as she clearly pays a price for her emancipation in terms of greater difficulties in forming a first partnership and any subsequent partnerships, greater instability of partnerships and lower fertility compared to men of the same status, at the end of the life cycle the equilibrium is inverted. This is demonstrated not only in life expectancy but also, to a certain extent, in the conditions of old age.

Women live longer than men, much longer than the difference which might be explained by biological reasons. They have been less exposed to hazards in the workplace (either by not working or by working less and in more protected sectors compared to those of men), they have made better use than men of progress in prevention and treatment (as a result of caring for the whole family). After many years of increasing gap of life expectancy between men and women, the difference has recently started to decrease in many developed countries, suggesting a new scenario: men are starting to imitate the virtuous elements of women's behaviour, while women's adoption of the hazardous elements of male behaviour remains a more contained phenomenon [Nobile, Chap. 11]. If the ultimate goal
of satisfactory life as a couple is reduction to the minimum of the period of widowhood (the stressful event most feared by elderly people), by prolonging the life of men and eventually accepting non-traditional criteria of couple matching (e.g. man of the same age or younger), such a goal might be reached.

Do widows and widowers receive assistance and care to the same extent? There is no doubt that women have devoted more time to children, and have often sacrificed autonomy and career to caring for the family. Is there any compensation for this? Tomassini and Glaser [Chap. 10], in their comparison of Italy and Great Britain, find that the behaviour of children towards their parents in the former, more family-oriented country does not differ with the sex of the surviving parent. The situation is, however, different in the case of the more individualist country: in this case, men receive less than women. Indeed, the family-oriented country has the family as the main, if not the only support for elderly parents, and assistance from children is a respected social norm. The individualist country has, on the other hand, developed a system of services which provide care for the elderly also in the absence of family support and in this case, if there is any relationship of intergenerational solidarity, it is more likely to be with the mother, insofar as reciprocal, than with the father, who has been a less central figure on the children's affective and relational horizons. In conclusion, at the end of the life cycle, in contexts in which the existence of support outside the family weakens the social norm of intergenerational solidarity, women receive more than men in exchange for past dedication.

## 5 PROSPECTS OF RESEARCH AND NEED FOR DATA

The design of the Family and Fertility Surveys (FFS), the data bases most used in this volume, did not offer any other possibilities of analysis, in terms of either exploration of contents, the limits inherent in the very structure of the surveys, or the possibilities of comparison.

One limit, for example, is that the survey concerns independent samples of men and women (with problems of statistical significance linked to the different numerical sizes of the samples) and does not afford the possibility of analysing partners' joint characteristics and man/woman interactions within the couple, while most of the choices concerning individual behaviour analysed in the chapters are the result of a complex interaction, often conflictual, between men and women. In this sense, an understanding of the different strategies applied by the members of a couple or small group, such as the family, in the identification of roles, the recognition of status and the management of power and resources is essential for our understanding of the outcome of the process. The sphere of gender analysis, insofar as it is involved in describing the persistence of inequalities between men and women and understanding the processes
leading to these imbalances, must necessarily include the field of interaction between the subjects involved. In this sense, the study of phenomena such as entry and exit from partnerships and fertility choices cannot therefore be limited to the analysis of individual propensities but must necessarily attempt to include the relational aspect of the couple. This makes it desirable to have data available concerning couple histories, measured with information about both partners from the start, or, in places where the frequency of complex partnership histories is high, starting from information provided by the women about her various partners, with reference to circumstances preceding the demographic events, so as to permit a causal analysis.

Another limit highlighted by the analyses presented lies in scarcity of the time-dependent information reconstructed by the surveys used: indeed, the analysis of life histories would require many more covariates for the temporal measurement of changes of status, so as to be able to relate them to verification of the demographic events of interest. This means a very accurate planning of the hypotheses to be tested at the phase of constructing the questionnaires, so as bear them in mind, simultaneously, at the different levels of longitudinal aggregation of information (individual, couple, family, context).

Some of the aspects highlighted in this research emphasize the need for further surveys. One example is the need to analyse past and ongoing changes in the social role of the woman, along with the evolution of the system of gender inequalities. It is necessary to continue to reflect upon the modalities of construction of those gender-sensitive indicators of social inequality needed to reveal important aspects of female and male roles and their transformations. Indeed, introducing the gender perspective into demographic research does not mean simply comparing the demographic behaviour of men and women, which is nonetheless an essential step, but above all observing how gender (gender system, contract, roles etc.) influences demographic behaviour or is affected by it. A crucial step in this sense is to "mine" family situations. In this context, an increased availability of variables capable of revealing the processes of acquisition, distribution and use of resources within the family becomes essential, on both gender and generational lines, variables which are still unfortunately fairly scarce in the data bases available.

At a collective level, we need to know more about all the institutional aspects which might influence the gender system (e.g. system of leave for women and men with children and relatives to look after, flexibility of the labour market, availability of services for children and the elderly, availability and cost of services substituting domestic work) and on the division of roles within the couple. Aspects which have hardly been developed at all are those regarding autonomy (which is not only provided by work, but also by the possibility of spending money, deciding on important issues and having an independent social
and associative life). Up until now, education and employment have been used as proxies for many aspects in which there is actually no knowledge of their characteristics. Indeed, what emerges from the results presented in this volume is that, in some cases, the best condition of women from the point of view of human capital and integration into the labour market does not actually correspond to a more equal allocation of roles.

The change in women's status and the difficulty of renegotiating roles within the couple highlights another need, which is to know if and how standards are changing as regards the tasks of family care hitherto undertaken almost exclusively by the woman. Indeed, domestic work has become much less onerous with the availability of electronic domestic hardware and external services, and this may have taken place differently in the various countries and among the different social classes. Moreover, expectations may have changed as regards what has to be done: tasks which were initially regarded as being a necessary part of the female role might simply have been eliminated. The analysis of standards would also tell us something about the quality of domestic life in the various conditions.

Another field of research to be developed concerns women's biological role, which is jeopardized by its competition with other roles and by the interests of medical and pharmaceutical corporations. The increase beyond any reasonable international standard of the percentage of Caesarean births, the abandonment of breast feeding and the excessive medicalization of pregnancy are aspects which must still be studied in a comparative fashion: having gained control of their own sexuality and fertility, or of their own human capital, women must now recover their ability to have children as a natural aspect of female life, instead of allowing themselves to be deprived of it or renouncing it.

Two fields of particular interest have emerged from our study, which should be further cultivated alongside the more classical ones: that of gender socialization and that of the marriage market and the criteria of couple matching, which are two aspects which may have notable consequences on future gender relations.

Finally, the analyses among countries have highlighted the interest in the comparison between different situations, in order to understand the relations between gender and demographic behaviour, which, as we have seen, vary with context. Particular attention should be paid in monitoring the changes underway in the east and south of Europe, where specific models of demographic behaviour are emerging, which cannot be described in the same terms as the situations which have hitherto been recorded. Political discontinuities or deep cultural differences may be breaking new ground in the relations between gender and demographic behaviour. The hard and complex task of international coordination of surveys and studies is well worth the effort and cost involved, and should be continued
bearing in mind the need to include the various theoretical perspectives present in research on the gender system - which is inevitably interdisciplinary - and to combine various research techniques (macro, micro, quantitative and qualitative).

## NOTES

1. ISTAT (for Italy) Multipurpose Survey (1993-1997) on Aspects of Daily Life; ONS (for Great Britain) British Household Panel Study (1999), and General Household Survey (1998); EUROSTAT/NIDI (for immigrants to Italy) Survey on Egypt and Ghana Population (1996); NewCronos Data Base 2000, http://europa.eu.int/newcronos/; Central Statistical Office, Hungary, www.ksh.hu; European Parliament, www.europarl.eu.int
2. Council of Europe, EUROSTAT, ILO 2000, OECD, UNESCO 1999, UNECE 2000, UNICEF, UN-WISTAT 1994, ISTAT, OMS (MDB-Mortality Data Base).

## CHAPTER 1

# THE GENDER SYSTEM IN DEVELOPED COUNTRIES: MACRO AND MICRO EVIDENCE 

PAOLA DI GIULIO AND ANTONELLA PINNELLI

## 1 DEFINITIONS

Gender identifies a category of analysis in the social sciences which does not refer simply to the biological differences between the two sexes, but which, as we shall see, involves virtually all spheres of existence.

The term "gender" has only been used to refer explicitly to the nonbiological differences between individuals of a different sex since the beginning of the 1970s [Udry, 1994]. Even more significant has been the introduction of the concept of a "gender system" by Rubin [1975], in order to indicate the set of conditions and expectations which define "being a man" and "being a woman" in a society in terms of the division of tasks and responsibilities and the attribution of rights and duties, typically to women's disadvantage. As a result, a gender system may create inequality in terms of power, autonomy and wellbeing. Some of the gender system's most deeply embedded expectations may be strongly reinforced by the state and by the community, and also, through informal sanctions, by the neighbourhood, kin group and peer group [Mason, 1995; Pinnelli, 1997].

The expression "gender system" replaces a whole series of definitions previously used to denote inequality in terms of status between men and women, or the conditions which cause and encourage it: women's status, patriarchy, female empowerment, women's autonomy, and others still [Mason 1995]. In none of these concepts has the relational nature of the concept of gender been so evident and clear, whereby a comparison between women's and men's status is always implicit.

It is not sufficient to regard gender as being on a par with a social role, defined by a whole set of attitudes and behaviours, which is taught and repeated until the behaviour prescribed by this role becomes so natural that it appears to be an integral part of the person. It is, however, important to regard

[^2]gender as being a constituent part of social structures, and as being profoundly interconnected with other elements such as class and race. Indeed, is gender not just an expression of cultural values: like class and race it also influences the subdivision of resources, and it is therefore directly linked to the distribution of merit, privilege, power and autonomy [Fox, McBride Murry, 2000; Ferree, 1990]. Moreover, according to this perspective men and women may vary in their degree of masculinity or femininity, despite gender socialization, and have to be constantly reminded of the fact that they are male or female through social interaction [Fox, McBride Murry, 2000].

The use of different terms in order to indicate what should be a single concept highlights its multidimensional nature. Due to its complexity, the gender system cannot be described by a single measure, especially in consideration of the fact that gender stratification and role allocation vary along with social class, with the institutional sphere in question (family, labour market, ...) and with the point reached in the life cycle [Mason, 1984; 1995].

There are four main levels at which gender differences emerge in the attribution of power [Sen, Batliwala, 1997]. Indeed, there may be within one's own family and within one's family of origin a division by gender of resources and household tasks, gender-differentiated access to health, education, autonomy, or limited possibilities for women to participate in decision-making processes. At a community level, there may often be social norms, beliefs or practices which are particularly oppressive for women's autonomy. In the labour market (though the concept may also be extended to differentiated access to credit, technology etc.), there may be unequal access to resources according to an individual's gender (e.g. segmentation and segregation of the labour market, or different access to the organs of government). Finally, the presence of legal systems or practices which discriminate against women, or the absence of programmes and policies which take explicit account of women's needs and constraints, automatically creates differences in power at the level of the state.

All of these levels are actually interconnected, and power relations at one level are reinforced and influenced by power relations on the other levels.

Finally, we must bear in mind that the gender system is essentially aggregate in nature, i.e. that it is best observed only when variations are measured over time in the same society, or transversally in societies with different gender systems. Indeed, we may reasonably hypothesize that all individuals belonging to the same society are subject to the same gender rules, and therefore do not differ in this respect.

For all of these reasons, multivariate, multilevel, comparative studies are to be recommended [Mason, 1995; Pinnelli, 1997].

The gender system may influence demographic change in a direct fashion, with changes in the gender system therefore prompting changes in
the existing demographic regime, or indirectly, in which case the nature of a previously existing gender system may affect the impact which other changes have on demographic behaviour [Mason, 1995]. Moreover, if we wish to understand how the gender system induces or influences demographic change, we must necessarily know how and through what mechanisms the nature of the society in which individuals live influences and directs their individual choices.

The aim of this study is to offer a synthetic vision of the gender system in developed countries. The first part will highlight its chief aspects, with particular attention to the situation prevailing in the 1990s. It will illustrate the macro indicators contained in the principal data banks, and also data regarding time use (where available) and data from the FFS Surveys on the matching of couples and on the sharing out of household tasks. The second part will analyse the evolution of the gender system over time in the European countries selected, and the way in which this relates to the demographic changes which have taken place over the last three decades.

## 2 A LOOK AT THE GENDER SYSTEM OF THE 1990S

### 2.1 The Main Aspects ${ }^{1}$

The gender system existing in different societies may be represented at a macro level by indicators which express the difference between men and women in terms of access to and control of resources, power, prestige and roles. Due to the complexity of the gender system and its continual interaction with the economic and cultural development of a society, there is no single measure which might adequately synthesize the situation of the various countries. Each aspect of the gender system will therefore be examined separately first, and then the relations existing between the main elements will be shown.

### 2.2 Education $^{2}$

A necessary condition for gender equality in the "construction" of human capital is equal access to education, especially at higher level. Investment in education provides opportunities in life and work and influences the way in which parenthood is exercised and free time is managed. If there is no discrimination against the access of young women to post-secondary education, then it is less likely in the future that positions of command, in both public and private spheres, will be the exclusive prerogative of men.

In the past, access to education at any level was strongly differentiated by gender. The result of this situation can be clearly read in the population
statistics for educational qualifications: virtually everywhere, adult men are on average better qualified than women, with a greater representation of women among the lower levels of study, and of men among the higher ones. But now that the rate of post-secondary qualification has increased over the last decades, and at a faster rate for women than for men, the gap is gradually closing as the generations of women benefiting from less restricted access to middle- and higher-level education grow older.

In order to assess the present situation, and to imagine the future, we must therefore take a look at the information on access to education, i.e. educational qualifications. There is currently almost no significant difference between male and female rates of qualification at secondary level. At tertiary level ${ }^{3}$, the female rate of qualification is actually equal to or higher than the male one in most European countries, though the prevalence of women is less pronounced in more advanced studies, at university or post-graduate level [UNESCO, 1999].

Despite the increase in female participation, women are not more numerous in all subjects: indeed, girls and boys typically opt for different fields. Women generally favour subjects related to the humanities, art, education and medicine (including nursing). Engineering, mathematics, natural sciences and informatics are the specializations which are most segregated in the opposite direction (prevalence of men); in the legal and commercial disciplines there is a fairer balance among students by sex [UNESCO, 1999]. The type of specialization chosen has a very strong impact on the labour market, and men generally opt for the more lucrative fields.

Women are currently doing better than men not only in school enrolment, but also in the acquisition of a university degree: more women than men are graduating every year in almost all ${ }^{4}$ European countries, and in some cases the percentage of women among graduates is higher than $60 \%$.

Basically, women do not see their own opportunities of access to higher levels of education as being limited, but they often choose different fields compared to men, both due to cultural stereotypes regarding the suitability of certain types of studies according to gender, and in view of future employment.

### 2.3 The Labour Market and Personal Income

Participation in the labour market is quantitatively and qualitatively different by gender. In the western economies, the rate of female activity has grown continually over the last decades, due not only to economic growth but also to the creation of new jobs in the services sector and women's greater participation in the opportunities for professional training afforded by education. The highest rate of female participation is currently to be found in the Scandinavian countries, with rates of around $50 \%$, while it is lowest in the South European
countries, at around $35 \%^{5}$. In the eastern countries, although the rate of female employment was always high from the post-war period onwards, the change in regime after 1989 sparked a deep economic crisis, the consequences of which included the loss of a large number of jobs, among men and especially among women.

We must however remember that most of the statistics have traditionally been constructed with a male-type definition of "work" in mind (long-term paid employment with a full working week etc.) and that female-type economic activity has remained somewhat hidden, not having been adequately measured [Mata Greenwood, 1999]. For example, part-time work or atypical contracts of employment (short-term, renewable) are more often entered into by women than by men, mainly for reasons that have to do with family responsibilities. The percentage of men working part-time in 1998 rarely exceeded $10 \%$ in European countries, while the rate was as high as $67 \%$ for women in the Netherlands, settling at around $30 \%$ in the countries of the European Union, excluding the South. Part-time employment is not particularly common in the countries of Eastern Europe, where the goal of full employment was pursued up to the end of the 1980s.

Men and women behave differently not only in their participation in the labour market, but also in the type of work they perform and in the amount they earn.

Gender segregation ${ }^{6}$, i.e. the tendency for men and women to be employed in different occupations (horizontal segregation) or in different positions of responsibility (vertical segregation) is very strong in virtually all European countries. Women are concentrated in occupations of a "technical, clerical or service-sector" type, the sector which contains over half of the workforce. Men are more likely to opt for the manufacturing sector which, apart from the sector of the armed forces, is the most male dominated. Although segregation may limit employment opportunities and influence the personal income, there is no clear relation between the extent of occupational segregation and the position of the woman in society. In the countries of northern Europe, where the gender system is judged to be fairer, there is a high degree of segregation in the labour market. It is therefore possible that in this case the choice of type of employment is dictated not by external constraints and limits, but by a personal assessment on the basis of practical considerations, e.g. as regards the possibility of reconciling the roles of motherhood and work, which is more feasible in some occupations than in others.

Personal income is the most difficult index to compare among the countries, as different sources are used (surveys, ministerial data etc.), the statistics lack standardized definitions (e.g. whether gross or the net income is quoted) and the proportion of part-time workers is not always taken into
account. However, it may be affirmed that in the countries belonging to the UN's Economic Commission for Europe (ECE), for which comparable data is available, women's income was usually about three quarters that of men for the period 1994-99, and the difference between male and female income is more pronounced in western countries than in the economies in transition. The difference decreases if one holds as constant age, educational qualifications and type of profession: female workers are usually younger than their male colleagues and thus less experienced, while in the older age groups women are less qualified ${ }^{7}$ than men and have presumably undergone more career interruptions than their younger female colleagues, owing to family responsibilities. Above all, women are generally employed in occupations different to those of men. But even after holding these factors constant, the difference in income is nonetheless equal to $15 \%$, which has yet to be explained [Benassi, 1999].

### 2.4 Participation in Political Power

The first woman in Finland was elected to the national assembly in 1906, but the same event did not take place in Switzerland until 1971 ${ }^{8}$. Although women's political involvement has been increasing, it is still much lower than that of men in all countries, with the exception of those of the North. Apart from Sweden, Denmark, Finland, Norway, the Netherlands, Iceland and Germany, where women made up over $30 \%$ of members of parliament in March 2000, most countries exhibit percentages which rarely exceed $20 \%$.

Women are also under-represented in executive power, as well as in the national assemblies. With the exception of the above-mentioned countries, where women made up at least $35 \%$ of the total number of ministers in March 2000 (the highest proportion being in Sweden at $50 \%$ ), the values for the other countries are on average lower. Moreover, it is often the case that women ministers are not given key roles to play in the executive, but tend to receive certain less strategic sectors, such as health, education, cultural affairs or social security.

On the other hand, women generally enjoy greater ease of access to political careers at a local level (in regional councils or as mayors). This is principally the case of the economies currently in transition, and less so for the Scandinavian countries.

There is not very much information about the roles covered by women within political parties. In general, it is more difficult for women to be nominated as party candidates, they do not have sufficient political experience, they lack adequate economic support and the necessary networks of relations, or they are hindered by prevailing stereotypes. The role of the political parties is crucial as it is these which promote candidacies.

### 2.5 Demographic Behaviour

Since the second half of the Sixties, family behaviours in the developed countries have gone through a great transformation: consensual unions and divorces have become more widespread, whereas marriages and the birth of children have been delayed. To describe these changes, occurred in the various countries with different intensity, the term 'Second demographic transition' was coined, with the hypothesis that it may represent a new phase of the evolution of demographic behaviours, very likely to spread [van de Kaa, 1987]. In particular, age at first marriage has increased, for both men and women, touching upon values of over 25 for women and approaching 30 for men nearly everywhere. At the same time, the age gap between genders is gradually closing, and is currently between 2 and 3 years. In eastern Europe, where marriage has traditionally been early, the figures are slightly different, with lower average ages and a greater age gap. The increase in the average age at first marriage may be due both to disaffection with the institution of marriage (and a consequent tendency to contract marriage only at the moment of the birth of children), and to a prolongation of education, and thus to the greater investment in human capital. The decrease in the age gap between genders, on the other hand, bears witness to an increasing similarity between male and female life patterns.

Men and women also differ in life expectancy: on average, women are currently living at least five years longer than men. The main differences are to be found in those countries with economies in transition (the former Soviet bloc): at the end of the 1990s, the difference between men and women in terms of life expectancy was in excess of 10 years in Estonia, Latvia, Lithuania, Belarus, the Russian Federation and the Ukraine. Several hypotheses have been put forward in order to establish the extent to which difference in survival between the genders is due to biological factors and that to which it is due to behavioural factors [cf. Nobile in this volume], without, however, coming to any firm conclusions.

### 2.6 Violence Against Women

One of the sectors in which statistics are almost completely absent is that of domestic violence against women ${ }^{9}$, perceived in the past more as a strictly private question than as a crime. The figures are however alarming: the World Bank estimates that in industrialized countries about $19 \%$ of illness in women aged 15-44 is the result of domestic violence. Unfortunately, only a few countries have launched investigations into violence against women, and the nature of the questions and the types of investigation are so varied that it is impossible to compare the results.

## 3 A SYNTHESIS OF THE MAIN ASPECTS

A previous study by Pinnelli and Di Giulio [1999] made use of a broad number of indicators in order to capture the features of the gender system at a macro level in developed countries (not only in Europe) in the first half of the 1990s. The indicators included in the analysis were selected bearing in mind not only the social localizations highlighted by Sen and Batliwala [1997], but also UN recommendations on the technical characteristics of the indicators to be considered in the analysis of women's status ${ }^{10}$ [UN, 1984]. For every aspect, we included not only the indicator relative to women, but also an indicator of comparison with men's situation, according to the methodology suggested by Sicherl [1989]. All indicators were analysed through a principal components analysis ${ }^{11}$, the results of which are illustrated in Fig. 1.1.

We observe aspects related to:

- power relations within the family (expressed in synthesis by age gap between spouses and by average age at first marriage for women);
- access to education as an investment in human capital;
- characteristics of the labour market (participation, unemployment, sectors of activity and occupational segregation);
- the political involvement of women at national or local level

There emerges a contrast along the first axis between a situation in which the average age at marriage is high, as is life expectancy, political involvement at a national level, tertiary-level education and the concentration of women in the services sector (with a resulting high rate of segregation in the labour market), and the opposite situation in which there are also high rates of maternal mortality and adolescent fertility, and male conditions of survival are markedly worse than those of women. The second axis, on the other hand, contrasts situations in which women's participation in the labour market is high, both in absolute terms and relative to men, and political involvement at a local level is more frequent.

In synthesis, four typical groupings of countries emerge: 1) those of the East, characterized by a widespread participation of women in the labour market ${ }^{12}$ in ways similar to those of men (low index of segregation by type of occupation), high rate of involvement of women in local, but not central government, young age at marriage, and with larger age gaps than average, and non-optimal conditions of survival for women and in particular for men; 2) the countries of northern Europe were, on the other hand, characterized by more favourable conditions of survival, a high rate of political involvement in national government and the organs of power, tertiary-level education for women, widespread participation in the labour market, but with attention to the

Figure 1.1. PCA on Indicators of Gender System (Variables and Countries), 29 Countries


Source: Pinnelli, Di Giulio, 1999.
choice of sector in order to maintain a degree of flexibility (i.e. the services sector and public employment), with a consequently high rate of segregation, and, lastly, high age at first marriage; 3) the countries of southern Europe, where both the visibility of women in the political world (national and local) and their participation in the labour market are limited; 4) the countries of western Europe, where the situation lies somewhere midway between those of the north and south, with higher than average values for participation in national politics, high age at first marriage, high educational qualifications, excellent rates of survival, but with rates of female activity which, while they are on average higher than those of southern Europe, do not achieve the extent of those of the Scandinavian countries and the former Soviet bloc.

While the analysis inevitably neglects certain interesting aspects, it does therefore highlight and confirm the existence of important differences in the gender system among the observed countries.

In an analysis of this type, we can only use proxy variables in order to capture those aspects of the gender system for which there are still no suitable indicators (or for which it is unlikely that any might exist in the future). For example, at a macro level we have no option but to fall back on age gap between spouses as proxy variable for the degree of equality of power (in management of resources, participation in decision-making processes etc.) between partners within the family. While it is nonetheless true that a smaller age gap between partners usually accompanies a more equal subdivision of power, it is however much more important for the purposes of measuring the gender system to know, for example, how household tasks are shared. Indeed, a large part of the sociological and economic literature on gender and the family concentrates on this point [Coltrane, 1996; 2000]. Data of this type can only be collected through purpose-built interviews, and are not available for all countries or for every year.

## 4 TIME USE

Men and women organize their own time in different ways, especially because they have different roles and responsibilities at home and at work. Traditionally, since the start of industrialization, it is the man who undertakes paid work outside the home, and the woman who manages the household sphere; a concomitant aspect of this type of organization has been less visibility for women in the public sphere. Moreover, the subdivision by gender of household and working responsibilities is so rooted in western culture, that even now that women's participation in paid work is becoming more frequent, it is much harder for the domestic rules to change.

The importance of the possibility of having access to data on time use, differentiated by sex, also lies in the fact that women's work is widely underestimated in economic terms, both because certain activities are not directly included in the various systems of national accounting and because the contributions of many people, and women in particular, are neither recognized nor remunerated. Attention to this kind of activity only started to spread when the stereotype of men's work as being economically important and paid started to be criticized and attempts were made to move beyond it [Mata Greenwood, 1999].

For this purpose we may analyse data on time use originating from special enquiries undertaken in certain European countries between 1984 and 1992 - rendered comparable ${ }^{13}$ by the United Nations [UN, 1995] - in which the total number of hours of the week is divided into working time, paid or not, and time for oneself; moreover, unpaid working time is divided into household chores and childcare ${ }^{14}$. The data are available for 15 countries.

In the whole set of 15 countries analysed, women work on average 55 hours a week, mainly with unpaid work ( 32 hours), and the rest with paid work ( 23 hours). Women's unpaid work is devoted mainly to household tasks (about 27 hours) and in a small part to children (about 5 hours). Total working time exceeds that of men, who work a total of 50 hours, and it is very differently distributed (men devote a little under 14 hours a week to unpaid work). Men are therefore left with somewhat more time for themselves (115 hours as opposed to 110). On average, women are involved in household tasks for more than double the time of men, and about three times as far as childcare is concerned.

The geographical differences between countries are notable, and have been synthesized using a principal components analysis, Fig 1.2. The variables inserted in the analysis are the quantity of time that women devote to paid work, to domestic activities and to themselves, and the ratio between this and that of men. Onto the plane defined in this fashion ${ }^{15}$ were projected all the other variables.

We may note that the first axis contrasts the time devoted by women to paid work with that devoted to domestic activity, both in an absolute sense and compared to men. The second axis is highly correlated with time for oneself, but in this case the indicator of comparison with men is more distant from that of the absolute quantity of time devoted by women to this kind of activity. In substance, fairly evident patterns of time usage emerge: in the first group of countries, in the upper right corner of the factorial plane, we see all those situations in which the woman is involved in paid work, but less so in domestic work (and at the same time the man is on average more involved in unpaid work compared to other situations, particularly in domestic activities), so she has more time for herself, especially compared to men. This part of

Figure 1.2. PCA on Data Concerning Time Use, (Variables and Countries), 15 Countries



Source: Our elaboration on UN data. [1995b]
the plane corresponds perfectly to the set of Scandinavian countries (Denmark, Norway, Finland and Sweden). The eastern European countries (Hungary, Latvia, Lithuania and Bulgaria) are almost entirely represented in the bottom right corner of the plane, where women are also very much involved in paid work (as in the case of Scandinavian countries) and inevitably devote less time to household tasks, but due to their greater involvement in the labour market they can dedicate less time to themselves in absolute terms. On the left side of the graph are those countries in which the woman devotes less time to paid work, but has considerable responsibility in domestic work (Italy and Spain) and thus less time for herself compared to the average for the other countries. The countries of western Europe (Netherlands, Germany, UK and Austria) are characterized by the opposite situation compared to the eastern countries, i.e. women work less than the average for these countries, they are responsible for household tasks, but they have more time for themselves, especially in absolute terms.

These results effectively complete the analysis at macro level presented previously: the real gain for women does not seem to consist in the achievement of equality at all costs and in all sectors, but in an improvement in the quality of life (expressed e.g. as amount of time for oneself), thanks to a fairer sharing out of unpaid commitments.

## 5 COUPLES AND DOMESTIC RESPONSIBILITIES

Information both on the ways in which couples are matched and on the sharing out of household tasks may be found in the FFS surveys. The women interviewed who stated that they were currently in a union were requested to give information about their partner as regards age, level of education and the way in which household tasks were shared ${ }^{16}$. For reasons of comparability, we shall limit the analysis to couples in which the woman was aged between 20 and 39 at the time of the interview.

The countries for which the necessary data are available ${ }^{17}$ belong to western Europe (Germany, Austria, Switzerland and Belgium), the South (Italy) and the East (Hungary, Poland, Bulgaria, Latvia, Lithuania and the Czech Republic). Unfortunately, there are no data for the countries of northern Europe, so it is not possible to obtain any information on couples living in countries with a fairer gender system.

About half the men in the countries observed are at least four years older ${ }^{18}$ than their partner, with a minimum of $40-41 \%$ in the two Baltic countries and a maximum of $61 \%$ in Italy. The percentage of couples in which the woman is older than her partner is lower than $10 \%$. With the exception of the two extremes, the eastern countries tend to have a more traditional model of couple matching
by age. The age gap between partners has always been one of the most robust social norms, justified in the past by the greater fertility of younger women and the greater economic security of older men. Conversely, we may expect a loosening up of these social norms with an improvement in women's status.

As regards difference in educational qualifications between partners, on the other hand - where the gender differences will emerge not so much between countries as within the national education system itself - we may note that the percentage of couples in which the woman is as qualified or better qualified than her partner is generally higher than elsewhere in the eastern countries (with the exception of Lithuania and Bulgaria), where there is a longer tradition of participation of women in education, albeit mainly at middle school level. In all the countries, the most common situation is nonetheless one of "homogamy" between partners: at least half the couples, with the exception of Latvians, have similar qualifications. The situation in Latvia is remarkable: in $87 \%$ of couples in the sample the woman possesses at least the same educational qualifications as her partner, and within this group at least half the women are even better educated than the man.

As regards the sharing of household tasks within the couple, the indicator chosen for these is the percentage of women stating that such activity is undertaken by both spouses on an equal basis, or that the main person responsible is the man (i.e., the percentages of men collaborating). By household tasks in this case we mean cooking, cleaning, shopping and managing the household budget.

What differs between men and women is not only the amount of household work, but also the type of work [Brayfield, 1992]: of the above tasks, the first two are less shared by spouses. The percentage of men collaborating varies from $10 \%$ in Bulgaria to $27 \%$ in the Czech Republic, for cooking, and $12 \%$ in Italy to $38 \%$ in Germany for cleaning. The other two activities are better shared, with a minimum of $38 \%$ in Switzerland and a maximum of $55 \%$ in Germany for shopping and a minimum of $46 \%$ in Hungary and a maximum of $75 \%$ in Bulgaria for the management of the family budget.

The picture varies greatly, mainly because collaboration between partners in domestic tasks can be influenced by several factors. The literature constantly underlines the fact that household work is still regarded as a woman's responsibility, despite the fact the paid work is taking on an ever greater role in women's lives. Different approaches have been suggested in order to explain these inequalities, which underline the effect of partners' economic resources and their bargaining power, the existence of strong gender ideologies, and also the effect of the availability of time. The first theory suggests that an individual with a higher income is less likely to undertake household tasks, the second that the behaviour of those socialized to accept that paid work and domestic work
should be segregated by gender coincides with their beliefs, and the third that the more time a person devotes to paid work, the less they devote to household tasks [Greenstein, 2000; Coltrane, 2000]. Moreover, it is always important to take account of the characteristics of the context in which the couple lives, e.g. the availability of outside help, facilities and services, which are more widespread and utilized in some countries than in others.

FFS data on collaboration between partners highlight the existence of at least two models for the sharing out of activities (Fig. 1.3).

In the first group, collaboration is generally more common between partners and it is not totally segregated between typically female tasks and more "neutral" ones (Germany, Hungary, Czech Republic and Poland). Collaboration between partners in cooking and cleaning is always on average higher than $26 \%$, and in the case of the first two countries, shopping is more commonly shared than managing the household budget, suggesting the idea of a more balanced type of sharing. Indeed, management of the household budget is the kind of activity in which the man tends to collaborate more frequently, even in the most traditional situations from the point of view of the current gender system, while participation in shopping is often indicative of a sharing of household responsibilities of a more routine type.

In a second group of countries, collaboration between partners in those activities more typical of women is not as common as in the previous case, and we may observe a more or less evident skewing of the graph towards management of the family budget (Bulgaria, Latvia, Lithuania and Switzerland). As far as the other countries are concerned, there is no information as regards this latter activity, so we can only state that in Italy collaboration between partners is really minimal in those activities more typical of women, and that Austria and Belgium appear to resemble the second category more than the first ${ }^{19}$.

The comparison with the previous analysis on time use is not immediate, both because the two series of investigations refer to different moments in time (end of the 1980s in most of the countries in the first case, mid 1990s in the second), and because different indicators are available (quantitative in one case, qualitative in the other). This calls for some observations regarding the type of indicator used. Indeed, this type of analysis is usually performed on data deriving from surveys on the time use, in which it is also possible to measure the amount of time generally devoted to household tasks, something which cannot be done with the FFS data. Moreover, the type of question, which is aimed essentially at identifying the partner mainly responsible for household tasks, may mask a much more complex situation, in which an equally significant role may also be played by other members of the family or other people in general ${ }^{20}$.


## 6 CHANGES IN THE GENDER SYSTEM AND DEMOGRAPHIC CHANGES

### 6.1 Data and Method

Having represented the gender system at a macro level at the current point in time and from different points of view, we may now examine its evolution over time and its relation to demographic events. We aim to understand how gender differences have evolved and the extent to which the European countries have evolved differently over the last thirty years, in correspondence to the second demographic transition, as regards the basic features of the gender system.

In the first place, we must once again bear in mind the fact that only very rarely is it possible in an analysis of this type to have access to economic, demographic and social data which are comparable not only from country to country but also over the course of time, and which has a clear meaning for the purposes of defining the gender system.

The following indicators emerged in the analysis of the gender system as being most important for capturing the dimensions of access to and control of resources, power, autonomy, prestige and roles, and they are all available over the course of the years:

- for access to resources and prestige:
- gross ISCED76 rate of women's qualification at tertiary level: access to education for women at higher levels, in order to gain access to more influential and prestigious careers;
- proportion of women enrolled at ISCED76 tertiary level: gender equality in the number of students at the top level;
- for access to and control of resources, autonomy and roles:
- rate of female employment: as women's status gradually improves, access to the labour market is increasingly easier, in part because responsibilities towards family and children are becoming more limited;
- for power, prestige, control of resources and roles:
- proportion of women elected to national parliamentary assemblies: indicates discrimination in access to power. Only if women are in power can they influence the preparation of legislation on their behalf.
All indicators were collected for the years 1970, 1980, 1990, 1998/99 (last year available), for European countries of significant size whose borders have not changed since 1970. The following were therefore excluded: Germany, the Czech Republic, Slovakia, the countries of the former USSR and the former Yugoslavia, and those with under a million inhabitants.

On average, the value of all the indicators rose during the period under observation: the rate of third-level qualification, for example, increased from $10 \%$ in 1970 to almost $50 \%$, and the percentage of women among students at this level grew from $36.7 \%$ to $52.5 \%$.

The rates for female employment and the percentage of seats in parliament occupied by women have also grown: from $30 \%$ to $41 \%$ on average for the indicator of economic activity and from $11 \%$ to $21 \%$ for participation in political power. Although the growth of women's participation has been considerable both in education and in political power, women's presence in seats of power may still, unfortunately, be regarded as marginal. Moreover, there are notable regional differences, to which we shall devote ample attention below.

Certain indicators were chosen in order to compare gender system and demographic behaviour.

For the marriage market and the criteria whereby couples are matched:

- average age of woman at first marriage: the increase in average age at first marriage (from 23.1 to 26.6 years in the period under observation) is the result of a greater investment in human capital and the increase in opportunities outside family life; this has led to a postponement and reduction of fertility [Blossfeld, 1995; Pinnelli, 2001];
- average man-woman age gap at first marriage: this has shrunk from an average of 2.6 to 2.46 years. The decrease in the age difference between spouses is an indicator of change in the criteria of couple matching and of greater equality within the couple.
For change in the cost-benefit balance in marriage:
- proportion of births outside marriage: this has grown from $6.1 \%$ to $28.4 \%$; and its increase is an indirect indicator of the greater frequency of informal unions and thus of a declining interest in marriage;
- total divorce rate: this has grown from $12.1 \%$ to $31.5 \%$, indicating the increasing instability of marital forms. We may state that family instability is linked to woman's autonomy: both the woman and the man are more in favour of the dissolution of the union if the woman has a certain degree of economic independence [White, 1990; Olàh, 2001].
For fertility:
- total fertility rate: this has dropped from 2.4 children per woman to 1.5 ; we may state that, although the change in women's condition is something which generally limits fertility, this effect is counterbalanced in those countries in which women are more empowered and
there are policies which are more attentive towards the needs of the family and quality of life [Pinnelli, 1999; 2001].
For survival:
- life expectancy at birth for women: this has grown from 74.4 to 79.6;
- difference between genders in life expectancy at birth: this grew from 5.9 to 6.8 years between 1970 and 1990, but then dropped once again to 6.5 years. The value for male supermortality due to exclusively genetic and biological causes is estimated at around 2 years [Pressat, 1973], but increasing to around 6-7 years during the second demographic transition and reaching still higher values in some countries (e.g. 14 years in Russia in 1994), in certain circumstances. In some countries, a fall in the differences in life expectancy between genders was observed, which could be related to a change in the gender system in a more egalitarian direction, and in particular to the increasing similarity between male and female lifestyles [Vallin, 1999].
Our main interest lies in the study of the change over time of the geographical distribution of these indicators, the way in which they correlate, and the tendency for them to converge (i.e become more homogeneous) or diverge over time. In order to effect this kind of analysis, we use multi-way factor analysis of the data matrices (tables), referred in French to as ACT (Analyse conjointe de tableaux), performed using the STATIS method. This makes it possible to analyse matrices of the type individuals-variables-occasions in which, in this case, the occasions are calendar years. Basically, the analysis identifies a so-called factorial plane "of compromise", upon which it is possible to represent - with minimum loss of information - the variables for the various occasions (years) by means of coefficients of correlation between the variables and the axes of the plane of compromise, and the countries observed by means of factor scores [Lavit, 1985; Lavit et al., 1994]. Then the trajectories of the countries or variables are analysed by joining up the points relative to the various occasions, from 1970 to the most recent year. If the trajectories tend towards the centre, then the observations (individuals or variables) have tended over time to become more similar to the average individual, whereas if they tend towards the periphery, then they have tended to diverge, i.e. to become more heterogeneous from a geographical point of view.

It is not always easy to interpret the meaning of the axes, as in the case of the principal components analysis, due to the dynamic nature of the variables; in an analysis of this type, what interests us most is the movement of the variables, the relationship between them, the dynamics of the countries and how close they are to each other and the tendency of variables to diverge or converge.

As the graph illustrating the method contains abundant information, we shall start by analysing the situation at the beginning of the period of observation, and then the subsequent changes (Fig. 1.4).

### 6.2 The Gender System and Demographic Behaviour in 1970

At the beginning of the period of observation, three of the four variables with which it was decided to represent the gender system are very close to each other (Fig. 1.4). Rate of female employment, percentage of women elected to national assemblies and percentage of women enrolled in post-secondary education (third level, according to the ISCED76 classification) are highest in the area of the plane containing most of the countries of northern and eastern Europe, which are therefore very similar from this point of view. The indicator for the rate of qualification of women at third-level (ISCED76) is located elsewhere, on the other hand, and indicates the difference which already existed between these two groups of countries since 1970. Indeed, women's participation in higher education is higher in the countries of northern and western Europe, not only in comparison with the eastern countries, but also with those of the south and Ireland.

According to these indicators, gender systems discriminated more heavily against women at the beginning of the 1970s, both in western Europe and, especially, in the countries of the south of Europe and Ireland.

From the point of view of demographic behaviour, divorce and informal unions were more common in the countries of northern Europe than in the other countries in 1970. All the countries, except those of the east, exhibited high values for average age of women at first marriage, female life expectancy and differences between female and male life expectancy. Fertility was higher in the countries of the south of Europe, and lower in the countries of the north of Europe, and age gap between men and women at first marriage was still high both in the countries of the east and in certain countries of the south of Europe.

The differences which may be noted between the countries as regards demographic trends may be due, in this case, more to the different levels of socio-economic development between the countries in the early 1970s, or to historical differences in family models and models of survival, than to actual differences in the gender systems, which nonetheless existed.

### 6.3 Gender System and Demographic Behaviour in the Period 1970-99

In the next period, all the gender-system indicators exhibit a notable dynamism. Women's political involvement at national level grows in all the

Figure 1.4. Results of Multiway Analysis (Statis) Years 1970, 80, 90, 98 or the Most Recent Variables


Source: Our elaboration (data in Pinnelli et al. 2003 Tab.1.2).
countries of northern Europe, more gradually so in those of western Europe, reaching values of up to $43 \%$ for seats in parliament occupied by women in Sweden, and $36 \%$ in the Netherlands. On the other hand, there is a sudden fall in the percentage of female representation in the countries of the east immediately after the 1990s, following the collapse of the communist regimes. In the same fashion, the countries of the south of Europe exhibit very low values for this indicator, which has actually dropped to derisory levels in the most recent period. All this can be clearly seen in the trajectory of the indicator, which moves away from the countries of the east, travelling directly away from those of the south and approaching those of northern and western Europe.

Less marked, but in the same direction, is the geographic change in the extent of women in post-secondary education: the values for this indicator were already higher than average in 1970 for the nordic countries, and moved still further in this direction in the following years, because although women's participation in higher education increased everywhere, the increase was more marked in those countries than in those of the east or south.

The rate of female employment also exhibits a trajectory which tends increasingly to approach the nordic countries, moving away from the countries of the East, where the value for the indicator has remained fairly stable, or has slightly diminished. The western countries, and those of the south, despite the general increase in female participation in the labour market, have nonetheless remained characterized by low levels for the rate of activity.

The variable for gender equality in participation in high levels of education exhibits a less dynamic nature compared to the other indicators, and hence less change in the geography of the phenomenon. Indeed, the value for this indicator has increased everywhere, but it started off from higher values in the countries of the east at the beginning of the 1970s. The variable therefore moves more towards the centre, in any case following the movement of the countries of the north.

In synthesis, three of the four variables characterizing the gender system display a diverging pattern, so that the countries of the north of Europe remain relatively isolated, in a position which is much more egalitarian than that of the others.

From the point of view of demographic behaviour, the geographical distribution of those indicators reflecting a growing unpopularity of marriage (total divorce rate and percentage of births outside marriage) has remained substantially unchanged, with the Nordic countries still characterized by these phenomena. The other variables display a greater dynamism, especially the total fertility rate, which has generally fallen from high to low levels in all countries in the period observed (the height of the second demographic transition), but which, over the course of time, is relatively higher for the countries of northern
and western Europe compared to those of the south and east. The average age of the woman at first marriage has also changed in its geography, shifting from high levels at the beginning of the period for the countries of the south, to high levels for the countries of the north, where marriage is definitely being postponed, also because of the spread of pre-marital cohabitation, in stark contrast to the low levels for eastern Europe. On the other hand, there is little difference in female-male age gap at first marriage: this indicator maintains high levels for the southern countries and in particular the eastern ones. Finally, the high female life expectancy remains the prerogative of the countries of the north, west and south, in contrast to those of the east. The difference in life expectancy between men and women assumes a dramatic trajectory: its lowest values were for the countries of eastern Europe and its highest values are for these same countries in 1999, so the trajectory for this variable points straight towards these countries.

The same four groups of countries with similar trajectories therefore emerge once again: the countries of the north and east, while initially characterized in the early 1970s by fairly comparable situations as regards the gender system, increasingly diverge, in contrast to the countries of the south of Europe, which converge towards the barycentre. Those of western Europe are all already close to the barycentre, and are fairly homogeneous.

## 7 CONCLUSIONS

In this chapter we have analysed the characteristics of the gender system, both at the macro level, of the countries, and at the micro one, of couples, by means of various indicators.

We have produced a synthetic vision of the existing gender system in developed countries, along with an idea of the temporal dynamics leading up to the current situation over the course of the last thirty years.

We have also observed data on the subdivision of household tasks, both from the point of view of time use (paid and unpaid work, time for oneself) and in terms of collaboration between partners in the undertaking of particular tasks (cooking, cleaning, shopping and managing the household budget), for a selected group of countries. Finally, the modalities of couple matching have been observed, by age and educational qualifications of partner.

The picture which emerges is very detailed, and underlines not only the multidimensional nature of the gender system, but also the difficulties encountered in defining and utilizing the most suitable indicators.

Four groups of countries emerge very clearly from the analyses at a macro level. The four groups differ, not only as regards the relationship between society and women's employment, but also as regards participation in power, family behaviour and the sharing out of household tasks.

In the early 1970s, there was an apparently egalitarian system in the countries of the east, but it was very much skewed towards the economic world (widespread participation in the labour market) and institutions (participation in local political life), while being at the same time very traditional as far as family behaviour was concerned. The situation deteriorated after the fall of the communist regimes, revealing that this equality was probably only apparent. In the countries of the east, women currently have less political influence both with respect to men and with respect to the past, though they still participate on a widespread basis in the labour market (despite the economic crisis), but at the cost of sacrificing time for themselves, and thus the quality of their own lives.

The nordic countries, on the other hand, represent the most favourable situation for women, and this has been the case since the end of the 1970s. Nordic women currently participate on a large scale in the labour market, easily combining their hours (there is full use of part-time opportunities and segregation in the most flexible jobs) with those devoted to the household and personal time (partners are involved in household tasks and women devote more free time to themselves, reconciling family and career), and they invest in the creation of their own human capital, with widespread access to higher level education and notable political influence. It would therefore seem that women in Nordic countries succeed in maintaining a fair degree of bargaining power and autonomy not only in public, but also in private (as shown by the data on the time use).

In contrast to these two groups of countries are those of the south of Europe, which started off in the early 1970s with a very traditional situation, from which they are recovering all too slowly. Participation in the labour market is still marginal compared to other European countries, and political representation is scarce. Family forms are still of traditional type (i.e. with scarce evolution towards new, more flexible forms of union). Data on time use confirm this position: women in the countries of south Europe usually devote less time to paid work, but more time than in the rest of the countries to household tasks: the result is nonetheless a total of working hours superior to that of her partner, with the consequent erosion of a slice of free time for herself.

In between the countries of the south and of the north are those of western Europe, which are characterized by intermediate starting and finishing points. In western countries, participation in the labour market is not as common as in the north or east of Europe, but women's involvement in politics appears to be fairly high. Women enjoy more time for themselves, thanks to less involvement in paid work.

The following chapters will deal with particular subjects in some of these countries, chosen so as to preserve, where possible, geographical representativity in terms of "gender system areas". The idea, as underlined at the beginning of the chapter, is to observe countries with different gender systems,
because only by comparing societies which are very different from each other in this respect is it possible to reveal the existence of different rules in the two genders' ways of relating to each other, and their varying effect on social and demographic behaviour.

## NOTES

1. Except where otherwise indicated, the data and information comes from the UN/ECE [2000].
2. As it is very difficult to examine and directly compare the education systems of the different European countries, reference is generally to the ISCED76 classification (International Standard Classification of Education), adopted by UNESCO. An updated version has recently been proposed, which should facilitate comparison of education systems in the various countries.
3. The third level of the ISCED classification is divided into three bands: ISCED5, ISCED6, ISCED7. Only from ISCED6 onwards are studies regarded as university level. ISCED7 is post-graduate.
4. With the exception of Austria, Belgium, Germany, the Czech Republic and Switzerland (data from the mid-nineties).
5. ILO, 2000.
6. In this case we use the segregation index. It calculates how many people should change their type of employment in order to obtain the same percentage distribution for men and women by type of employment.
7. In the younger age groups, on the other hand, women are more qualified than men, but the difference in income persists.
8. UN/WISTAT data (Women's Indicator and Statistics Database, Version 3, CdRom), 1994.
9. Defined as the type of violence which takes place in the home between close relations. It includes emotional abuse, sexual abuse and physical violence.
10. In particular, indicators must be: conceptually meaningful for the thorough analysis of the relative situation of men and women in the countries; comparable, in the sense that they must be collected in the same way and they must measure the same thing in the different countries, valid, i.e. they must measure what they intend to measure and not other correlated dimensions; accurate and widespread, i.e. available in carefully constructed data bases in many countries [UN, 1984].
11. Statistical technique of factor analysis which makes it possible to represent the variables on a plane - the axes of which (factors) consist of linear combinations of the variables themselves - through the coefficients of correlation between variables and factors. The units of observation are represented as factor points on a second plane, the axes of which have the same valence as the previous ones [Bouroche, Saporta, 1980].
12. The analysis is centred on the first half of the ' 90 s , at a time when the effects of the economic crisis which followed the collapse of the Soviet bloc were yet to be felt on the labour market.
13. As far as possible, dissimilarities in terms of units of time, age groups under observation and classifications of activity were removed; however, significant differences remain in the methods of data collection, the way in which seasonal variations are treated and in the representativity of the samples analysed.
14. However, this division of total time into working time and free time does not take account of other roles played by women within the community and the kinship group [Oppong, Abu, 1987], classifying the time devoted to such activities as free time for oneself.
15. The first axis explains $54.21 \%$ of variance, the second $35.64 \%$, for a total of almost $90 \%$.
16. The actual question (v902) was: "I would like to ask a few other questions about you and your partner. Could you indicate who usually performs each of the following household activities: mostly yourself, mostly your partner, both of you equally, mostly other members of this household, or mostly other persons not belonging to this household? a) preparing the daily meals, b) vacuum-cleaning, c) shopping, d) keeping the household budget, e) filling out the tax form, f) doing the dishes, g) looking after the elderly."
17. Only in the case of some of the countries was it possible to obtain basic information on the matching of couples by age of partners, educational qualifications of both (according to the ISCED 76 classification) and the sharing out of household jobs.
18. Couples in which the women was at most three years younger than her partner and no more than a year older were classified as "same age"; hence the other two classifications.
19. We shall not deal here with the search for possible explanations of the different subdivision of household tasks between partners, a subject which deserves thorough examination and which goes beyond the introductory purposes of this chapter. Let it suffice to say that the average picture presented by these data may be affected by the structure of couples in every country according to age, phase of life cycle, type of employment, educational qualifications, the existence of outside help and other factors still. For example, the sub-group of women in employment is much more homogeneous than that of the women who do no work, in the various countries, and the composition of couples according to this characteristic may have an enormous influence on the picture which emerges.
20. For example, it is quite common for children to share the responsibility for household tasks with their mother [Gager, 2002].

## CHAPTER 2

# AGE AT FIRST SEXUAL INTERCOURSE 

LUCIA COPPOLA

## 1 INTRODUCTION

In every society there is a greater or lesser degree of acceptance of young people's sexuality, which is usually differentiated by gender, depending on the culture and on the socio-economic context. What emerges from the scientific literature is that some countries exhibit similar models of behaviour between men and women, while others exhibit very different timing and modalities between the genders of entry into sexual activity [Bozon, Kontula, 1997]. In the Scandinavian countries, for example, age at first intercourse appears to be very early for both sexes. The opposite model is that of the countries of Southern Europe, where men's first intercourse is fairly early, while for women it is much later.

The changes in the timing of first intercourse which have taken place over the second half of the XX century have also assumed dimensions which differ according to country and gender. For example, Bozon and Kontula [1997] identify three models of evolution for women and three for men. As far as women are concerned, first intercourse in Denmark, Iceland and Norway has been very early since the '50s. This anticipation of other countries remains a constant over time: indeed, women in Scandinavian countries are still the most precocious in the ' 90 s. This model contrasts with that of the women of Portugal and Athens (and presumably other southern European areas), which features a very late age at first intercourse in the ' 50 s which drops sharply over time, but not enough to reach the level of the countries of northern Europe. An intermediate model of behaviour is that of women in the countries of Western Europe, e.g. France, Germany and Great Britain, which feature an age at first intercourse lying between those of the other two groups of countries, an age which drops continually but slowly. As far as men are concerned, there has been a fall in age at first intercourse over the second half of the last century in the Scandinavian countries and France, but this has not been very marked. The timing of men's first intercourse in southern Europe seems to have remained unaltered. Countries

[^3]like Germany, Belgium and the Netherlands used to feature a fairly high age at first intercourse for men in the '50s, but this has dropped rapidly over time.

Our aim here is to track the onset of sexual activity in the various European countries, and its evolution and determinants, with particular attention to gender differences. The second section gives a synthetic overview of the literature, in order to highlight the elements which contribute to determining age at first intercourse, which range from individual characteristics to family ones, and from the peer group and neighbouring community to society as a whole. The third section provides an illustration of the data and methods of analysis, as well as the research hypotheses. The fourth section illustrates the descriptive statistics used to recognize differences and similarities between countries. The fifth section contains the results of the multivariate analysis, which describes the effects of certain possible explanatory variables on age at first intercourse, by country and gender. The sixth paragraph discusses the conclusions.

## 2 THE THEORETICAL FRAMEWORK

A wealth of studies have contributed to the identification of the different elements influencing the timing of first intercourse. The marked heterogeneity of behaviour, both within each country and among countries, may be explained by the existence of a broad number of determinants of the onset of sexual activity. The strictly individual ones concern the level of biological development, the sphere of values and motivations, and the timing of entry into a phase of adult life. The social determinants concern mainly the individual's environments of direct socialization, i.e the family, peer group and immediate community. Society as a whole has a secondary effect: the behavioural norms it transmits determine the ease with which individual choices can be fulfilled, providing a varying degree of support to the norms transmitted by the family, peer group and all the possible contexts of socialization.

Society's interest in first intercourse is partly linked to the symbolic meaning which first intercourse takes on in terms of transition to adulthood. Indeed, the commencement of sexual activity represents not only the adoption of typically adult behaviour, but also the adoption of a series of responsibilities deriving from its related risks, such as pregnancy and sexually transmitted diseases. Interpersonal relations with one's partner, peer group and family are all reinterpreted and transformed as a result of this transition [Upchurch et al., 1998].

So although age at first intercourse is the consequence of a free and individual choice, it would appear to be strongly influenced by the social interpretation which each country and ethnic group attributes to male and female virginity [Barone et al., 1996; Upchurch et al., 1998]. Much of the variability
between countries is related to the acceptance of young people's sexuality, which has given rise to greatly heterogeneous models of behaviour, some of which are based on strong gender differences [Billari, Borgoni, 2002; Castiglioni, Dalla Zuanna, 1997a; Cazzola, 1999; Ongaro, 2001], while others are based at least apparently on more similar patterns of sexual behaviour between men and women [Bozon, Kontula, 1997].

In the XX century there has been a relaxation of social norms on sexuality in countries of advanced development, especially as far as women are concerned [Bozon, Kontula, 1997]. The set of transformations in sociodemographic behaviour known as the "Second demographic transition", and in particular the growing level of women's emancipation, with the integration of women into the labour market and their progressive adoption of social roles increasingly similar to those of men, has meant that their experience of sexuality and the social acceptance of women's sexual freedom have also undergone transformations of varying importance in the different countries [van de Kaa, 1987]. Last but not least, the spread of safe contraceptive methods have helped increase women's freedom of choice in terms of sexuality, freeing them from the fear of undesired consequences, such as unwanted pregnancies.

On the other hand, the relaxation of social norms and the adoption by individuals of patterns of sexual behaviour which are increasingly precocious and free, no longer bound to the traditional context of the stable union or marriage, are being accompanied by a growing incidence of infectious disease [Cooksey et al., 1996; Singh, Darroch, 1999]. In particular, the increasing spread of AIDS has created a high level of alarm and a growing degree of attention on the part of institutions and society towards the sexual behaviour of young and old alike. As a result, social pressure has increasingly favoured the principles of abstinence, with the emphasis on the informing of individuals in order to make them more responsible when it comes to sexual behaviour [Bozon, Kontula, 1997; Villar, 1995].

The existing social norms are internalized by the individual through the process of socialization which takes place within the family, at school and in institutions in general, and in the peer group [Udry, Billy, 1987].

The sexual choices of adolescents are strongly influenced by the family in particular. Indeed, it has been shown that the different levels of sexual precocity are associated both with the structure of the family and with its social and economic status, and above all with the degree to which the parents accept young people's sexuality. Empirical results demonstrate that adolescents living in one-parent families or with parents who have separated experience sexual intercourse earlier than those who have lived with both parents [Upchurch et al., 1998; 1999]. The economic condition of the family seems to influence the timing
of first intercourse among adolescents, with young people in less well off families being more precocious [Bingham et al., 1990; Miller, Moore, 1990; Miller et al., 1997]. The characteristics of the mother and the relationship between mother and child appear to be of particular importance in determining the choices of adolescents in terms of first intercourse [Jaccard et al., 1996]. Indeed, it would appear that the children of women who are less strict as regards young people's sexuality are, in turn, less strict with themselves, and embark earlier upon sexual activity [Thornton, Camburn, 1987]. A high level of education on the part of the mother also delays the entry of children into adult sexual life [Cooksey et al., 1996].

In addition to the family, the peer group also plays an important role [Mott et al., 1996; Whitbeck et al., 1999]. Indeed, it is often within their circle of friends that adolescents receive much information about sexuality. Moreover, the tendency to emulate may lead an individual to experience their first intercourse at a young age, if socialized within a group which has had early experiences, or to postpone it in time if part of a group of friends who are less precocious and less active sexually.

Some studies have shown that the neighbourhood and community $[\mathrm{Ku}$, et al., 1993; Upchurch et al., 1999] influence the timing of young people's first intercourse, and also the socio-economic context [Brewster et al., 1993]. This takes place both through the transmission of values and specific norms (not necessarily similar to those of the country as a whole) and through economic opportunities which may affect the speed of transitions into adulthood and the onset of sexual activity [Ku et al., 1993]. In particular, it would appear that in places where the costs of unwanted pregnancies are particularly high, women postpone the onset of sexual activity in order to avoid the associated risks.

The complex process of socialization, through family, peer group or institutions, therefore seems to be very important in determining the timing of the first intercourse of adolescents. But while on the one hand there are the norms transmitted in this way, there is also their interpretation by the individual, and their greater or lesser acceptance on his or her part. Indeed, every individual develops a series of values and principles, according to which they choose their own path of life [Lesthaeghe, Moors, 2000], in terms of sexuality included. For example, it would appear that individuals with a strong orientation towards the future tend to postpone the onset of sexual activity [Lauritsen, 1994; Plotnick, 1992]. Moreover, there are important gender differences in the system of individual values, which may also contribute to our understanding of behavioural differences in the sexual field [Beutel, Marini, 1995]. Some authors, for example, suggest that men and women attribute different meanings to first intercourse. For men this represents a normal stage in the sexual learning
process, and does not necessary imply sentimental involvement. Women, on the other hand, prefer to experience this act in the context of a committed affective relationship [Bozon, 1993; Buzzi, 1998].

In addition to the meaning which each individual attributes to the debut of sexual activity, depending on their own system of values, other individual characteristics also determine the degree of sexual precocity. Various studies have, for example, shown that educational qualifications, performance in school [Ku et al., 1993] and religious beliefs are associated with the different timing of first intercourse, and the extent of the effects of these characteristics varies strongly depending on gender and ethnic group [Barone et al., 1996]. For example, adolescents girls who devote a lot of time to school and associated activities delay the onset of sexual activity, but the same is not as evident for men [Whitbeck et al., 1999].

Finally, some authors look to the timing of biological development as a possible cause of the degree of sexual precocity. In some cases, it has been demonstrated that early onset of menstruation in girls may lead to early first intercourse [Udry, 1979]. In other studies, on the other hand, no link has been found between biological development and sexual precocity in women [Kinsey et al., 1953]. More recent studies have shown that biological development, together with other strictly individual characteristics, strongly determines sexual precocity in men, while the sexual debut of women is more influenced by social norms [Udry, Billy, 1987; Udry, 1988]. This leads us to suppose that there might be a greater degree of social tolerance of male sexuality, and greater social control over that of women [Ongaro, 2004]. As a result, while first intercourse for men appears to be a purely individual choice, for women it is influenced by a more complex set of social and individual determinants.

## 3 DATA, METHODS AND HYPOTHESES

The analyses presented in this chapter have been undertaken using data collected as part of the FFS project. Only some of the countries taking part in the project collect information on age at first sexual intercourse, with both male and female samples. These countries are Belgium, France, Italy, Latvia, Lithuania, Norway, Portugal, the Czech Republic, Slovenia, Spain, Switzerland and Hungary.

In order to establish gender differences in the timing of entry into adult sexual activity, and whether and how such differences might have evolved, we use simple descriptive statistics. But to identify the determinants of the degree of sexual precocity, survival analysis methods are used. The event "first intercourse" cannot be repeated, and since the only thing we know is the age
at which it has taken place, it is measured at discrete time. The most suitable method of analysis is therefore a model of logistic regression [Yamaguchi, 1991], already used in the literature in order to estimate the effects of first intercourse's possible explanatory variables [Billari, Borgoni, 2002; Ongaro, 2001]. It was deemed opportune to estimate the models separately by sex, so as to highlight any possible gender differences in the explanatory factors of the timing of first intercourse.

The potential explanatory variables of age of first intercourse were chosen so as to represent both individual characteristics and those of the family context in which the individual had grown up, as well as the socio-cultural context.

Specifically, the individual variables are age, school attendance and religious conviction. The characteristics of the family of origin represented here concern mainly its structure, taking into account whether the individual has lived in a family with both parents (up to the age of 15), or if there has been a separation or divorce, and the number of siblings. Finally, the sociocultural context in which the individual has lived is identified through the demographic dimension of the place of residence (up to the age of 15) and the cohort.

### 3.1 Age of the Individual

It is to be expected that most first intercourse takes place between the ages of 17 and 22 , depending on country and gender, as it is in this phase of life that the first events of transition to adulthood take place, such as completion of school education, for example, or entry into the world of work. Moreover, it is hypothesized that in traditional countries such as those of southern Europe, men have first intercourse earlier than women, while in more egalitarian countries such as those of northern Europe first intercourse is concentrated around the same ages for both genders.

### 3.2 Definitive School Leaving

The definitive exit from education represents one of the elements of transition to adulthood. It is therefore hypothesized that following this transition the sexual debut is also more probable [Bozon 1993; Ongaro 2001; Whitbeck et al. 1999]. The reference is to the definitive cessation of studies, as opposed to a temporary break, as we are interested in this process as a definitive abandonment of adolescent behaviour and roles. It is therefore hypothesized that the effect of school leaving is similar for the two genders.

### 3.3 Religious Conviction

Religion is one of the elements which contribute most significantly to determining each individual's set of values and ideals. It is not difficult to hypothesize that an individual of Catholic faith, for example, is sexually less precocious than an individual who is not religious, insofar as they have assimilated, at least in part, the principle whereby sex should take place inside marriage [Thornton, Camburn, 1987]. The degree of participation in religious worship would be a good measure of the level of assimilation of religious norms. However, such information was only collected for the moment of the interview in the FFS surveys, which was often subsequent to first intercourse. It is therefore impossible to pinpoint a relationship of the type cause-and-effect between participation in religious worship and sexual precocity, given the timelag between the two items of information. The hypothesis that an individual might opt whether or not to identify with a religious faith in the course their life is regarded as weaker, on the other hand. It is hypothesized that persons of religious conviction have sex later than atheists, without there being any strong gender differentiations.

### 3.4 The Interviewee Has Not Lived With Both Parents Up to the Age of 15

The presence of both parents makes it possible for them to exercise greater control over the actions of children, and thus over the extent to which they are exposed to situations which might favour early sexual intercourse. It is assumed that individuals who have lived with both parents, at least up to the age of 15 , experience first intercourse later than if they have grown up in a less traditional family structure [Upchurch et al., 1999].

### 3.5 Separation and Divorce of Parents

The separation of parents may have consequences on their children's behavioural models, both because the family structure is modified and less control can therefore be exercised on the activities of adolescents, and because their reaction to an episode which is so traumatic, also for the children, may lead them to be less receptive towards their parents' guidance and more so towards the influence of their peers. It is hypothesized that, following separation or divorce of parents, children are more exposed to the risk of experiencing first sexual intercourse [Upchurch et al., 1998]. This variable is treated as time-dependent, and its effects are measured only when the event "parents' separation" takes place prior to the event "first intercourse". Finally, it is hypothesized that this variable has effects which are substantially similar on both men and women.

### 3.6 Number of Siblings

The presence of siblings in the family can have contrasting effects. On the one hand, the presence of brothers and sisters allows for more reciprocal control and thus less individual freedom also in terms of sexual experimentation. On the other hand, the presence of older siblings who are already sexually active could facilitate the transmission of information about sex, and therefore also encourage a greater predisposition to sexual activity among young people. Given that the age of siblings plays an important role in choosing one interpretation or another, and that such information is not available, we decided to give greater importance to the role of reciprocal control. We therefore distinguish between individuals with and without siblings, hypothesizing that the presence of siblings might be associated with a lesser degree of sexual precocity [Upchurch et al., 1999].

### 3.7 Demographic Size of Place of Residence Up to the Age of 15

The demographic size of the place of residence may be regarded as a proxy indicator of the level of modernization of the social context in which the individuals form their own system of values during the first 15 years of life. It is hypothesized that cities of large demographic size contribute to the earlier and faster spread of the principles of free and informed sexuality, together with more similar models of behaviour for men and women, towards which the industrialized cities have tended during the last century. More precocious patterns of sexual behaviour are therefore expected among individuals who have lived in large cities up to the age of 15 , and this effect is expected to be stronger on women than it is on men [Ku et al., 1993].

### 3.8 Cohort

The cohorts interviewed in the various countries were born between the second half of the '40s and the start of the '80s. The interviewees are grouped into 5 -years cohorts in order to assess whether and how the timing of first intercourse has developed between the older generation and the younger one. Generation of origin may also be interpreted as a proxy indicator of the social norms specific to the historical period in which the interviewee was of adolescent age. It is hypothesized that developments over time are more marked for women than for men, in that the cultural revolution concerned mainly women and their roles in society. Moreover, it is expected that any evolution over time will be in the direction of an increasing precociousness among the younger generations, as
a result of the ever increasing social acceptance of adolescent and extra-conjugal sexuality [Bozon, Kontula, 1997; Singh, Darroch, 1999].

We are aware of the fact that other characteristics exist, both regarding the social context and the family or individual, which should be taken into consideration in order to understand young people's sexual behaviour. Indeed, the literature demonstrates how the value system of community, peer group, parents and the individual themselves is fundamental in determining the extent of sexual precocity. Furthermore, it would be useful in making predictions to have at least some information on the structural identity of parents, their educational qualifications, participation in the labour market or socioeconomic status. As this information is not available for all the countries observed, it has been omitted, in order to perform the international comparisons correctly.

## 4 TIMING OF ENTRY INTO ADULT SEXUAL ACTIVITY: NATIONAL AND GENDER DIFFERENCES

An immediate description, albeit an approximate one, of national and gender differences in the timing of entry into adult sexual activity is provided by the median age at first intercourse (Tab. 2.1). This indicator was calculated separately by sex with reference to the cohorts of '46-'50 (where possible), '56' 60 and ' $66-$ ' 70 . This allows to identify gender differences in the timing of first intercourse and to assess if and how these have developed over time.

In accordance with the literature, we may identify two groups of countries, one characterized by a double standard of behaviour for men and women and the other featuring similar models of behaviour for both genders. Some countries, however, do not form part of either of these groups, but are located in an intermediate position.

On the one hand a group of countries emerges which, although traditionally characterized by a timing of first intercourse which is differentiated by gender, over time experience a narrowing of the gap between male and female standards of behaviour. These include France, Italy, Latvia, Portugal and Spain. In these five countries, men traditionally have intercourse for the first time at a younger age than women. Moreover, it is important to underline how this age has remained constant from one generation to the next, a sign that men's sexual behaviour has not evolved in time. Women, on the other hand, have undergone a progressive lowering of age at first intercourse, highlighting how the process of women's emancipation and transformation of women's social and family roles is associated with greater sexual precocity, which is increasingly similar to that of men. However, with the exception of France, it may be noted that the youngest generation is still characterized by a higher median age at first intercourse for

Table 2.1. Median Age at the First Sexual Intercourse, and Percentage of the First Sexual Intercourse Before the $16^{\text {th }}$, the $18^{\text {th }}$ and the $20^{\text {th }}$ Birthday, by Country, Gender and Cohort

| Country | Median |  | $\% \leq 16$ |  | $\% \leq 18$ |  | $\% \leq 20$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Women | Men | Women | Men | Women | Men | Women | Men |
| Belgium |  |  |  |  |  |  |  |  |
| Cohort 56-60 | 19 | 19 | 11.7 | 17.6 | 45.2 | 48.0 | 74.0 | 68.8 |
| Cohort 66-70 | 18 | 18 | 15.5 | 24.4 | 54.8 | 59.7 | 82.8 | 85.9 |
| France |  |  |  |  |  |  |  |  |
| Cohort 46-50 | 19 | 17 | 9.0 | 31.2 | 44.4 | 71.0 | 77.0 | 83.5 |
| Cohort 56-60 | 18 | 17 | 18.6 | 36.2 | 70.6 | 79.3 | 89.2 | 90.5 |
| Cohort 66-70 | 17 | 17 | 27.1 | 37.0 | 74.8 | 82.1 | 91.3 | 92.5 |
| Italy |  |  |  |  |  |  |  |  |
| Cohort 46-50 | 21 | 18 | 6.0 | 19.0 | 22.5 | 56.9 | 46.8 | 75.2 |
| Cohort 56-60 | 19 | 18 | 12.9 | 27.0 | 44.0 | 75.0 | 69.8 | 86.5 |
| Cohort 66-70 | 19 | 18 | 12.5 | 26.8 | 43.8 | 72.2 | 70.4 | 88.3 |
| Latvia |  |  |  |  |  |  |  |  |
| Cohort 46-50 | 20 | 18 | 2.0 | 3.8 | 22.3 | 51.9 | 54.2 | 76.2 |
| Cohort 56-60 | 19 | 18 | 2.9 | 18.4 | 30.0 | 53.4 | 70.6 | 77.4 |
| Cohort 66-70 | 19 | 18 | 8.2 | 27.4 | 48.5 | 63.9 | 81.4 | 82.2 |
| Lithuania |  |  |  |  |  |  |  |  |
| Cohort 46-50 | 21 | 20 | 2.9 | 11.2 | 17.2 | 34.1 | 44.9 | 63.6 |
| Cohort 56-60 | 20 | 19 | 2.7 | 11.0 | 21.8 | 39.9 | 56.0 | 71.4 |
| Cohort 66-70 | 19 | 18 | 4.7 | 19.0 | 33.7 | 54.0 | 69.8 | 79.2 |
| Norway |  |  |  |  |  |  |  |  |
| Cohort 46-50 | 18 | - | 14.3 | - | 57.8 | - | 83.4 | - |
| Cohort 56-60 | 17 | 17 | 37.9 | 34.3 | 77.3 | 67.0 | 91.1 | 86.1 |
| Cohort 66-70 | 17 | - | 43.8 | - | 83.7 | - | 99.8 | - |
| Portugal |  |  |  |  |  |  |  |  |
| Cohort 46-50 | 21 | 17 | 7.1 | 41.5 | 20.4 | 70.3 | 44.9 | 80.9 |
| Cohort 56-60 | 19 | 17 | 14.5 | 44.0 | 40.7 | 72.7 | 65.2 | 82.8 |
| Cohort 66-70 | 19 | 17 | 15.8 | 45.2 | 46.9 | 77.6 | 69.8 | 86.9 |
| Czech Republic |  |  |  |  |  |  |  |  |
| Cohort 56-60 | 18 | 18 | 17.8 | 15.0 | 73.3 | 67.7 | 92.4 | 86.5 |
| Cohort 66-70 | 17 | 18 | 23.4 | 17.6 | 80.5 | 67.9 | 95.1 | 93.9 |
| Slovenia |  |  |  |  |  |  |  |  |
| Cohort 56-60 | 18 | 18 | 14.4 | 28.5 | 67.1 | 65.6 | 92.2 | 84.6 |
| Cohort 66-70 | 18 | 17 | 20.6 | 33.8 | 72.8 | 78.8 | 95.8 | 94.4 |
| Spain |  |  |  |  |  |  |  |  |
| Cohort 46-50 | 23 | 19 | 4.1 | 22.1 | 11.1 | 45.6 | 23.8 | 57.9 |
| Cohort 56-60 | 20 | 18 | 6.6 | 18.2 | 27.9 | 58.0 | 54.3 | 77.4 |
| Cohort 66-70 | 19 | 18 | 13.2 | 24.9 | 47.2 | 64.4 | 74.5 | 82.4 |
|  |  |  |  |  |  |  |  | cont.) |

Table 2.1. (Continued)

| Country | Median |  | $\% \leq 16$ |  | $\% \leq 18$ |  | $\% \leq 20$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Women | Men | Women | Men | Women | Men | Women | Men |
| Swiss |  |  |  |  |  |  |  |  |
| Cohort 46-50 | 19 | 19 | 7.3 | 15.0 | 35.4 | 46.7 | 70.1 | 75.3 |
| Cohort 56-60 | 18 | 18 | 18.3 | 22.4 | 58.6 | 57.3 | 83.4 | 80.2 |
| Cohort 66-70 | 18 | 18 | 23.5 | 33.7 | 64.5 | 68.8 | 85.5 | 88.2 |
| Hungary |  |  |  |  |  |  |  |  |
| Cohort 56-60 | 18 | 18 | 14.7 | 26.5 | 57.3 | 68.5 | 84.0 | 86.6 |
| Cohort 66-70 | 18 | 17 | 23.0 | 32.4 | 69.1 | 72.6 | 90.4 | 93.7 |

woman than for men, highlighting the persistence of the double standard of behaviour between the two genders in the countries of southern Europe and Latvia.

Lithuania, Slovenia and Hungary also feature double standards of behaviour. In these countries, however, unlike the previous ones, there is a fall in the age at first intercourse for men, which in the case of Lithuania is associated with a parallel fall in the age of women at first intercourse, while in the case of Slovenia and Hungary women's age at first intercourse remains static.

In contrast to these countries is the group formed by Belgium, Norway and Switzerland, which is characterized by the same age at first intercourse for both genders. In both Belgium and in Switzerland, there is a fall in the age at first intercourse, which takes place at the same time and in equal measure for men and women. As for Norway, women tend to bring forward their debut into sexual activity, but it is not possible to trace a trend of evolution for men due to lack of information.

Finally, the Czech Republic represents a unique case, featuring a lower age for women than men at first intercourse in the youngest cohort.

If we analyse the percentages of first intercourse taking place prior to the sixteenth, eighteenth and twentieth birthday, we may note that these values are higher for men in almost all the countries, demonstrating the existence of greater precocity among men even where the median age at first intercourse is the same for both genders. The most evident gender differences are to be found in Italy, Latvia, Lithuania, Portugal and Spain. Exceptions, on the other hand, are formed by Norway and the Czech Republic, where the percentages of intercourse prior to the various birthdays is greater for women.

The indicators observed up until now are useful for highlighting the existence of a strong degree of heterogeneity of behaviour among the different countries and between men and women.

The hypothesis may therefore be confirmed that the timing of first intercourse of the two genders depends very much on the social, cultural and institutional context of the different countries, which sometimes favours patterns of behaviour undifferentiated by gender, and sometimes determines patterns which are differentiated to varying extents.

In all countries, however, the generational change in the timing of first intercourse has always taken place in the direction of an increasing precocity, with a reduction in gender differences. This highlights how young people's (and young women's) sexuality has become more accepted over time, even in the more traditional countries.

## 5 THE EXPLANATORY VARIABLES OF THE TIMING OF FIRST INTERCOURSE

Survival models allow to assess the effects of individual, family and socio-cultural characteristics on the timing of entry into adult sexual activity. Tables 2.2 and 2.3 show estimates of the parameters of the models for women and men respectively.

Results show that individual characteristics contribute significantly towards explaining the timing of first intercourse for both genders in all countries. If we compare the parameters associated with the age of the individual, we may note that in most countries, the age groups with the highest relative risk are the same for men and women, even though they vary from country to country. Exceptions are France, Italy, Lithuania, Portugal and Spain, which are confirmed as the countries most strongly characterized by a double standard of behaviour and greater men's precocity, and the Czech Republic, where women are more precocious than men.

Exit from education as an event of transition to adulthood is associated with a higher risk of experiencing first intercourse. Its effect is significant in all the countries, for both genders. However, it seems to be slightly higher for women than for men, suggesting that it is mainly women who tend to locate their first intercourse in the "adult" phase of their life.

Religious convictions also have a clear effect on the timing of entry into adult sexuality. Indeed, we may note that individuals who are not religious are more precocious than those who are. This result holds in almost all the countries, with the exception of both genders in Latvia and men only in Switzerland and Hungary.

Table 2.2. Parameter Estimates of the Hazard Models at Discrete Time by Country: Women

| Women | Belgium | France | Italy | Latvia | Lithuania | Norway |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |  |
| $\leq 16$ | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| 17-19 | $2.452^{* * *}$ | 2.712*** | $2.390^{* * *}$ | 2.919*** | $3.033^{* * *}$ | 2.225*** |
| 20-22 | $2.550 * * *$ | $2.756^{* * *}$ | $2.661^{* * *}$ | $3.621^{* * *}$ | $3.701^{* * *}$ | 2.185*** |
| 23-25 | $2.570^{* * *}$ | $2.272^{* *}$ | $2.559^{* * *}$ | $3.568^{* * *}$ | $3.755^{* * *}$ | $1.927^{* * *}$ |
| $\geq 26$ | $1.601^{* * *}$ | $0.892^{* * *}$ | $1.668^{* * *}$ | $2.740^{* * *}$ | $2.642^{* * *}$ | $0.628^{* * *}$ |
| Exit from |  |  |  |  |  |  |
| education | $1.002^{* * *}$ | $0.584^{* * *}$ | $0.501^{* * *}$ | $0.791^{* * *}$ | $0.706^{* * *}$ | $0.835^{* * *}$ |
| No religious | $0.522^{* * *}$ | $0.379^{* *}$ | $0.596^{* * *}$ | 0.037 | 0.144* |  |
| No siblings | 0.193** |  | 0.019 | 0.089 | $-0.189^{* *}$ | $-0.087$ |
| No both parents | 0.163 |  | 0.016 | $0.221^{* * *}$ | $0.196^{* * *}$ |  |
| Parents separated | $0.345^{* * * a}$ | $0.323^{* * *}$ | $0.676^{* * *}$ | $0.272^{* * *}$ | $0.263^{* * *}$ |  |
| Place of residence |  |  |  |  |  |  |
| Medium |  |  | Ref. | Ref. | Ref. | Ref. |
| Small |  |  | -0.001 | -0.074 | -0.203*** | 0.124** |
| Big |  |  | $0.182^{* * *}$ | -0.017 | -0.028 | $0.288^{* * *}$ |
| Cohort |  |  |  |  |  |  |
| $>70$ |  | Ref. | Ref. | Ref. | Ref. | Ref. ${ }^{\text {b }}$ |
| 65-70 | Ref. | 0.198** | 0.278*** | $-0.421^{* * *}$ | -0.097 | -0.019 |
| 60-65 | -0.118* | -0.027 | $0.532^{* *}$ | $-0.694^{* * *}$ | $-0.307^{* *}$ | 0.026 |
| 55-60 | $-0.181^{* * *}$ | -0.093 | $0.494^{* *}$ | $-0.715^{* * *}$ | $-0.326^{* * *}$ | $-0.167^{* *}$ |
| 50-55 | $-0.415^{* * *}$ | $-0.406^{* * *}$ | $0.293 * * *$ | $-0.919^{* * *}$ | $-0.521^{* * *}$ | $-0.502^{* * *}$ |
| <50 |  | $-0.595^{* * *}$ | $0.132^{* *}$ | $-1.074^{* * *}$ | $-0.541^{* * *}$ | $-0.750^{* * *}$ |
| Constant | $-4.075^{* * *}$ | $-3.784^{* * *}$ | -4.777*** | $-4.075^{* * *}$ | $-4.747^{* * *}$ | -3.099*** |
| Women | Portugal | Czech Rep. | Slovenia | Spain | Swiss | Hungary |
| Age |  |  |  |  |  |  |
| $\leq 16$ | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| 17-19 | $2.335^{* *}$ | $2.962^{* * *}$ | $2.878 * * *$ | $2.490^{* * *}$ | 2.529*** | 2.415*** |
| 20-22 | $2.751^{* * *}$ | $2.678^{* *}$ | $3.030^{* *}$ | $2.879^{* * *}$ | $2.804^{* * *}$ | $2.661^{* * *}$ |
| 23-25 | $2.791^{* * *}$ | $1.859^{* * *}$ | $2.655^{* *}$ | $3.223^{* * *}$ | $2.778^{* * *}$ | $1.987^{* * *}$ |
| $\geq 26$ | $1.668^{* * *}$ | $0.807^{* *}$ | $1.409^{* * *}$ | $2.612^{* * *}$ | $1.818^{* * *}$ | 0.508** |
| Exit from |  |  |  |  |  |  |
| education |  | $0.447^{* * *}$ | $0.574^{* * *}$ | $0.549^{* * *}$ | $0.653^{* * *}$ | $0.902^{* * *}$ |
| No religious |  | $-0.234^{* * *}$ | $0.353^{* * *}$ | $0.475^{* * *}$ | $0.321^{* * *}$ | $0.234^{* * *}$ |
| No siblings | -0.044 | 0.007 | 0.025 | -0.118 | 0.131* | 0.010 |
| No both parents | $0.231^{* * *}$ | -0.187 | 0.208** | $0.229^{* * *}$ | 0.072 | -0.034 |
| Parents separated | $0.444^{* * *}$ | $0.539^{* * *}$ | $0.304^{* *}$ | $0.572^{* * *}$ | $0.600^{* * *}$ | $0.421^{* * *}$ |
| Place of residence |  |  |  |  |  |  |
| Medium |  | Ref. | Ref. | Ref. | Ref. | Ref. |

Table 2.2. (Continued)

| Women | Portugal | Czech Rep. | Slovenia | Spain | Swiss | Hungary |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Small |  | -0.041 | $0.127^{* *}$ | -0.063 | 0.030 | -0.052 |
| Big |  | $-0.194^{* *}$ | $0.206^{* *}$ | 0.075 | $0.135^{* *}$ | 0.053 |
| Cohort |  |  |  |  |  |  |
| $>70$ | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| $65-70$ | 0.047 | 0.128 | -0.015 | $0.157^{* *}$ | 0.034 | 0.080 |
| $60-65$ | $0.199^{* * *}$ | $0.498^{* * *}$ | -0.053 | 0.091 | -0.028 | 0.096 |
| $55-60$ | 0.088 | 0.117 | -0.054 | -0.031 | -0.049 | $-0.112^{*}$ |
| $50-55$ | -0.034 | 0.115 | $-0.444^{* * *}$ | $-0.413^{* * *}$ | $-0.321^{* * *}$ | $-0.170^{*}$ |
| $<50$ | $-0.190^{* * *}$ | 0.001 |  | $-0.489^{* * *}$ | $-0.634^{* * *}$ |  |
| Constant | $-4.114^{* * *}$ | $-3.620^{* * *}$ | $-3.759^{* * *}$ | $-4.761^{* * *}$ | $-3.743^{* * *}$ | $-4.009^{* * *}$ |

Notes: ${ }^{*} \mathrm{p}<0.10 ;{ }^{* *} \mathrm{p}<0.05 ;{ }^{* * *} \mathrm{p}<0.01$.
${ }^{a}$ We only know if there has been a separation or a divorce, but not when the event occurred.
${ }^{\text {b }}$ Only the cohorts '68 (reference category), '65, '60, '55, '50 and ' 45 have been surveyed.
As for the effects of family characteristics, it may be noted that these are more variable according to gender and country.

In the case of men, only in Belgium is first intercourse notably influenced by the three variables describing the structure of the family: absence of at least one parent (prior to the age of 15), separation of parents and absence of siblings. The three characteristics are associated with more precocious timing of first intercourse. So in Belgium, not only the presence of both parents but also that of siblings facilitates greater control over the activities of children, with a consequent delaying of first intercourse.

The absence of at least one parent in the first 15 years of the interviewee's life only significantly brings forward first intercourse in the case of men in Italy, the Czech Republic and Switzerland. The absence of siblings, on the other hand, only delays the onset of adult sexual behaviour in the case of Italian men, which suggests that siblings may play a role of socialization and provision of information about sex in Italy (unlike in Belgium), facilitating entry into adult sexual activity.

Parental separation is significantly associated with earlier first intercourse for men in almost all the countries observed (except for Italy and Slovenia). The effect of this event is to bring forward first intercourse. Children are probably less subject to parental control as a result of this experience, or are less receptive to parental guidance. We may also hypothesize that the fact of being divorced indicates that parents have less traditional values and are therefore also more permissive with regard to their children and their sexual behaviour.

In the case of women, the separation of parents significantly increases the likelihood of their entry into adult sexual behaviour. The absence of at least one

Table 2.3. Parameter Estimates of the Hazard Models at Discrete Time by Country: Men

| Men | Belgium | France | Italy | Latvia | Lithuania | Norway |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |  |
| $\leq 16$ | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| 17-19 | $2.178^{* * *}$ | 2.227*** | $2.226^{* * *}$ | $2.334^{* * *}$ | 2.273 *** | $1.706^{* * *}$ |
| 20-22 | $2.217^{* * *}$ | $1.675^{* * *}$ | $2.030^{* * *}$ | $2.942^{* * *}$ | $3.038^{* * *}$ | $1.212^{* * *}$ |
| 23-25 | $2.242^{* * *}$ | $1.187^{* * *}$ | $1.630^{* * *}$ | $2.621^{* * *}$ | $3.101^{* * *}$ | $0.642^{* * *}$ |
| $\geq 26$ | $1.541^{* * *}$ | -0.418* | 0.434* | $1.113^{* * *}$ | $2.049^{* * *}$ | $-1.483{ }^{* * *}$ |
| Exit from |  |  |  |  |  |  |
| No religious | $0.281^{* * *}$ | $0.146^{* * *}$ | $0.375^{* * *}$ | 0.016 | $0.336^{* * *}$ |  |
| No siblings | 0.223** |  | -0.227* | -0.127 | -0.128 | -0.017 |
| No both parents | $0.044^{* * *}$ |  | 0.270* | 0.142 | -0.058 |  |
| Parents separated | $0.505^{* * *}$ | $0.363^{* * *}$ | 0.238 | 0.239** | $0.418^{* * *}$ |  |
| Place of residence |  |  |  |  |  |  |
| Medium |  |  | Ref. | Ref. | Ref. | Ref. |
| Small |  |  | 0.048 | -0.180** | -0.078 | 0.011 |
| Big |  |  | 0.109 | 0.020 | $0.218^{* * *}$ | $0.323^{* * *}$ |
| Cohort |  |  |  |  |  |  |
| > 70 |  | Ref. | Ref. | Ref. | Ref. | Ref. ${ }^{\text {b }}$ |
| 65-70 | Ref. | 0.432 | 0.154* | -0.137 | 0.031 |  |
| 60-65 | -0.097 | -0.048 | 0.287** | $-0.226^{* *}$ | $-0.218^{* * *}$ |  |
| 55-60 | -0.074 | -0.110 | $0.264^{* * *}$ | -0.142 | -0.093 |  |
| 50-55 | $-0.223^{* * *}$ | -0.136 | 0.318** | -0.269** | $-0.292^{* * *}$ |  |
| <50 |  | $-0.315^{* * *}$ | 0.168 | -0.205* | -0.290*** | $0.412^{* * *}$ |
| Constant | $-3.788^{* * *}$ | $-2.992^{* * *}$ | $-3.669^{* * *}$ | $-3.360^{* * *}$ | $-3.870^{* * *}$ | $-3.555^{* * *}$ |
| Men | Portugal | Czech Rep. | Slovenia | Spain | Swiss | Hungary |
| Age |  |  |  |  |  |  |
| $\leq 16$ | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| 17-19 | 1.829*** | 2.714*** | 2.366*** | 2.108*** | $2.118^{* * *}$ | 2.311*** |
| 20-22 | $1.305^{* *}$ | $3.209^{* * *}$ | $2.472^{* * *}$ | $1.920^{* * *}$ | $2.454^{* * *}$ | $2.462^{* * *}$ |
| 23-25 | $1.366^{* *}$ | $3.071^{* * *}$ | $2.207^{* * *}$ | $1.925^{* *}$ | $2.200^{* * *}$ | $1.840^{* * *}$ |
| $\geq 26$ | 0.327** | $2.505^{* * *}$ | $1.275^{* * *}$ | $1.493 * * *$ | $1.412^{* * *}$ | 0.446 |
| Exit from |  |  |  |  |  |  |
| No religious |  | $0.435^{* * *}$ | $0.505^{* * *}$ | $0.278^{* *}$ | 0.132 | 0.036 |
| No siblings | 0.002 | 0.112 | -0.114 | -0.077 | 0.145 | -0.070 |
| No both parents | 0.040 | 0.314* | 0.106 | 0.059 | 0.210* | -0.092 |
| Parents separated | 0.195* | 0.323* | 0.208 | $0.528^{* * *}$ | $0.231^{* *}$ | 0.229* |
| Place of residence |  |  |  |  |  |  |
| Medium |  | Ref. | Ref. | Ref. | Ref. | Ref. |
| Small |  | -0.143 | -0.206** | -0.184*** | -0.170*** | -0.255*** |

(cont.)

Table 2.3. (Continued)

| Men | Portugal | Czech Rep. |  | Slovenia | Spain | Swiss |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Hungary |  |  |  |  |  |  |
| Big |  | 0.131 | -0.049 | 0.052 | 0.111 | $0.249^{* * *}$ |
| Cohort |  |  |  |  |  |  |
| $>70$ | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| $65-70$ | $0.168^{* *}$ | -0.607 | 0.149 | $0.149^{*}$ | 0.086 | $0.163^{*}$ |
| $60-65$ | $0.324^{* * *}$ | -0.970 | 0.033 | 0.121 | 0.038 | 0.101 |
| $55-60$ | $0.254^{* * *}$ | -1.149 | 0.016 | 0.130 | -0.156 | -0.015 |
| $50-55$ | $0.249^{* * *}$ | $-1.350^{*}$ | -0.046 | -0.110 | -0.136 | 0.076 |
| $<50$ | $0.173^{* *}$ | $-1.406^{*}$ |  | $-0.181^{*}$ | $-0.378^{* * *}$ |  |
| Constant | $-2.831^{* * *}$ | $-2.730^{* * *}$ | $-3.206^{*}$ | $-3.653^{* * *}$ | $-3.249^{* * *}$ | $-3.331^{* * *}$ |

Notes: *p $<0.10 ;{ }^{* *} \mathrm{p}<0.05 ;{ }^{* * *} \mathrm{p}<0.01$.
${ }^{\text {a }}$ We only know if there has been a separation or a divorce, but not when the event occurred.
${ }^{\mathrm{b}}$ Only the cohorts ' 60 (reference category) and ' 45 have been surveyed.
parent only induces earlier sexual debuts in the cases of Latvia, Lithuania, Portugal, Slovenia and Spain: it does not have significant effects in the other countries. This family characteristic therefore only influences the timing of first intercourse in some countries, where sexual behaviour is differentiated by gender. Finally, the presence or absence of siblings is only significant in the case of Belgian, Lithuanian and Swiss women. Lithuanian women have first intercourse earlier if they are only children, suggesting that siblings are a medium of socialization and information. Belgian and Swiss women, on the other hand, are more precocious if they are only children. In these cases, then, siblings might possibly exercise a role of control over women.

These results lead us to suppose that in almost all the countries the structure of the family has stronger effects on women than on men. In particular, the presence of both parents could allow for a greater degree of control over the activities of daughters, thus delaying their entry into adult sexuality. More rarely does such control have any significant effects of the sexual debuts of men, perhaps because they enjoy more freedom compared to women in any case.

Finally, as far as the socio-cultural context is concerned, we may note that demographic size of place of residence up to the age of 15 rarely has any significant effect for either gender. If the effects are significant they seem to accord with the hypotheses advanced, insofar as early instances of first intercourse correspond to localities of large demographic size, while later onsets are associated with smaller ones. This holds in almost all the countries and for both genders. Exceptions are women in the Czech Republic, who are less precocious if resident (up to the age of 15) in large centres, and in Slovenia, who are more precocious if resident in small or large centres compared to women resident in medium-sized centres.

Cohort of origin always seems to have a significant influence on women's first intercourse, and rarely so on that of men. This highlights the fact that women have effectively transformed their sexual behaviour over time in terms of sexual precocity, while men have experienced a less variable timing of sexual onset from one generation to the next. The only countries where there have been significant changes in the case of men between the oldest and the youngest generation are Italy, Latvia, Lithuania and Portugal. In Italy and Portugal, men of the most recent generation seem to be the least precocious, perhaps indicating a trend towards more responsible sexual activity, which is more often located in a more adult phase of life. In Latvia and Lithuania, on the other hand, only those generations born before ' 60 are significantly less precocious than those born after ' 70 , indicating a tendency to bring forward the sexual debut.

As far as women are concerned, the picture is more complex, insofar as there are significant differences in almost all the countries.

In Italy, the generations born after ' 70 are the least precocious. The pattern of relative risks shows that the tendency to bring forward the onset of sexual activity stopped among the generations born after 1965, giving place to a gradual delaying of the timing of entry into adult sexuality. An inversion of the trend may also be noted in the cases of France, Portugal and Spain. Indeed, the oldest generations turn out to have been the most precocious, although those of 1960-75 in France and Spain and those of 1960-65 in Portugal are more precocious than those born in the 1970s.

In Belgium, Latvia and Lithuania, on the other hand, there is a clear tendency to bring forward the sexual debut. In Norway, Switzerland and Hungary, a similar trend holds, but only among the older generations, as those born after 1955-1960 no longer display significant differences in behaviour.

Finally, no significant trends of evolution may be observed in the Czech Republic or Slovenia.

The explanatory analyses have shown that sexual behaviour in the countries examined is still more heterogeneous than it might appear in the descriptive analyses. Indeed, in accordance with the results shown, it is not easy to identify homogeneous groups of countries according to the type of effects which the explanatory variables have on the timing of the sexual debut. However, evident gender differences do emerge in almost all the countries in the degree of influence of family and context on the sexual choices of individuals. Indeed, it may be noted that while individual characteristics have the same effects on the sexual debut of both men and women, the same may not be said of the other variables taken into consideration. Indeed, family structure and context appear to have a strong influence on women's behaviour and a more marginal one on men's behaviour. This leads us to hypothesize that, despite the fact that men and women may follow more or less similar models of behaviour in a given
country, society and the family exercise a much greater influence on women than on men. For the latter, the sexual debut depends much more on personal choices.

## 6 CONCLUSIONS

The analyses presented here show the existence of very heterogeneous patterns of timing of first intercourse from country to country and between the two genders. Two main groups of countries have been identified: on the one hand, Belgium, Norway, the Czech Republic and Switzerland, where men and women follow similar patterns of timing for the onset of sexual activity; and on the second hand the other countries, where men are more precocious than women. In egalitarian countries, age at first intercourse has fallen in a parallel manner for the two genders. Countries with a double standard of behaviour include France, Italy, Latvia Portugal and Spain: these are undergoing a convergence of male and female ages at first intercourse. In France, in particular, women have adopted patterns which are wholly similar to those of men. In the countries of southern Europe and Latvia gender differences persist despite the fact that women's age at first intercourse is falling. Finally, Latvia, Slovenia and Hungary exhibit a trend towards greater precocity among men but not among women.

When we analyse the effects of the possible explanatory variables, gender differences emerge not only in the timing of the sexual debut but also in the strength of the effects of these variables in determining the sexual precocity of the two genders.

In particular, we have sought to distinguish the effects of socio-cultural context, family structure and certain individual characteristics.

The individual characteristics taken into account in this study have important and similar effects on both genders. First intercourse is more likely subsequent to definitive exit from education. We regard school leaving as an element of transition from adolescent to adult behaviour. The fact of delaying first intercourse until the completion of one's studies therefore suggests that sex is also regarded as a form of adult behaviour at an individual level. Finally, the important role played by religious conviction shows how individual values are fundamental in determining the timing of first intercourse. The lack of ways of measuring the existence of such values at the age when the event took place represents a serious gap in our information, which cannot be filled by any of the other information available.

The role played by the family, described by the presence of both parents (whether or not they are separated) and the existence of siblings, is confirmed as being very important, especially for women. Indeed, traditional
structures, characterized by the presence of both parents and by at least one sibling, correspond to later sexual debuts. This is due both to the possibility of exercising greater control over the activities of children and to the transmission of traditional values aimed at later timing of first intercourse. The separation of parents, in particular, is associated with earlier sexual debuts both for men and for women. This effect may be interpreted on the one hand as being due to the traumatic nature of event, which may lead individuals to be more susceptible to the influence of their peers. On the other hand, parents who have separated may have less traditional values and thus be more tolerant of earlier sexual intercourse. Finally, in one-parent families, the level of control which may be exercised on the activities of adolescents is somewhat limited. The role undertaken by the presence of siblings, on the other hand, varies according to country and gender. The presence of siblings is sometimes associated with earlier first intercourse and sometimes with later. We may hypothesize that siblings play a role either of control or of provision of information and socialization, depending the country. However, this family characteristic rarely has significant effects. In the whole group of countries taken into consideration, nonetheless, family structure seems to have a greater influence on the timing of women's first intercourse than it does on that of men, leading us to suppose that families exercise more control on women than on men, or that women are more susceptible to family pressure than men.

In order to better describe the picture of the role undertaken by the family, it would be important to have specific information not only on socioeconomic status but also on the parents and the relationship between parents and children, but such information is not available.

The effects of context were identified in this analysis by means of the cohort of origin and the demographic size of the city of residence up to the age of 15 .

There are significant generational differences among women in all the countries, except for the Czech Republic and Hungary. Among men, in contrast, intergenerational differences are only significant in Italy and Portugal, and to a lesser extent in Latvia and Lithuania; there are no significant differences in the other countries. These results confirm the hypothesis that the process of women's emancipation and their convergence towards roles which are increasingly similar to those of men is also reflected in earlier sexual intercourse in women and a greater social acceptance of young women's sexuality.

Earlier first intercourse is generally associated with large cities. This result also confirms the hypothesis that environments which are more receptive towards cultural transformations ease the adoption of earlier first intercourse. The effect of the demographic size of the city of residence is usually greater for women than for men, confirming that the social conditioning of women's
choices is stronger than that of men's. However, the effect of this variable is rarely significant. This suggests that the effect of context is not well identified by the variable demographic size. It would be useful to have more information on neighbourhood and on the level of development and socio-economic wellbeing of the environment in which the individual has grown up. These features may vary within the same city and, as we have already pointed out, have a more direct influence on the sexual behaviour of adolescents. Furthermore, we have no information on the peer group or on the activities undertaken in the period of adolescence, which are similarly connected to the timing of first intercourse.

The results exhibited in this study therefore show that the timing of entry into adult sexuality varies greatly depending on country, gender and historical period. We therefore find confirmation of the hypothesis of a strong social influence on individual choices in terms of sexual behaviour, which determines patterns of sexual behaviour which are greatly differentiated by gender in some countries and in certain historical periods and are very similar in others. The information contributed by multivariate analysis, moreover, makes it possible to identify greater social and family control on women's behaviour than on men's behaviour, generally aimed at delaying entry into adult sexual activity, possibly with a view to putting off the assumption of all the responsibilities and risks inherent in an active sex life.

## CHAPTER 3

# THE FORMATION OF THE FIRST PARTNERSHIP: THE ROLE OF EDUCATION AND EMPLOYMENT 

ROBERTO IMPICCIATORE AND ROSELLA RETTAROLI

## 1 THEORY AND LITERATURE

The study of the determinants of first partnership formation in developed countries cannot ignore Becker's theory [1981]: in the presence of traditional gender roles, any increase in level of education and involvement in the labour market reduces the attraction of marriage and family life for women whereas the opposite emerges for men. More formally, the formation of the family is an asset which may be evaluated on the basis of two mechanisms: income effect and price effect. The income effect implies that those achieving higher levels of education and with a stable position in the labour market have better chances of pursuing the career and accumulating wealth. These characteristics are able to give more "attractiveness" in the marriage market and increase the propensity to form a new family. The price effect, on the contrary, implies that the formation of the family has at its root evaluations of costs/opportunities: the costs are higher for those with better educational qualifications and highly involved in their working career, given that family life detracts time and resources that could be addressed to the working time. As a consequence, higher educational levels and the working activity tend to reduce the propensity to form a new family. In the presence of a traditional model of gender roles, the price effect prevails for women while the income effect predominates in the case of men.

These simple relations, useful to draw schematic relations between the process of family formation and the economic context, are not always confirmed in empirical studies. They usually appear to be generally proven at a macro level of analysis [Lesthaeghe, Surkin, 1988; Oppenheimer, 1994; Pinnelli, 1999], but following a micro approach, the general applicability and the explanatory potential of the new home-economics theory is notably reduced.

In the most recent studies [Liefbroer, Corjin, 1999], the effect of education is not always in the direction of Becker's hypotheses; indeed, the relation often

[^4]appears to be not statistically significant, if not actually in the opposite direction from that expected [Blossfeld, 1995]. Furthermore, the direction of the relationships differs from country to country. Generally speaking all the analyses confirm the incompatibility between the choice to study and the decision to build one's own family. The strong negative effect is therefore limited to particular phases of an individual's life and also varies with age and between cohorts.

It must be highlighted that the existence of a relationship such as that hypothesized by Becker may depend on the type of event experienced: marriage or cohabitation [Liefbroer, Corjin, 1999]. If the choice between the two kinds of partnerships is related to different plans for the creation of one's own family, better defined in the first case and less distinct in the second, then the evaluation of the costs-opportunities could change in the case of women. Consensual union often implies a lesser degree of long-term affective commitment and fewer investments compared to a marriage. Then, among women, the negative effect of resources in terms of educational and working career could be lower when we consider the transition into first cohabitation. Following the same idea, for men we expect that the income effect is higher for the transition into the first marriage.

The importance of education and employment may differ among different societies [Oppenheimer, 1994] and over time. The literature exhibits a great variety, both in the direction and in the intensity of the relationship between education and family formation [Blossfeld, 1995]. The kind of family system implies differences in commonly held values, religious traditions, models of inter-generational transfers and cultural references [Reher, 1998]. For women, the negative relation will become weaker as the incompatibility between women's various roles tends to disappear, i.e. as family systems start to vary, changing from "traditional" to "modern" models ${ }^{1}$.

The changes over time are well explained by a cohort effect. In all developed European countries, fundamental variations among cohorts have been reported, albeit with national variations, in relation to the marriage behaviour: the more equality between genders is a dominant value in a cohort, the better the opportunities of combining work and family. But the point that we want to highlight is that relations may also change over the course of life: for women, higher educational qualifications mean later entry into the labour market and this renders the incompatibility stronger. Age and accumulation of experience play less important roles later, as a career progresses. The mechanism could be the same for men. Even though the creation of one's own family does not have a real effect on the opportunities of income, it could however have an effect on a career, insofar as setting up a family could detract time from occupational fulfilment or, conversely, stimulate the quest for success. This would suggest that, for men, the impact of education on the formation of a family could be
negative at the beginning, and then disappear over time or even become positive. The hypothesis is in line with studies which show that, for men, the delaying of the formation of a family is much more common than total renunciation.

There are therefore several ways in which the relation emerges between human capital and the timing and ways of forming a family. In this study we shall attempt to verify the existence of relations between individual resources and propensity of forming a new family, for men and women. The interest focuses mainly on the effect of a) the type of partnership, as a proxy of the level of individual commitment, and b) geographical variation, taken as exemplifying different family, cultural and institutional systems.

The analysis is structured as follows. After a brief description of the characteristics of the areas examined (section 3.2), we shall proceed with a synthetic illustration of the data, variables and methods utilized (section 3.3). Sections 3.4 and 3.5 present a descriptive analysis of entry into first cohabitation and first marriage for the two genders and by country; we shall seek to highlight the temporal relations between the decision to enter into a partnership and other significant events of the transition to adulthood: the end of education, employment and the exit from the parental home. Section 3.6 includes a synthesis and commentary on the results obtained by the application of event history analysis methods.

## 2 THE COUNTRIES

The countries examined are Finland, Sweden, Hungary, Latvia and Italy. Given the limits in the availability of data, the choice has been done with the aim to include countries with different situations in the Europe of the 1990s from a demographic, social and political point of view. All the countries observed experienced delays in age of entry into a partnership from the 1960s onwards, along with falls in the propensity to marry and an increase in cohabitation (FFS Standard Country Reports, various years). These patterns are common to both men and women, albeit often with variations in the level and timing of changes [Schoenmaeckers, Lodewijckx, 1999]. Previous studies [Pinnelli, 1999] have shown that these countries occupy different positions in relation to a series of indicators which qualify the gender system.

Finland may be regarded as representative of situations in which there is a high degree of investment in women's human capital, along with a general effort to achieve greater gender equity [Bradley, 1998]. Women participate on a large scale in the labour market and in political administration, and up until now measures of social and family welfare have always been similar to those in Scandinavian countries, and are certainly the most attentive to women's needs of all the western countries. Marriage and parenthood now seem to be almost
separate dimensions, and levels of fertility are currently stable and higher than in other western countries.

In Switzerland, women's involvement in the labour market has grown over the last decades, with the increasing participation of married or cohabiting women. The rising levels of education and participation in the labour market, the latter linked at young ages to the school system, have been accompanied by the increasing spread of new family forms [Gabadinho, Wanner, 1999]. Cohabitation is mainly experienced at younger ages, and marriage remains the most important value of reference, principally for the birth of children, and it remains anchored to a strong division of roles [Fux, 1997]. Women's participation in political administration, although more widespread, is nonetheless lower than that to be found in the countries of northern Europe. Switzerland is one of the central European countries where fertility is still falling from cohort to cohort.

Hungary and Latvia at the time of the survey had recently emerged from the centralized state politics of the communist regimes. The participation of women and men in education and the labour market is high and virtually egalitarian [Robert, Blossfeld, 1995]. Gender equality appeared to be a primary goal of socialist theory as a requisite for countries' economic development. Indeed, modest levels of income meant that the upkeep of a family required the employment of both the man and the woman. Gender equality in education and participation in the labour market was accompanied by a traditional view of how a couple should live: marriage is the universally accepted form of partnership in Hungary, and while there has been a notable increase in cohabitation, the alternative to marriage consists mainly of living separately, albeit in sexually active partnerships. In Latvia, on the other hand, the rapid spread of cohabitation among young people has notably changed the picture of the formation of the first partnerships. A further aspect which unites the two countries, and appears directly related to the propensity of forming a partnership, is the shortage of housing, which continues to pose serious limits on a young couple's chances of obtaining a home independent of their parents' [Kamarás, 1999; Zvidrins et al., 1998].

Italy exhibits traditional values oriented towards marriage and the differentiation of roles among genders. However, it does appear to be undergoing transformation especially as far as the younger generations are concerned [De Sandre et al., 1997; Rosina, 2002]. Women's participation in the labour market has grown enormously in these last decades, although it is still at a lower level than those to be found in the other central and northern European countries. Typical of this country is a postponement of the timing in experiencing the various phases of adult life, which delays the setting up of one's own independent family [Billari, 2000]. The political participation of women is more recent, and it is still infrequent.

## 3 VARIABLES

The data used in the analysis derives from the FFS surveys (Fertility and Family Surveys) $)^{2}$. These databases, among other things, provide the most important events experienced by respondents up to the interview as regards partnerships, employment and education, giving us the possibility to draw the individual experiences in these fields as parallel trajectories. The dynamic relations among these trajectories can be analyzed using event history analysis techniques.

The variable of interest is the transition rate to first partnership and each episode starts at the 15th birthday (before this age the transition rate is approximately zero) and ends at the beginning of the marriage, cohabitation or, if neither of these two events have been experienced, at the interview (in this case we consider the episode as right-censored). Given that two alternative destinations are possible (cohabitation or marriage), the multivariate models will be estimated considering competitive risks. The analysis follows the "causal" approach [Blossfeld, Rohwer, 1995] and the model considered belongs to the family of proportional hazard models, with an underlying piecewise constant risk. The length of intervals with a constant risk in the piecewise model has been suitably chosen by observing the pattern of the sample risk function, and more specifically from the analysis of survival curves ${ }^{3}$.

The analysis takes account of individual characteristics, specifically as regards educational ${ }^{4}$ and employment ${ }^{5}$ career, including both constant and time-dependent. The entire set of variables analysed is present in table 3.6.

In particular, we intend first of all to examine whether a) such transitions are different for the two genders in the various countries and b) if they differ according to the type of union observed: cohabitation or marriage.

## 4 THE TIMING OF FIRST PARTNERSHIP: A DESCRIPTIVE ANALYSIS

Before presenting the results of the multivariate analysis, this section contains a descriptive analysis of the timing of first marriage or first cohabitation for the two genders and by country. Table 3.1 shows the numerical dimensions of the events and the sub-populations considered. Nonetheless, the FFS data made it easy to reconstruct the patterns, by age and by cohort, of the other events which mark the passage into adult life: end of studies, entry into the labour market and leaving the parental home.

There are different models of family formation in the five areas examined [Kiernan, 2000]. Looking at the partnership at the moment of the interview (Table 3.2), we may note above all that marriage is the first form of union for about $30 \%$ of men and for $35 \%$ of women in Finland and Switzerland

Table 3.1. Respondents and Number of First Unions, by Country and Gender

|  | Respondents |  |  | First unions |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Country | Men | Women |  | Men | Women |
| Finland | 1650 | 4109 |  | 1359 | 3666 |
| Switzerland | 3001 | 2937 |  | 2356 | 2489 |
| Latvia | 1489 | 2689 |  | 1182 | 2305 |
| Hungary | 1894 | 3393 |  | 1357 | 2845 |
| Italy | 1157 | 4665 |  | 3246 | 659 |

and becomes more frequent in Latvia, Hungary and Italy. At the same time, the proportion of cohabitations moves in the opposite direction, with a considerable number in the north which gradually decreases the closer one moves towards the Mediterranean. Premarital cohabitation also follows the same patterns [Prinz, 1995]. In Finland and Switzerland, the most frequent form of partnership is marriage after a phase of cohabitation, which is the case for $35 \%$ of men and $30-40 \%$ of women. In Latvia, this form of union is still fairly frequent (between $23 \%$ and $25 \%$ for men and women) while it is rarer in the case of the other two countries and especially so in Italy (about 3\%).

Cohabitation not followed by marriage as first partnership concerns proportions of a little under 20\% in Finland and Switzerland and under 10\% in the other countries; in this case too, the minimum threshold is that of Italy ( $4 \%$ and $2 \%$ respectively for men and women).

The proportion of individuals who have not yet experienced a partnership at the time of the interview grows, on the other hand, from the countries of the north to those of the south, reaching $42 \%$ of men and $30 \%$ of women in Italy. Gender difference naturally accounts for women's greater precocity in entering into a first partnership compared to men.

The analysis by cohorts (Table 3.3) shows that there has been a fall in all countries in the proportions of first partnerships before age 25 for men, with the exception of Latvia, and an increase in such partnerships for women, except in Italy. Entry into a marriage prior to the age of 25 is falling for both genders, implying that the increases in the propensity to form a partnership recorded for women within this age limit may be attributed to the spread of cohabitation. Once again, Italy constitutes an exception to this pattern. There is, moreover, a notable general increase in marriages preceded by cohabitation among the younger cohorts, once more especially for women.

Median age at first partnership (Table 3.4) differs among countries and gender: in Finland and Switzerland it lies between 24 and 25 for men and around

| Countries | Marriage |  | Consensual union + marriage |  | Consensual union |  | Singles never in union |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Men | Women | Men | Women | Men | Women | Men | Women |
| Finland | 30.5 | 40.0 | 34.7 | 31.6 | 19.8 | 17.7 | 15.0 | 10.7 |
| Switzerland | 29.4 | 34.2 | 35.9 | 38.5 | 18.8 | 17.7 | 15.9 | 9.6 |
| Latvia | 46.6 | 52.5 | 22.8 | 24.5 | 9.9 | 8.7 | 20.6 | 14.3 |
| Hungary | 55.5 | 67.8 | 9.0 | 10.6 | 7.5 | 5.7 | 28.1 | 15.9 |
| Italy | 50.6 | 64.2 | 3.1 | 3.8 | 3.9 | 2.2 | 42.4 | 29.8 |

Table 3.3. Proportions of Respondents Who Experienced the First Union Before 25 Years of Age, by Cohort and Gender

| Countries | Cohorts | First union | Marriage | \% marriage preceded by <br> consensual union |
| :--- | :---: | :---: | :---: | :---: |
|  |  |  | Men |  |
| Finland | $1943-47$ | 64.9 | 44.8 | 34.9 |
| Switzerland | $1963-67$ | 60.5 | 4.4 | 79.8 |
|  | $1950-54$ | 59.0 | 26.1 | 53.4 |
| Latvia | $1960-64$ | 55.3 | 14.2 | 66.2 |
|  | $1950-55$ | 77.0 | 54.1 | 28.3 |
| Hungary | $1960-65$ | 80.5 | 48.6 | 35.5 |
|  | $1951-55$ | 72.9 | 63.3 | 10.0 |
| Italy | $1958-62$ | 70.1 | 53.6 | 15.2 |
|  | $1950-55$ | 52.7 | 44.0 | 6.1 |
|  | $1960-65$ | 30.3 | 25.1 | 7.1 |
| Finland |  |  | Women |  |
|  | $1945-49$ | 77.2 | 60.2 | 22.8 |
| Switzerland | $1955-59$ | 80.6 | 17.3 | 73.6 |
|  | $1950-54$ | 73.1 | 37.7 | 45.8 |
| Latvia | $1960-64$ | 73.8 | 16.9 | 67.8 |
|  | $1950-55$ | 83.6 | 58,8 | 22.7 |
| Hungary | $1960-65$ | 88.6 | 56.0 | 33.1 |
| Italy | $1951-55$ | 88.2 | 80.5 | 10.1 |
|  | $1958-62$ | 90.5 | 75.0 | 14.3 |
|  | $1950-55$ | 76.3 | 72.2 | 4.2 |

22 for women. The two countries of the former communist area exhibit median values which are lower still (22.9 and 24.0 for men in Latvia and Hungary and 21.3 and 20.5 for women in the same two countries). The Baltic country displays lower age differences in the couple compared to all the other countries. In Italy, the median ages are decidedly higher and equal to 27.8 and 24.0 for young men and women respectively, with higher differences between the partners.

Analysing the survival curves, the differences among countries and between genders turns out to be even more marked. Gender difference is, in any case, present with a high degree of statistical significance and it is stronger among the curves of entry into marriage than among those of entry into cohabitation; indeed, matching rules by age are much stronger for marriage than for cohabitation.

The preferences for marriage or cohabitation as first partnerships are clearly different in the various geographical contexts: in Italy and Hungary,

Table 3.4. Median Ages for Some Specific Events Related to the Transition into Adulthood, by Gender

| Countries | End of education |  | First job |  | Exit from parental home |  | First union |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Men | Women | Men | Women | Men | Women | Men | Women |
| Finland | 18.8 | 19.2 | 17.9 | 18.0 | 21.5 | 19.7 | 24.2 | 21.9 |
| Switzerland | 19.9 | 19.1 | 19.8 | 19.2 | 21.3 | 19.4 | 25.3 | 23.0 |
| Latvia | 18.4 | 18.9 | 19.0 | 18.8 | 25.0 | 22.0 | 22.9 | 21.3 |
| Hungary | 17.6 | 17.8 | 17.8 | 18.0 | 24.9 | 21.5 | 24.1 | 20.5 |
| Italy | 19.1 | 18.4 | 19.2 | 21.0 | 26.7 | 23.8 | 27.8 | 24.2 |

marriage is prevalent both for men and for women at all ages. In Switzerland and Finland, cohabitation prevails; in Latvia there seems to be a mixed model for men and women, with a prevalence at very young ages of exits towards cohabitation, and a more rapid exit towards marriage from the ages of 22 and 20 onwards, respectively ${ }^{6}$.

Measurable differences in behaviour also exist between men and women for the other significant events marking entry into adulthood, including end of the period of education, entry into the labour market and exit from the parental home. Table 3.5 states whether the gender differences in the survival curves relative to previous events are statistically significant ${ }^{7}$. It is to be expected that the exit from the education system will be more rapid and intense for women, entry into the labour market will be more frequent and earlier for men and that exit from the parental home will be earlier for the female sex. The results differ according to the countries which are observed: for Finland and for the two countries of the former communist area, differences between men and women in the working and the educational career are not significant or not expected ${ }^{8}$, and it is therefore possible to hypothesize that equality has already been achieved. In Switzerland, on the other hand, and above all in Italy, the differences persist. In the first case, women's greater precocity at entry into employment is related to their swifter exit from the phase of studies. In Italy, the pattern is certainly due to the greater difficulty experienced by the female sex of entering the labour market. An examination of differences in the median ages at the time of experiencing the above events (Table 3.4) confirms what we have just outlined.

Finally, the differences regarding exit from the parental home, which is increasingly early for women, are significant in all five countries (Table 3.4 and Table 3.5); in this case it is evidently possible to hypothesize the action of a gender norm similar to that which acts in the case of entry into partnership.

Table 3.5. Statistical Significance of the Differences Between Men and Women Survival Curves for Some Specific Events Related to the Transition into Adulthood

|  | Italy | Switzerland | Finland | Latvia | Hungary |
| :--- | :---: | :---: | :---: | :---: | :---: |
| End of education | YES | YES | YES* $^{*}$ | YES* | NO |
| First job | YES | YES** | NO | NO | NO |
| Exit from parental home | YES | YES | YES | YES | YES |

Notes: $\mathrm{p}<0.05$.

* contrary to the expected results, men live the event faster than women.
** contrary to the expected results, women live the event faster than men.


## 5 RESULTS OF MULTIVARIATE ANALYSIS

It is well known that as far as the cohorts are concerned, the new forms of partnership have spread from the 1960s onwards, with an acceleration in recent decades, especially in the north-western countries [Kiernan, 2000]. The descriptive analysis presented in the previous paragraphs has already shown that the most recent cohorts are involved in less traditional choices. Moreover, the innovation is mainly concentrated in the urban centres, and it is associated with less traditional vision of gender relations and more liberal value systems. The results of the multivariate analysis, confirm these indications ${ }^{9}$. Looking at Table 3.6 and Table 3.7, what emerges is the fall in the propensity to marriage and the growing risk to experience cohabitation as first partnership by the younger cohorts. The effects are highly significant for both gender but if among men prevails the fall in the hazard of entering into marriage, for women prevails the increasing propensity to choose cohabitations as first union ${ }^{10}$. In Finland, the youngest male cohort's propensity to enter first marriage is 10 times lesser than the cohorts born in the decade following the Second World War, whereas for women the same ratio is 4.5 . The same comparison shows lower differences for the other countries (relative risks in the interval $0.4-0.8$ for both gender), except for Italian men (relative risk 0.25 ).

It is worth to underline that, when using proportional hazard models, it is not possible to understand whether the postponement of marriage, highlighted by a risk lower than one, will be definitive or not. In other words, we do not have specific information concerning the final intensity of the phenomenon. However, considering first partnership without distinction between marriage and cohabitation (models here not shown), we may see that in all the countries except Italy, the propensity to form a new family has not always declined over the last decades. This reinforces the idea that in several contexts, consensual union has become a real alternative to the marriage. Nowadays, in Finland
Table 3.6. Covariates Included in the Multivariate models

| Time-constant variables |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Birth cohorts | Italy | Latvia | Hungary | Switzerland | Finland |
| Cohort 1 (ref.) | 1946-1955 | 1945-1955 | 1948-1955 | 1945-1955 | 38-47W/43-47M |
| Cohort 2 | 1956-1965 | 1956-1965 | 1956-1965 | 1956-1965 | 48-57W/53-57M |
| Cohort 3 | 1966-1975 | 1966-1977 | 1966-1974 | 1966-1975 | 58-67W/63-67M |
| Separated or divorced parents <br> No (ref.) |  |  |  |  |  |
| Yes | dummy $=1$ if respondent's parents experienced a separation or a divorce |  |  |  |  |
| Size of the place where respondents mainly lived until 15 years of age ${ }^{\text {a }}$ |  |  |  |  |  |
| Less than 10,000 inhabitants (ref.) | dummy $=1$ small size town (up to 9,999 inhabitants) |  |  |  |  |
| 10,000-99,999 inhabitants | dummy $=1$ for a medium size town (between 10,000 and 99,999 inhabitants) |  |  |  |  |
| More than 100,000 inhabitants | dummy $=1$ for a large size town (100,000 inhabitants and over) |  |  |  |  |
| Respondents' religiousness (participation to religious offices) |  |  |  |  |  |
| Null (ref.) | dummy $=1$ no participation or not religious at all |  |  |  |  |
| Medium | dummy $=1$ religious offices at least once a month or once a year |  |  |  |  |
| High | dummy $=1$ religious offices at least once a week |  |  |  |  |

Table 3.6. (Continued)

| Time-related variables |  |
| :---: | :---: |
| Current level of education (according to the age at which the highest level has been completed) |  |
| Low (ref.) | dummy $=1$ if the highest level of education is achieved before the 17th birthday or until the attainment of the highest level of education (if this occurs after the 17th birthday) or until the 19th birthday (if the highest level occurs after the 21 st birthday) |
| Medium | dummy $=1$ after the highest level achievement (if this occurs between the 17th and the 21st birthday) or between the 19th birthday to the achievement of the highest level (if this occurs after the 21st birthday) |
| Higher | dummy $=1$ after the highest level achievement if this event occurs after the 21 st birthday |
| Student | dummy $=1$ if respondent is a student in a specific point in time, 0 otherwise |
| Left parental home | dummy $=1$ if respondent has left the family of origin for study, work or other reasons (except for marriage or living in consensual union) in a specific point in time, 0 otherwise |
| Working Job experience | dummy $=1$ if respondent is employed in a specific point in time, 0 otherwise quantitative variable expressing the amount of time spent in the condition "be employed" until a specific point in time |

[^5]Table 3.7. First Marriage and First Consensual Union. Coefficient Estimates and Relative Risks by Country and Gender. Exponential Piecewise Constant Model with Competitive Risks (Marriage vs Consensual Union)


Table 3.7. (Continued)

|  | Italy |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Marriage |  | Consensual union |  |
|  | Women | Men | Women | Men |
|  | Baseline - Coefficient estimations |  |  |  |
| First period | $-5.32^{* * *}$ | $-7.41^{* * *}$ | $-7.98{ }^{* * *}$ | $-8.48^{* * *}$ |
| Second period | $-4.10^{* * *}$ | $-5.67 * * *$ | $-7.78 * *$ | $-8.27^{* * *}$ |
| Third period | $-3.85 * * *$ | $-5.62^{* * *}$ | -7.45 *** | $-8.48^{* * *}$ |
| Fourth period | $-4.54^{* * *}$ | -6.41** | $-7.49^{* * *}$ | $-7.87^{* * *}$ |
| Fifth period | $-5.15 * * *$ | -7.04** | $-8.34 * * *$ | -8.97 *** |
| Sixth period | $-6.71^{* * *} \quad-7.61^{* *} \quad-8.75^{* * *} \quad-8.97$ |  |  |  |
|  | Time fixed covariates - Relative risks |  |  |  |
| Birth cohort (ref. Cohort 1) |  |  |  |  |
| Cohort 2 | 0.78*** | 0.67 *** | 1.86*** | 1.55* |
| Cohort 3 | 0.40 *** | $0.25 * * *$ | 2.20 *** | 1.68* |
| Religiousness (ref. Null) |  |  |  |  |
| Medium | 1.19*** | 1.89*** | 0.50*** | 0.85 |
| High | 1.09 | $1.62^{* * *}$ | 0.26 *** | 0.21 *** |
| Town size (ref. < 10, 000) |  |  |  |  |
| 10,000-99,999 | 1.07* | 0.95 | 0.81 | 0.98 |
| $\geq 100,000$ | 1.05 | 0.95 | 1.32* | 1.19 |
| Separated or divorced parents (ref. No) |  |  |  |  |
| Yes | 1.02 | 1.16 | $1.94 * *$ | 3.47** |
|  | Time-dependent variables - Relative risks |  |  |  |
| Current educational level (ref. lower) |  |  |  |  |
| Medium | 0.95 | 1.05 | 1.10 | 1.25 |
| Upper | 1.04 | $1.37 * *$ | 1.75** | 2.46 ** |
| Student | $0.27^{* * *}$ | 0.52*** | 0.47*** | 0.95 |
| Lefty parental home | 0.87** | 1.01 | $3.29 * * *$ | 2.26 *** |
| Working | $0.63 * * *$ | $2.52^{* * *}$ | 1.17 | 1.01 |
| Job experience | 1.07*** | 1.03** | 1.09*** | 1.10 *** |
| Log-lik.(starting values) | -19918 | -4401 | -19918 | -4401 |
| Log-lik.(final estimates) | -18292 | -3908 | -18292 | -3908 |
|  |  |  |  | (cont.) |

Table 3.7. (Continued)

|  | Latvia |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Marriage |  | Consensual union |  |
|  | Women | Men | Women | Men |
|  | Baseline - Coefficient estimations |  |  |  |
| First period | $-6.99 * * *$ | -6.76*** | $-6.68 * * *$ | $-6.97 * *$ |
| Second period | $-4.70^{* * *}$ | $-4.78 * * *$ | $-5.37 * * *$ | -5.72*** |
| Third period | -4.18*** | $-5.00^{* * *}$ | $-5.15^{* * *}$ | -5.83*** |
| Fourth period | -4.76 *** | $-5.84 * * *$ | -4.76*** | -5.96*** |
| Fifth period | $-5.75 * * *$ | $-5.95 * * *$ | $-5.45 * * *$ | -5.98*** |
| Sixth period | -7.11*** | $-7.26{ }^{* * *}$ | -5.76*** | -6.56*** |
|  | Time fixed covariates - Relative risks |  |  |  |
| Birth cohort (ref. cohort 1) |  |  |  |  |
| Cohort 2 | 1.12** | 0.93 | 1.48*** | $1.53^{* * *}$ |
| Cohort 3 | $0.78 * * *$ | 0.72*** | $2.52^{* * *}$ | $2.13 * * *$ |
| Religiousness (ref. Null) |  |  |  |  |
| Medium | 1.12* | 1.11 | 0.87* | 1.07 |
| High | 1.03 | 1.22 | 0.64** | 1.26 |
| Town size (ref. < 10, 000) |  |  |  |  |
| 10,000-99,999 |  |  |  |  |
| $\geq 100,000$ |  |  |  |  |
| Separated or divorced parents (ref. No) |  |  |  |  |
| Yes | 1.01 | 1.04 | $1.62{ }^{* * *}$ | $1.62^{* * *}$ |
|  | Time-dependent variables - Relative risks |  |  |  |
| Current educational level (ref. lower) |  |  |  |  |
| Medium | 1.09 | 1.22** | 0.93 | 1.10 |
| Upper | 1.08 | 1.20 | 0.77 | 0.93 |
| Student | 0.51*** | 0.75** | 0.43 *** | 0.58*** |
| Lefty parental home | 0.84*** | 1.16* | $1.28 * * *$ | 1.45 *** |
| Working | 1.02 | 1.66 *** | 0.96 | 1.45 *** |
| Job experience | 1.00 | 0.98 | 0.97 | 0.98 |
| Log-lik.(starting values) | -14453 | -7669 | -14453 | -7669 |
| Log-lik.(final estimates) | -13343 | -7009 | -13343 | -7009 |

Table 3.7. (Continued)

|  | Switzerland |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Marriage |  | Consensual union |  |
|  | Women | Men | Women | Men |
|  | Baseline - Coefficient estimations |  |  |  |
| First period | $-6.08^{* * *}$ | $-6.78 * *$ | -6.61 *** | -6.71 *** |
| Second period | $-4.28^{* * *}$ | $-5.08 * * *$ | $-4.97 * * *$ | -5.85*** |
| Third period | $-4.31^{* * *}$ | $-5.11^{* * *}$ | $-4.79 * * *$ | $-5.69 * * *$ |
| Fourth period | $-4.89 * *$ | -5.59 *** | $-5.17{ }^{* * *}$ | $-5.81{ }^{* * *}$ |
| Fifth period | $-6.00^{* * *}$ | $-5.82 * * *$ | $-5.68{ }^{* * *}$ | $-6.24^{* * *}$ |
| Sixth period | $-8.08{ }^{* * *}$ | -6.93 *** | -6.74*** | -7.43*** |
|  | Time fixed covariates - Relative risks |  |  |  |
| Birth cohort (ref. Cohort 1) |  |  |  |  |
| Cohort 2 | 0.55*** | 0.55*** | 1.66*** | 1.55*** |
| Cohort 3 | $0.40^{* * *}$ | 0.46 *** | 1.86 *** | $1.64 * * *$ |
| Religiousness (ref. Null) |  |  |  |  |
| Medium | $1.74 * * *$ | $1.33^{* * *}$ | 0.89** | 0.78*** |
| High | $2.08^{* * *}$ | $2.00^{* * *}$ | $0.55{ }^{* * *}$ | 0.46*** |
| Town size (ref. $<10,000$ ) |  |  |  |  |
| 10,000-99,999 |  |  |  |  |
| $\geq 100,000$ |  |  |  |  |
| Separated or divorced parents (ref. No) |  |  |  |  |
| Yes | 1.12 | 0.61 *** | 1.43 *** | 1.15* |
|  | Time-dependent variables - Relative risks |  |  |  |
| Current educational level (ref. lower) |  |  |  |  |
| Medium | 0.91 | 0.79*** | $1.35{ }^{* * *}$ | 2.38*** |
| Upper | 1.22 | 0.74** | $1.43{ }^{* * *}$ | 2.14*** |
| Student | 0.09*** | 0.22*** | 0.31*** | 0.42*** |
| Lefty parental home | 0.62*** | 1.05 | 1.01 | 1.19 *** |
| Working | $0.33^{* * *}$ | 1.12 | 0.68*** | 1.13 |
| Job experience | $1.16{ }^{* * *}$ | $1.05 * * *$ | $1.05 * * *$ | 1.00 |
| Log-lik.(starting values) | -16141 | -15904 | -16141 | -15904 |
| Log-lik.(final estimates) | -14576 | -14505 | -14576 | -14505 |

Table 3.7. (Continued)

|  | Hungary |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Marriage |  | Consensual union |  |
|  | Women | Men | Women | Men |
|  | Baseline - Coefficient estimations |  |  |  |
| First period | $-5.97 * * *$ | -6.81* | $-6.97^{* * *}$ | $-7.86{ }^{* * *}$ |
| Second period | $-4.35^{* * *}$ | $-5.38^{* * *}$ | $-6.57^{* * *}$ | $-7.02^{* * *}$ |
| Third period | $-3.89^{* * *}$ | $-4.91{ }^{* * *}$ | $-6.26^{* * *}$ | -6.51 *** |
| Fourth period | $-4.46{ }^{* *}$ | $-5.63^{* * *}$ | $-6.33^{* * *}$ | -7.23 *** |
| Fifth period | $-5.20^{* * *}$ | $-6.76{ }^{* *}$ | $-7.07^{* *}$ | $-6.77^{* *}$ |
| Sixth period | $-6.70^{* * *}$ | $-7.66^{* * *}$ | -6.89*** | $-7.19^{* * *}$ |
|  | Time fixed covariates - Relative risks |  |  |  |
| Birth cohort (ref. Cohort 1) |  |  |  |  |
| Cohort 2 | 0.93 | $0.77^{* * *}$ | $1.87 * * *$ | $1.62^{* * *}$ |
| Cohort 3 | 0.67 *** | 0.50*** | 2.83 *** | $2.08^{* * *}$ |
| Religiousness (ref. Null) |  |  |  |  |
| Medium | 0.95 | 1.11 | 0.69 *** | 0.88 |
| High | 0.89 | 0.87 | $0.42{ }^{* * *}$ | 0.37** |
| Town size (ref. < 10, 000) |  |  |  |  |
| 10,000-99,999 | 0.92* | 1.02 | $1.26{ }^{* *}$ | 1.80 *** |
| $\geq 100,000$ | 0.68*** | 0.95 | $1.75 * * *$ | $2.66{ }^{* *}$ |
| Separated or divorced parents (ref. No) |  |  |  |  |
| Yes | 0.95 | 0.97 | 1.74*** | $1.62^{* * *}$ |
|  | Time-dependent variables - Relative risks |  |  |  |
| Current educational level (ref. lower) |  |  |  |  |
| Medium | 1.03 | $1.29 * * *$ | 0.92 | 0.89 |
| Upper | $1.66{ }^{* * *}$ | 1.70 *** | 0.75 | 0.87 |
| Student | 0.32*** | $0.48^{* * *}$ | 0.30*** | $0.17{ }^{* * *}$ |
| Lefty parental home | $0.74{ }^{* * *}$ | 1.16 | 2.71 *** | $2.49^{* * *}$ |
| Working | $1.40^{* * *}$ | 1.91 *** | 0.73 ** | 1.05 |
| Job experience | 1.01 | 1.01 | 1.03 | 1.00 |
| Log-lik.(starting values) | -16940 | -8905 | -16940 | -8905 |
| Log-lik.(final estimates) | -15583 | -8114 | -15583 | -8114 |

Note: Statistical significance ${ }^{*} \mathrm{p}<0.1 .{ }^{* *} \mathrm{p}<0.05 .{ }^{* * *} \mathrm{p}<0.01$.
cohabitation as first union is the most frequent choice. The changes in the last decades are particularly evident for women: compared to the generations of the 1940s, the female cohorts of the 1960s experience a seven-fold risk of choosing cohabitation as first partnership. Finnish women seem to have undergone very radical changes in their choices as regards life as a couple, much more so than their male counterparts.

### 5.1 The Role of Education

As we have already pointed out in Table 3.6, the covariates used to analyse the educational career regard both the status (being or not being a student in a specific point in time) and the overall accumulation of acquired resources, exemplified by the highest level of education currently owned.

For all the countries considered, it is clearly confirmed that the fulfilment of individual aspirations in education is a fundamental step that has to be completed before starting a partnership, whether this be marriage or cohabitation. The only exception is the group of Finnish men, for whom the contraction of the risk is not significant. However, even though the incompatibility between the student condition appears as a general rule, it is always more pronounced for women for any kind of union (except for first cohabitation in Hungary). Besides, it is noteworthy that in Italy, Switzerland and for the Finnish women this incompatibility is stronger in the case of first marriage whereas in Latvia and Hungary it is higher for cohabitation.

Taking under control the status of enrolment in education, the effect given by the level of education is different from one country to another but it is possible to find some common traits.

For the first marriage, a longer education increases the risk in Finland, especially among men, and in Hungary, where no gender differences appear. In Italy and Switzerland the effect of level of education is significant only for men, with a positive effect in the former country and, an unexpectedly negative effect for the latter. No significant relations appear in Latvia.

Relating to the first cohabitation, we see a positive effect of education for Finland, Italy and Switzerland for both gender but especially for men, whereas no significant results emerge for Latvia and Hungary. This result suggests that the choice of cohabitation as first union is preferred primarily by high-educated people in Finland, Switzerland and Italy whereas it is not strictly related to the level of education in Latvia e Hungary.

Following the Becker perspective (1981), not only the negative role of education on the family formation among women is never confirmed, but also the hypothesized income effect for men does not always come out and in the Swiss case, the direction of the relation is the opposite. Besides, the two
expected and opposite effects suggested by Becker, never appear together in the same country and for the same kind of union. In other words, the lack of clear gender specific effects does not "fit" well with the Becker's economic theory.

We may hypothesize that when the negative effect on first union given by educational enrolment is associated with a positive effect given by high levels of education, the postponement of partnership seems to be more likely than the definitive renunciation: once the phase of education has been completed, the creation of one's own family is the next possible goal to be reached, and as quickly as possible if the number of years in education is high. Differently, when a negative effect of education emerges, it becomes plausible that higher educated people will never make up for the "lost time".

### 5.2 First Partnership and Employment

The condition "be employed" (see Table 3.7) increases the risk of entering into first marriage for men in all the countries examined ${ }^{11}$. The association is particularly strong for Italians, for whom being employed leads to a 2.5 -fold increase in the probability of marrying. For women, the situation is less uniform. Being employed leads to a significant increase in the propensity to marry in Hungary, where it is common to have two different jobs in order to support the own family, but to a significant decrease in Finland, in Italy and particularly in Switzerland where, taking constant all the other covariates, a woman that does not work has a propensity to marry 3 times higher than a woman who works, confirming the idea of a more traditional gender roles division in this country. In Latvia, finally, the working activity does not affect the transition to first marriage among women.

The effect of the job experience, a quantitative covariate chosen in order to approximate the amount of time spent in the condition "employed" and hence the career opportunities ${ }^{12}$, on the marriage propensity is not significant in Latvia and Hungary and positive in Finland, Italy and Switzerland for both genders but generally higher for women.

Briefly, the association between employment and first marriage for men is in accordance with the "new home economics" theory [Becker, 1981], underlining the persistent importance of their breadwinner role. The mechanism in not equally clear for women since the effects differ from country to country and appear to be certainly influenced both by the economic and social conditions in which they live and, probably, by the different level of diffusion of traditional ideas of roles in the couple.

In the case of cohabitation, being employed plays a less important role than for marriage. For men, having a job favours cohabitation in Finland and Latvia, countries in which cohabitation has the same recognition as
marriage and is more frequently experienced at a young age, while it is not significant in Switzerland, Hungary and Italy, suggesting that cohabitation is a less important choice in these countries, and not a definitive one. The association is negative for Hungarian and Swiss women, that experience a substantial decrease in the hazard of entering into first cohabitation if they are employed; in the case of Italian, Finnish and Latvian women, there are no significant links.

The nature of the association between employment and cohabitation is not the same as in the case of first marriage: where the woman's employment is not regarded as indispensable, there is usually a significant negative association with marriage (Finland, Italy and Switzerland); if, on the other hand, it is perceived as an essential economic support (Hungary), then there is a significant positive relation. For entry into first cohabitation, on the other hand, the relations do not have the same intensity, probably due to the lesser degree of institutional responsibility which the event carries with it, or because it is related to young age (student cohabitation) or personal conviction. In Switzerland, for example, where the presence of a traditional model of gender relations implies that women active in the labour market are mainly single, the decreasing in the propensity due to employment is lower for first cohabitation than first marriage.

In general, where the transition to the first marriage reveals clear gender difference in the effect of the employed condition, this asymmetry reduces if the first union is cohabitation. Considering Finland with regard to employment, taking constant other factors, the decision to marry (not particularly widespread in the population) nonetheless seems to involve more traditional roles, emphasizing the importance of male employment. In the case of cohabitation, on the other hand, which is extremely widespread as a form of partnership, the role of the two sexes would seem to be more similar and employment is equally important for men and women. In Italy, the country where family sentiment and traditional gender roles are most entrenched, entry into first marriage also accentuates the differentiation of roles, displaying a positive and strong effect of male employment and the opposite in the case of female employment: women's occupational independence lowers the hazard of first marriage. On the other hand, for the cohabitation, an elitist choice and probably to some extent ideological, women's employment increases the hazard (albeit not significantly) ${ }^{13}$, once more underlining the existence of more egalitarian gender relations.

What really seems to most favour the experience of a first cohabitation as regards first marriage is the independence from the parental home: the hazard of transition to cohabitation increases for both men and women if they have left parental home. The most significant increases are to be found in Hungary and Italy, and they probably reflect different situations: in the eastern countries it is particularly difficult to obtain an independent housing solution, both for
men and for women; in Italy, on the other hand, the variable carries a cultural valence of greater decision-making autonomy. In general, where the exit from parental home is associated with marriage, as in Italy, who decides to leave parents for other reasons (study, work, independence, etc.), are, most probably, more oriented towards less committed types of partnership as consensual union and, besides, this kind of choice may be favoured by the independent housing.

## 6 CONCLUSIONS

The transformations in the family formation, which have taken place from the 1960s onwards in all developed countries, are certainly related to the changes occurred in gender relations and in the overall society. The process of tertiarization of the economy and the increase in average levels of education, which have jointly affected both male and female universes, as well as the more egalitarian participation in the labour market (from a vertical, though not a horizontal point of view), have undoubtedly set off a stronger drive towards decision-making autonomy and more egalitarian processes of negotiation between genders, with women's greater economic and cultural independence.

How this different situation might influence preferences and choices for forming a partnership is still however the object of discussion and study. Sociological literature underlines the presence and the importance of the economic rationality [Becker, 1981] in the decision process, as well as the influence of emerging cultural processes, such as individualization and privatization, able to transform family formation as a private experience led by individual expectations and independent from normative control [Zanatta, 2003]. However, several forms of social control persist, as the ones regarding the appropriate sequences and timing of young people's transition to adulthood [Lucchini, Schizzerotto, 2001]. Besides, individual life histories take place and unfold within certain social contexts able to influence family choices. The systems of welfare, for example, might certainly favour or limit the consolidation of gender-role parity.

In this study we have described the preferences in terms of first partnership in different European countries, characterized by different social systems and by different phases as regards the second demographic transition, and we have analysed the determinants of the timing relating to the first partnership from a gender perspective.

In the first place, the countries observed display notable differences as regards the diffusion of the various types of union. The importance of marriage increases along a north-centre-east-south trajectory, passing from Finland to Italy via Switzerland, Latvia and Hungary. The spread of cohabitation follows the opposite trajectory. It is mainly the most recent cohorts for whom the propensity
to enter into a first marriage has been decreasing, with a marked delay in age at access for both men and for women.

The survival analysis nonetheless shows statistically significant gender differences: the younger women experience their first partnership later than the older cohorts but at a younger age than men. There are smaller gender differences for entry into first cohabitation than for marriage, indicating a greater similarity of behaviour between men and women as they make non-traditional choices. Moreover, there are also gender differences among other events marking the transitions to adulthood. Although substantial parity in education and participation in the labour market has been reached in Finland, Latvia and Hungary, in Italy significant differences persist between men and women on both fronts.

The application of the event history analysis confirms that, on the one hand, an increasing tendency towards more similar processes and choices between the two genders, and on the other the persistence of distances closely related to the specific national contexts.

Starting off by looking at the cohort effect, the growing postponement of marriage and the corresponding increasing anticipation of cohabitation as first partnership over the cohorts is a clear indication of the fall in the attraction of marriage as first partnership experience. These changes are particularly rapid among women, that women are clearly engaged in "catching up" with the positions already reached by men. In this dynamic framework, variables such as lack of religious observance, residence in an urban centre or experience of parental divorce, tend to "push" towards the spreading of non-traditional forms of partnership formation

The analysis of dynamics during the life course has shown that being a student is an obstacle to the partnership formation, whether this is marriage or cohabitation. The incompatibility between educational enrolment and union formation is particularly strong for women, confirming that they usually invest (or they intend to invest) more energies and time in the new partnership. However, considering the level of education, we do not find general confirmations neither for the women's price effect nor for men's income effect. The influence of the level of education varies from one context to another but, within each country and for the same kind of union, differences between men and women are not marked. Then, we can conclude the effect of educational resources on the transition into first partnership is more country-related than gender-related.

As far as employment is concerned, the interpretation of gender differences is more immediate. For men, being employed acts in the direction hypothesized by economic-rational theory with an increasing in the propensity to enter into a partnership. The strength of the relation is much greater if the partnership is a marriage as opposed to cohabitation. In the case of women, work is negatively correlated with the transition to the first marriage in Finland, Switzerland and

Italy and positively so in Hungary, where it is taken for granted that the woman should work and a second income is more necessary. It has no influence in Latvia, where participation in the labour market nonetheless seems to have lost any gender connotations. In the case of cohabitation, the trend is towards a positive influence of employment, even though this is not often significant.

Finally we may therefore make two observations: on the one hand, there is a trend towards an increasing similarity in boys' and girls' forms of behaviour and choices regarding life as a couple, on the other, there is nonetheless the persistence of differentiated situations owing to generational history, individual national contexts, the ways in which the different societies have evolved as regards the acquisition of educational experience, participation in the labour market, the trend towards independence from the parental home and institutional contexts. All conditions being equal, however, as hypothesized in the presentation of the study, the restrictive effects of social norms are mainly present for women compared to men, and gender disparities are more often to be found in the case of marriage than in that of cohabitation, despite the fact that some of the conditions of evolution towards modernity (urban residence, lack of religious observance, high level of education, more recent generations) have similar effects on both men and women. Only in the case of employment does a clear gender difference remain.

## NOTES

1. Liefbroer and Corjin [1999] propose two different sources of incompatibility, one structural and one cultural. Cultural incompatibility is based on ideologies, values and social norms, while structural incompatibility depends on the rules, opportunities and constraints whereby women's role is determined by social organization.
2. Conducted in Latvia and Italy in 1995, in Switzerland in 1994-95, in Finland in 1989 (for women) and 1992 (for men) and in Hungary in 1992. For the sample sizes see Table 3.1.
3. The age intervals, characterized by a constant risk in the piecewise models, were differentiated by gender, type of union and country, in order to approximate the sample risk function by age. The total age interval between 15 and 50 was divided into six sub-intervals of varying length.
4. In the countries considered, the educational career is reconstructed considering each episode of study. In this way, it is possible to take into account some eventual interruptions. This is not the case of Italy where the only information available is the date at which the highest educational qualification was obtained and the lack of information about the various episodes of study forced us to consider the educational career is taken as a single episode terminating at the date indicated. On the other hand, in order to obtain comparable levels of education, we have considered the age at which the individual attain the higher level of education. In fact, as already reported elsewhere [Dourleijn et al., 2000], the Isced classification is not always
satisfying and, given the countries considered, we believe that the length of education is more reliable as a criterion for the comparison of level of education.
5. The job experience, i.e. the time spent in the condition "employed", is taken as representative of professional skill and thus of career possibilities. In reality, it is well known in the literature that such interpretation may be subject to criticism because of the segmentation existing in the labour market: the accumulation of experience in the professional activity and, above all, the speed with which this takes place, depend strictly on the type of occupation [Blossfeld, Mayer, 1988; Blossfeld, Rower, 1995; Bernardi, 1999]. We are nonetheless convinced that such a variable might be at least an initial discriminant, especially for a comparison between genders, given the difficulty of finding homogeneous data for the various countries as regards occupational structure. The attempt to introduce a time-dependent variable to take account of the presence of a demanding job, with a commitment of over 35 hours a week, has not provided any results worthy of note.
6. This may be a cohort effect, given the very rapid spread of cohabitation as a type of first partnership in this country.
7. The survival curves referred to in Table 3.5 are not present in the text for the purposes of brevity.
8. As far as education is concerned, in Latvia and Finland the education is longer for women than men, in contrast to the other countries.
9. The estimations include coefficients for the baseline hazard and relative risks for all the covariates. For the time-constant variables, relative risks express the ratio between the risk for an individual exhibiting a given modality and the risk for an individual exhibiting the reference modality. For example, Finnish women in the cohort 2 are 4.15 times more likely to enter a first consensual union compared to those belonging to cohort 1 but 1.7 (1/0.22) time less likely to enter a first marriage. For the time-varying covariates, relative risks express the ratio between the risks experienced by the same individual but in different points in time (i.e. before and after the occurrence of a specific event such as end of education, exit from parental home, etc.).
10. The only exception is constituted by Latvian women born between 1956 and 1965 (cohort 2 ) that show an increasing propensity to anticipate the first marriage.
11. For Switzerland, in the case of men, it is full-time employment, defined as a commitment of over 35 hours a week, which plays a decisive role.
12. For the limits of such variable see note 5 .
13. The absence of significance may be directly related to the limited number of events, due to the relatively recent appearance of the phenomenon.

## CHAPTER 4

# IDEATIONAL FACTORS AND CHOICES OF LIFE AS A COUPLE* 

LUCIA PASQUINI AND ALESSANDRA SAMOGGIA

## 1 PREMISE

According to the theory of ideational shifts [Preston, 1986], the growing spread of new forms of life as a couple may be attributed to the increase in individual autonomy in the ethical, religious and political field, i.e. to changes in the scale of subjective values. The cultural dimension influences the acceptance and experimentation of the different forms of union in a different way for the man and for the woman. The importance of taking account of ideational factors in addition to economic ones has been discussed in depth and demonstrated in the case of some countries of central Europe by Lesthaeghe and Moors [1996]. And it is the framework of Lesthaeghe and Moors which we take as our starting point in this study, for the analysis from a gender perspective of the role played by value orientations in the choice of the various forms of life as a couple, marriage and cohabitation, in certain areas of Europe. In particular, cohabitation will be taken as representing that type of partnership which, at least theoretically, is associated with a reduction in gender differences: indeed, the absence of pre-established roles for the partners should render the relationship within the couple more egalitarian and free. Moreover, in consideration of the fact that the various European countries exhibit a distribution of types of union which is extremely differentiated [Kiernan, 2000], we wish to assess whether there is any corresponding existence of similarly differentiated ideational factors; indeed, we cannot necessarily assume that the same value orientations lead to similar patterns of behaviour [Lesthaeghe, 1998].

In some countries (for example those of Scandinavia), the new family types and free partnerships had already started to spread in the 'sixties and are

[^6]currently regarded by society as equivalent to conjugal partnerships. In other, more conservative countries, the new models appeared later and cohabitation, nowadays uncommon, still represents a deviant pattern of behaviour. As amply demonstrated by Prinz [1995], the transition of the partnership is divided into four phases: in the first phase, cohabitation is regarded as a deviant phenomenon; in the second, it represents a trial period prior to marriage; in the third phase it represents an alternative to marriage, which is socially accepted; in the final phase it is regarded as a real kind of marriage. In order to observe the determinants which induce men and women to opt for cohabitation, we decided first of all to limit our study to those countries where this has not yet become a common way of living as a couple: indeed, it is precisely in such societies that the circumstances leading to a non-conventional choice might be identified. The analysis was performed on six European countries: Italy, Spain, Switzerland, Slovenia, Hungary and Latvia adhering to the Ffs which are indicative of the different situations of diffusion of the new family models and exhibited different value systems (see Pasquini, Samoggia, 2007 for the reasons to choose those countries).

The questions chosen to define the value system concern religious observance ${ }^{1}$, tradition/innovation (about family behaviour), the reasons considered sufficient for the dissolution of a union or for having an abortion, the sense of responsibility towards children and materialism/post-materialism (maintaining order and fight inflation vs. giving people more say in important government decisions and protecting freedom of speech).

With a view of characterising the selected countries on the basis of their declared values, we shall refer - in the following analysis - to the answers provided by all respondents, in order to gain an overall picture of the ideational system, even though, as we said, we shall go on to focus our attention on those living in union, divided into "married" and "cohabiting".

It should also be pointed out that, in order to render the data more homogeneous, the analysis was limited to individuals aged between 20 and 39, as the range of respondents' age actually differs from country to country.

From a descriptive analysis (Pasquini, Samoggia, 2007), it is possible to note the presence of gender differences as regards the values expressed by respondents in the countries analysed. Indeed, with the exception of certain reasons given for splitting up, the majority of countries exhibits significantly different attitudes between men and women.

In general, what emerges is that although women display more conservative values than men (indeed, they practise their religion more often, they adhere more frequently to materialist values and they tend more to attribute great value to marriage and the family), they are nonetheless clearly more accepting of change: indeed, the more widespread acceptance of birth outside a stable
partnership, the greater acceptance of resorting to an abortion - even when there is no risk to the health of mother or child - and the identification of aggression on the part of the partner as the main reason for dissolving a partnership all show how a common female ideational model is taking shape in the countries analysed, still strongly characterized by the existence of strong traditional values, but with more innovative elements compared to the male ideational model.

## 2 IDEATIONAL DIMENSIONS

To confirm the associations existing between the variables chosen to describe value orientations, we used a multiple correspondence analysis which makes it possible to identify new dimensions which synthesise the information. Twenty variables are regarded as active in the multiple correspondence analysis, and a total of 61 modalities are associated with them. These concern religiousness, agreement/disagreement over the importance of marriage and the family and acceptance/rejection of maternity outside a stable couple relationship, sufficient reasons for dissolving a partnership or having an abortion, sense of responsibility towards children, materialism/post-materialism. Some illustrative variables were also chosen (age, sex, education, living arrangement, occupational status) in order to better interpret the meaning of the new dimensions identified.

The multiple correspondence analysis was performed separately on the countries studied. The active variables play a different role among the various countries or at any rate among the broad cultural areas. The countries observed seem to be highly differentiated, with the exceptions of Italy and Spain, which seem to be permeated by the same ideational context. For this reason we have chosen to consider Italy and Spain together, as being part of the same broad cultural area. The multiple correspondence analysis performed at an initial stage on the six countries taken as whole made it possible to confirm the proximity of Italy and Spain as regards their value orientations. This is also opportune for statistical reasons. The rarity of cohabitation in the two countries makes it preferable to aggregate the data, so that the results of the analysis are not invalidated by the low incidence of this type of partnership. The aggregation is therefore justified both on conceptual and on statistical grounds.

Within each country or cultural area, then, the analysis was conducted jointly for the two sexes, given that the socio-cultural context in which the individuals live is characterised by the same ideational factors independently of the fact that it might then influence men and women's orientations in a different manner.

On the basis of the results of the multiple correspondence analysis, the space identified by the first three axes, which together explain about $90 \%$ of
overall inertia, was defined as the subspace of representation of each country (Table 4.1).

It is interesting to observe that the new dimensions identified have somewhere the same meaning, albeit to different extents, and are partly distinctive of each context analysed.

The axis defined by "religiousness" sharply contrasts positions typical of a rigid religious ethic with secular values. At one extreme, we find those least in favour of resorting to abortion, even when mother or baby's health are in danger, those who regard a union as indissoluble, to the extent that none of the reasons listed for dissolving it are regarded as sufficient, and those who actively practise their religion. This axis is the first in order of importance for Italy and Spain, and for Switzerland; in Slovenia and Hungary, countries where the religious tradition is less widespread, it only occupies third place, while in Latvia it doesn't appear at all.

Another axis characterising Italy and Spain and Switzerland as a second dimension is termed "dogmatism": it contrasts the ability to express an opinion on the questions posed with an inability to do so. From a more detailed analysis, which has made it possible to further examine the meaning of the axis, it has above all emerged that the group of those answering "don't know" consists of different individuals, depending on the different questions and items proposed: i.e. the group of those reluctant to give an answer is not the same. From the observation of the latter, according to certain illustrative variables, it seems to consist of people who believe that certain practical situations cannot be judged a priori,

Table 4.1. Meaning and Variability Explained by the First Three Axes in the Selected Countries

| Italy and Spain |  | Switzerland |  | Slovenia |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Axes | R.I. (\%) | Axes | R.I. (\%) | Axes | R.I. (\%) |
| Religiousness | 64.4 | Religiousness | 53.6 | Certainty | 56.1 |
| Dogmatism | 20.6 | Dogmatism | 25.5 | Tradition | 32.3 |
| Tradition | 6.0 | Tradition | 8.8 | Religiousness | 5.5 |
| Hungary |  |  | Latvia |  |  |
| Axes |  | R.I. (\%) | Axes | R.I. (\%) |  |
| Certainty |  | 68.5 | Certainty | 58.7 |  |
| Tradition |  | 15.9 | Tradition | 23.5 |  |
| Religiousness |  | 7.1 | Sentiment | 6.3 |  |

R.I.(\%) = revalued inertia (\%)
but should be contextualised in each case before being able to express an opinion on the subject. While the possession of certain characteristics significantly influences the orientations expressed, the fact of being very religious, for example (or young, or married, or innovative, or secular), is not enough for these doubtful respondents to assume a precise position: their approval or disapproval of a given fact depends on the circumstances surrounding it, not from an ideological a priori. For example, even though the most religious are opposed to "abortion under any circumstances", it is precisely the most religious who find it most difficult to provide an answer on the admissibility of having an abortion when the mother's health is in danger, whether they are practising or not, especially among women aged over thirty. This would appear to suggest the existence of a conflict between religious dictates and real situations, which determines the inability to assume a precise position valid for all circumstances. This dimension therefore seems to contrast possibilism, i.e. the absence of preconceptions, with a kind of dogmatism.

The axis of "certainty", the most important in Slovenia, Hungary and Latvia, contrasts those who have already developed what is now a deeprooted opinion with those who, on the other hand, are more uncertain, not yet having concluded this process. The respondents who do not know what answer to give do not appear to be characterised in any specific way by the illustrative variables taken into consideration, and they do not therefore appear to experience the conflict between ideology and opinions registered among the doubtful in other countries. This dimension may perhaps be linked to the so-called phenomenon of presentification: indeed, certain sociologists [Buzzi, Cavalli, De Lillo, 1997] have shown, in a series of surveys targeted at young Italians, that some of them are only interested in the present, i.e. in the events which they are living through, and that they are therefore unable to express opinions on issues which do not concern them. Presentification may not be just a juvenile phenomenon; it may also characterise other age groups to varying extents.

As for the axis denominated "tradition", which is present everywhere, this provides a sharp contrast of more traditional values with those which are more innovative: from the vision of a partnership as being an indissoluble bond (even in the absence of love or in the case of infidelity, etc.) to a more innovative view of the partnership, which has a justification only if certain conditions exist. The greater degree of innovation is also shown through greater acceptance of abortion and the birth of a child outside a stable partnership. This factor is the third in order of importance in Italy and Spain and in Switzerland, and the second in the other countries.

Finally, only in Latvia multiple correspondence analysis has identified an axis which seems to be determined almost exclusively by opinions regarding
the reasons for dissolving a union and for having an abortion. This dimension clearly contrasts the most material reasons (insufficient division of tasks, disagreement about the number of children) with those of a more sentimental nature (lack of love, infidelity). This therefore seems to represent a vision of life as a couple as being understood on the one hand as a kind of well-defined contract which does not allow for derogation and on the other as a sharing of sentiments. The condemnation of abortion, whatever its cause, is also associated with the more material vision, whereas in the more sentimental vision there is greater tolerance as regards the voluntary interruption of pregnancy. On the basis of these findings, the axis has been defined as that of "sentiment".

## 3 DETERMINANTS OF THE CHOICE OF PARTNERSHIP FOR MEN AND WOMEN

As we have already said, the aim of the study is to analyse the role played by value orientation on the choice of the various forms of union, from a gender perspective. The group to which we shall now refer is therefore that of those respondents living in a partnership, married or cohabiting. We chose to ignore the subset of those not living with a partner in so far as their status might not derive from a free choice but rather be the result of circumstances independent of the will of the individuals in question, thus representing a factor of confusion in the analysis.

The explanatory variables are firstly the factor scores obtained in the multiple correspondence analysis, representing respondents' ideational system, and secondly certain control variables which the literature has shown to be influential on the choice of the kind of the union: age, education, employment status, whether parents have separated or divorced and size of place of residence up to the age of 15 .

In order to analyse the determinants inducing men and women to opt for a given way of living as a couple and in order to measure the hazard of cohabitation as opposed to marriage, we made use of the logistic regression model. The model was fitted separately for the countries analysed, with the exception of Italy and Spain, which were observed as a single unit once again, and for the two genders. Indeed, it is hypothesised that the ideational system, apart from having different characteristics in the various countries, plays a different role in the decision-making process of men and women regarding the choice of life as a couple.

With a view of making it easier to interpret the results of the regression, the factor scores were rendered discrete by means of terziles, which made it possible to compare an average situation against the two more extreme situations with respect to it.

Age was expressed in five-year groups, and was preferred to generations of birth as the years in which the survey was carried out in the different countries (December 1992-January 1996) do not entirely coincide, although they are fairly close.

As far as education is concerned, the utilisation of the ISCED classification has led to unsatisfactory results, due to the extreme diversity of educational systems in each country. We therefore opted to reconstruct the number of years devoted to education by each respondent in episodes of study. The number of years of study within each country were then grouped into classes using terziles, in order to obtain a discrete variable which might make it possible to compare the effect of a relatively high, average or low quantity of years of study for that country.

For the definition of occupational status, in addition to professional position reference was also made to the proportion of time which had elapsed between the first job and the date of the interview in which the respondent had been employed. Employment was then defined as "continuous" when the respondent had been employed for over $90 \%$ of the time, and "segmented" (between 50 and $90 \%$ ), "discontinuous" (under 50\%) and "never" in the other cases.

Finally, the variable for any separation or divorce on the part of respondents' parents was fed in as a yes/no dichotomy, and the size of the place of residence up to the age of 15 was grouped into three classes (up to 9,999 , 10,000-99,999 and 100,000 plus).

The logistic regression model adopted effects a selection of the explanatory variables through a backwards stepwise process. This procedure begins with a model in which all the identified variables are inserted, and at each step evaluates those to be retained and those to be removed according to a pre-established threshold of significance.

In Switzerland, the probability of opting for a cohabitation rather than for marriage seems strongly influenced by age both for men and for women (Tab. 4.2). Younger men are characterised by relative risks which are 12 times higher compared to those of respondents aged 35-39. More contained, but still considerable, is the size of the odds-ratio for those aged 25-29, and for men aged 30-34. It is well known that cohabitation among the very young is no longer a marginal phenomenon in Switzerland (67\% of respondents aged 20-24 and living in a couple opted for cohabitation), and this now represents a common form of partnership, which in the majority of cases constitutes a trial period with a view to marriage [Charton, Wanner, 2001]. The legislation of the various cantons have not yet awarded couples in informal unions the same rights as married couples, and nor have they done so for children born within the two
Table 4.2. Results of Logistic Regression. Switzerland, Italy and Spain

|  | Switzerland |  |  |  | Italy and Spain |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Men |  | Women |  | Men |  | Women |  |
|  | \% cohab. | Odds ratio | \% cohab. | Odds ratio | \% cohab. | Odds ratio | \% cohab. | Odds ratio |
| 100 in union | 25.5 | - | 21.2 | - | 6.8 | - | 5.3 | - |
| Age |  |  |  |  |  |  |  |  |
| 20-24 | 73.3 | 12.32 | 62.2 | 11.48 | 12.4 | 6.32 | 14.6 | 5.12 |
| 25-29 | 39.1 | 5.47 | 27.4 | 2.09 | 11.7 | 4.09 | 7.0 | 2.31 |
| 30-34 | 20.5 | 2.24 | 13.5 | N.S. | 6.9 | 2.38 | 4.0 | N.S. |
| 35-39 (ref.) | 11.2 | 1.00 | 8.2 | 1.00 | 3.5 | 1.00 | 3.3 | 1.00 |
| Religiousness |  |  |  |  |  |  |  |  |
| secular | 36.3 | 3.98 | 25.5 | 3.08 | 14.1 | 9.13 | 11.1 | 6.71 |
| medium | 25.4 | 1.81 | 26.0 | 2.42 | 2.4 | N.S | 4.4 | 2.78 |
| religious (ref.) | 16.8 | 1.00 | 13.1 | 1.00 | 1.6 | 1.00 | 1.6 | 1.00 |
| Dogmatism |  |  |  |  |  |  |  |  |
| possibilist | 28.6 | 1.66 | 22.6 | 1.67 | 6.0 | N.S | 4.7 | N.S |
| medium | 29.1 | 1.67 | 23.3 | 1.58 | 6.4 | N.S | 6.2 | N.S |
| dogmatic (ref.) | 19.3 | 1.00 | 17.9 | 1.00 | 8.3 | 1.00 | 5.0 | 1.00 |
| Tradition |  |  |  |  |  |  |  |  |
| innovative | 24.4 | N.S. | 24.1 | N.S. | 12.0 | 2.63 | 5.5 | N.S |
| medium | 29.2 | N.S. | 20.2 | N.S. | 5.1 | N.S | 4.4 | N.S |
| traditional (ref.) | 23.3 | 1.00 | 19.1 | 1.00 | 3.2 | 1.00 | 6.1 | 1.00 |
| Education |  |  |  |  |  |  |  |  |
| low (ref.) | 20.7 | 1.00 | 15.4 | 1.00 | 4.2 | 1.00 | 3.6 | 1.00 |
|  |  |  |  |  |  |  |  | (cont.) |

Table 4.2 (Continued)

|  | Switzerland |  |  |  | Italy and Spain |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Men |  | Women |  | Men |  | Women |  |
|  | \% cohab. | Odds ratio | \% cohab. | Odds ratio | \% cohab. | Odds ratio | \% cohab. | Odds ratio |
| medium | 31.0 | N.S. | 25.4 | N.S. | 6.4 | N.S | 5.4 | N.S |
| high | 24.3 | N.S. | 27.9 | N.S. | 11.6 | 2.28 | 8.8 | N.S |
| Occupational status |  |  |  |  |  |  |  |  |
| yes | 24.9 | N.S. | 38.7 | 5.17 | 6.8 | N.S | 7.8 | 2.09 |
| Employment |  |  |  |  |  |  |  |  |
| discontinuous | 42.3 | N.S. | 9.5 | N.S. | 11.5 | N.S | 3.7 | N.S |
| segmented | 23.5 | N.S. | 16.9 | N.S. | 8.6 | 0.24 | 8.4 | 4.08 |
| continuous | 25.6 | N.S. | 36.4 | N.S. | 5.6 | 0.18 | 6.4 | 2.14 |
| Parents' divorce |  |  |  |  |  |  |  |  |
| yes | 71.1 | N.S. | 28.7 | N.S. | 6.6 | N.S | 19.1 | 3.60 |
| no (ref.) | 74.9 | 1.00 | 20.1 | 1.00 | 11.7 | 1.00 | 4.7 | 1.00 |
| Residence |  |  |  |  |  |  |  |  |
| up to 9,999 (ref.) | 31.3 | 1.00 | 21.7 | 1.00 | 3.9 | 1.00 | 3.6 | 1.00 |
| 10,000-99,999 | 29.8 | N.S. | 26.9 | N.S. | 5.1 | N.S | 4.4 | N.S |
| 100, 000+ | 34.2 | N.S. | 26.6 | N.S. | 11.3 | 1.98 | 7.9 | 1.50 |
| Interactions |  |  |  |  |  |  |  |  |
| 20-24*high ed. |  |  |  |  | 24.2 | N.S | 48.7 | 8.28 |
| $25-29^{*}$ medium ed. | 37.6 | N.S. | 34.3 | 4.23 |  |  |  |  |
| 25-29*high ed. | 45.3 | N.S. | 43.2 | 3.25 |  |  |  |  |

[^7]different forms of union. This is what mainly determines the transition towards marriage for couples who decide to have children.

In addition to the strong influence of the age factor, it emerges that, in the case of men, the lower is the degree of religiousness and dogmatism, the greater is the probability that they will live in cohabitation. Even though religious observance is on the wane, the influence of religious ethics on conjugal behaviour emerges clearly, determining a risk which is four times as high among non-observing men compared to the more faithful. While cohabitation is a fairly common form of union, it is not yet regarded in all spheres as a normal, socially acceptable behaviour, as underlined by the higher relative risks for those who appear to be more "possibilist" and less conditioned by preconceptions.

The same factors also seem to condition the choices of Swiss women regarding life as a couple, but an important role is also assumed by human capital: being employed, or possessing a medium-high level of education (associated with young age) represent further important requisites capable of raising the probability of opting for an informal union as opposed to traditional marriage. In the case of women, the form of union therefore seems to be strictly linked to professional status: the absence of economic autonomy undoubtedly renders the matrimonial contract preferable, as it offers greater protection, while the possession of an independent income allows women to choose freely which form of union to adopt according to their own aspirations, no longer conditioned by motives of a material nature. A high level of education, besides representing an easier entry into the labour market, also contributes to the increase of women's social status, rendering women increasingly autonomous and free in their choices as regards their own political, religious, economic, personal, family and reproductive lives. The increase of relative risks among 25-29 year-olds with medium-high educational qualifications should be interpreted as a broadening of the possibilities of choice for this type of woman who, in couple relationships, appears to be more oriented than others towards informal unions.

In the case of the Italian-Spanish group ${ }^{2}$ too, as for the Swiss one, the youngest age groups are marked by the existence of high odds-ratios both for men and for women (Table 4.2). However, in these countries the increase in relative risks does not indicate that informal unions have become a habit among young people, but that, still relatively uncommon (only 14 out of 100 respondents aged 20-24 and living in a couple had opted to cohabit), they are a relatively new phenomenon involving principally the most recent generations.

The most important result seems to be the influence of the religious factor: in these countries, marked by the existence of a strong religious tradition which directly influences more or less all spheres of life, we may observe a marked variation in relative risks as we pass from the very religious respondents to the others, as they gradually become less spiritual. The most secular men are 9
times more likely to opt for an informal union. These are countries in which the value of marriage is still very deeply felt, and which represents the only possible form of union for many people. It is interesting to observe how, in the case of Italian and Spanish men, a greater or lesser degree of adherence to traditional behaviour is decisive in choosing the type of union. The fact of having innovative attitudes helps to increase the probability of cohabiting. It would therefore appear that it is precisely in the presence of a strong innovative spirit that the Latin male is prepared to abandon the position of privilege which generally enjoyed in the traditional marriage, in order to undertake a partnership which is more egalitarian, at least in theory, and at any rate based on presuppositions which are very different from those typical of the Mediterranean tradition.

The dislodging of traditional choices also appears to increase with a high level of education, which plausibly represents a basic requisite for adherence to less conventional living arrangements. Finally, it comes as no surprise that men who have spent their childhood in urban areas show a probability to opt for an informal union which is twice that of those who have lived in small rural centres. It is interesting to note that, if education represents a factor of openingup towards new forms of union, continuous employment represents a deterrent in this respect. Indeed, it is well known that economic instability delays the moment of marriage, while stability renders it possible. The different meanings taken on by employment and family life for men and women translate into different ways of organising the working and private spheres. While employment seems to discourage the choice of cohabitation for men, in the case of women it appears to considerably increase the probability of entering into an informal union (2.09), especially if this employment is fairly continuous.

In contrast to men, greater economic autonomy therefore seems to favour the choice of less conventional unions for women. The high odds ratio for women associated with the presence of separated or divorced parents (3.6) plausibly depends on a double order of factors: on the one hand, there can be no doubt that the failure of the parents' conjugal bond renders daughters more cautious in tackling the experience of marriage; on the other, the presence of a separation in the family weakens the pressure exercised by the parental group, which fairly often stigmatises unions not sanctioned by marriage in these countries. The fact of having grown up in large urban centres, which are generally more secular, also certainly enables women to overcome the strong conditioning exercised by Italian and Spanish societies, still firmly rooted in tradition, with the penalisation of behaviour which deviates from the norm.

In synthesis, it is possible to affirm that in Switzerland, while young and secular men are more oriented towards cohabitation, the situation is more complex for women. In Italy and Spain, the requisites which facilitate access to a
non-traditional type of relationship are more numerous and complex, especially for women. It is therefore evident that in all three countries, women undergo greater social conditioning than men, demonstrating the existence of marked gender differences.

The importance of the ideational system on the choice of the type of union in Hungary, Slovenia and Latvia seems to be much more limited, or even absent. Indeed, there is no statistically significant ideational factor for Hungarian men (tab. 4.3).

The relative risk of opting for an informal union seems to be particularly high only in correspondence with younger age groups ( 7.69 for $25-29$ year olds and 6.32 for $20-24$ year olds) and residence in medium-large urban centres up to the age of 15 ( 3.00 and 4.26 respectively). In Hungary too, as in the previously analysed countries, it is possible to measure a reduction of the relative risk of entering into an informal union for young people with a job compared to those who are unemployed. This fact, besides deriving from the direct link between economic stability and marriage, may also be the consequence of another motivation: informal unions, which are on the increase in Hungary among young couples, are not always the expression of a preference, being sometimes determined by external conditions which are mainly of an economic and legal nature; indeed, couples often lack the means to get married, and opt for cohabitation until it should become feasible. Also, given the high divorce rate, it may happen that one of the two partners cannot contract a new marriage. Moreover, due to the shortage of housing in Hungary, not all new couples manage to find a house in which to live, once they are married, and many of them decide to cohabit in the home of the parents of one of them [Kamarás, 1999]. The reduction of the relative risks in concomitance with employment may therefore explain the antithesis between such forced cohabitation and the economic means provided by employment.

The simultaneous existence of cohabitation which is either a free choice or a forced decision is even more evident from the analysis of the results for Hungarian women. Indeed, we may observe an increase in the relative risks in correspondence with young age associated with a low degree of religiousness, residence in large urban centres during childhood and separation of parents as underlining the importance of these factors in encouraging the choice of an informal union. A relation in the opposite direction between forced cohabitation and certain covariates is, on the other hand, underlined by the reduction of the odds ratios relative to being young and employed, having undertaken a continuous working activity and being in possession of an average level of education, conditions which tend to increase women's economic means, thus encouraging marriage. The double aspect assumed by cohabitation in Hungary (here still fairly uncommon as an ideological choice) makes it hard to analyse
Table 4.3. Results of Logistic Regression. Slovenia, Hungary

|  | Slovenia |  |  |  | Hungary |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Men |  | Women |  | Men |  | Women |  |
|  | \% cohab. | Odds ratio | \% cohab. | Odds ratio | \% cohab. | Odds ratio | \% cohab. | Odds ratio |
| 100 in union | 17.1 | - | 14.8 | - | 7.6 | - | 6.9 | - |
| Age |  |  |  |  |  |  |  |  |
| 20-24 | 40.6 | 8.40 | 35.0 | 8.00 | 20.7 | 6.32 | 13.2 | N.S. |
| 25-29 | 27.8 | 5.10 | 17.4 | 2.84 | 11.1 | 7.69 | 5.7 | N.S. |
| 30-34 | 14.5 | 2.16 | 11.2 | 1.66 | 5.3 | N.S. | 4.8 | N.S. |
| 35-39 (ref.) | 7.3 | 1.00 | 7.2 | 1.00 | 3.8 | 1.00 | 6.1 | 1.00 |
| Uncertainty |  |  |  |  |  |  |  |  |
| uncertain | 22.4 | 0.46 | 19.3 | N.S. | 9.2 | N.S. | 6.5 | N.S. |
| medium | 16.2 | N.S. | 12.6 | N.S. | 7.7 | N.S. | 8.2 | N.S. |
| certain (ref.) | 12.5 | 1.00 | 13.1 | 1.00 | 6.0 | 1.00 | 5.8 | 1.00 |
| Tradition |  |  |  |  |  |  |  |  |
| innovative | 18.3 | N.S. | 19.2 | 2.03 | 9.3 | N.S. | 7.4 | N.S. |
| medium | 19.2 | N.S. | 13.0 | N.S. | 8.7 | N.S. | 8.0 | N.S. |
| traditional (ref.) | 14.2 | 1.00 | 12.6 | 1.00 | 5.4 | 1.00 | 5.2 | 1.00 |
| Religiousness |  |  |  |  |  |  |  |  |
| secular | 19.4 | 1.00 | 15.6 | 1.00 | 7.8 | N.S. | 6.7 | N.S. |
| medium | 16.6 | N.S. | 15.5 | N.S. | 7.6 | N.S. | 7.0 | N.S. |
| religious (ref.) | 15.6 | N.S. | 13.2 | N.S. | 7.2 | 1.00 | 6.9 | 1.00 |
| Education |  |  |  |  |  |  |  |  |
| low (ref.) | 16.8 | 1.00 | 17.3 | 1.00 | 8.0 | 1.00 | 8.3 | 1.00 |

Table 4.3. (Continued)

|  | Slovenia |  |  |  | Hungary |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Men |  | Women |  | Men |  | Women |  |
|  | \% cohab. | Odds ratio | \% cohab. | Odds ratio | \% cohab. | Odds ratio | \% cohab. | Odds ratio |
| medium | 18.6 | N.S. | 11.6 | 0.50 | 9.4 | N.S. | 5.8 | 0.60 |
| high | 15.5 | N.S. | 16.7 | N.S. | 4.5 | N.S. | 6.4 | N.S. |
| Occupational status |  |  |  |  |  |  |  |  |
| yes | 15.6 | 0.42 | 14.2 | N.S. | 6.8 | N.S. | 6.1 | N.S. |
| Employment |  |  |  |  |  |  |  |  |
| discontinuous | 45.1 | N.S. | 28.7 | N.S. | 33.3 | N.S. | 12.5 | N.S. |
| segmented | 23.6 | N.S. | 15.6 | N.S. | 12.1 | N.S. | 8.3 | N.S. |
| continuous | 14.1 | N.S. | 13.0 | N.S. | 6.2 | N.S. | 5.9 | 0.38 |
| Parents' divorce |  |  |  |  |  |  |  |  |
| yes | 16.2 | 1.99 | 24.5 | 1.86 | 6.9 | N.S. | 12.7 | 2.06 |
| no (ref.) | 28.0 | 1.00 | 13.9 | 1.00 | 11.7 | 1.00 | 5.7 | 1.00 |
| Residence up to 9,999 (ref.) | 17.4 | 1.00 | 14.0 | N.S. | 3.5 | 1.00 | 4.9 | 1.00 |
| 10,000-99,999 | 20.6 | N.S. | 20.5 | N.S. | 9.2 | 3.00 | 5.9 | N.S. |
| 100, 000+ | 19.0 | N.S. | 19.7 | N.S. | 12.9 | 4.26 | 13.3 | 3.06 |
| Interactions |  |  |  |  |  |  |  |  |
| 25-29*secular |  |  |  |  | 10.3 | N.S. | 6.4 | 6.15 |
| 25-29* medium relig. |  |  |  |  | 11.0 | N.S. | 8.5 | 4.06 |
| 25-29*occupied |  |  |  |  | 4.1 | 0.28 | 11.5 | 0.40 |

[^8]the phenomenon and very difficult to interpret the results obtained. Overall, we may nonetheless note that the determinants identified for the choice of type of union seem to be fairly different for men and women, suggesting differentiated courses of action between the two genders.

In Slovenia too, the highest values for the relative risks correspond, for men and women, with young age, up to 30-34 (Tab. 4.3). Indeed, informal unions are not only a young phenomenon, but often represent an alternative to marriage, as also testified by the low total female first marriage rate and a high percentage of extra-marital births. Slovenia is therefore at a more advanced stage of the transition of the partnership compared to the countries hitherto considered. The fragility of conjugal bonds which, albeit to a lesser extent, also marked the generations of respondents' parents, is driving new couples to give preference to informal unions. Indeed, for men and women, the influence exercised by the existence of separated parents turns out to be significant. For Slovenian males, there is a reduction of the probability of opting for an informal union in correspondence with employment and if there is an inability to express an opinion. The absence of one's own opinions on the subject of the family, couple relationships and relations between generations plausibly drives men to assume "normal" forms of behaviour, i.e. to be more oriented towards traditional marriage. For women, on the other hand, an innovative spirit favours cohabitation, while the lowest relative risk, corresponding to medium-level educational qualifications, may suggest a preference for marriage when the social situation allows it, as has already emerged in the case of Hungary. The data available therefore suggests that gender differences as regards choices of living as a couple are more attenuated in Slovenia, probably as a result of the greater diffusion and acceptance of informal unions.

Finally, the situation in Latvia appears to be greatly differentiated by gender, even though it is a smaller set of covariates which turns out to be significant (Tab. 4.4). Latvia has in any case a very complex situation, with the coexistence, sometimes in a conflicting manner, of different ethnic groups with different ideals, which can give rise to heterogeneous forms of behaviour. This may explain the absence of a specific model for the formation of unions in this country: Latvian women aged 25-29 at the time of the interview show not clear preference for marriage or cohabitation for their first union.

This situation in Latvia may also be due to an advanced state of the transition of the partnership, the most advanced of all the countries observed. Indeed, here exists the lowest total female first marriage rate, and the highest percentage of extra-marital births. For men, very young age and parental separation lead to an increase in the relative risks (respectively equal to 2.91 and 1.70), while a high level of education lowers the odds ratio (0.51). For women, young age and adherence to innovative values increase the probability

Table 4.4. Percentage of Cohabitants and Results of Logistic Regression - Latvia

|  | Latvia |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Men |  | Women |  |
|  | \% cohab. | Odds ratio | \% cohab. | Odds ratio |
| 100 in union | 12.9 | - | 12.1 | - |
| Age |  |  |  |  |
| 20-24 | 28.0 | 2.91 | 19.8 | 2.83 |
| 25-29 | 12.7 | N.S. | 16.1 | 2.21 |
| 30-34 | 10.8 | N.S. | 9.3 | N.S. |
| 35-39 (ref.) | 9.8 | 1.00 | 8.1 | 1.00 |
| Uncertainty |  |  |  |  |
| uncertain | 14.4 | N.S. | 14.9 | N.S. |
| medium | 13.3 | N.S. | 11.8 | N.S. |
| certain (ref.) | 10.9 | 1.00 | 10.2 | 1.00 |
| Tradition |  |  |  |  |
| innovative | 15.0 | N.S. | 17.2 | 2.30 |
| medium | 13.2 | N.S. | 10.0 | N.S. |
| traditional (ref.) | 11.3 | 1.00 | 8.8 | 1.00 |
| Sentiment |  |  |  |  |
| rational (ref.) | 12.3 | 1.00 | 14.9 | 1.00 |
| medium | 11.1 | N.S. | 12.8 | N.S. |
| sentimental | 15.5 | N.S. | 9.4 | 0.59 |
| Education |  |  |  |  |
| low (ref.) | 15.3 | 1.00 | 14.9 | 1.00 |
| medium | 15.1 | N.S. | 11.9 | N.S. |
| high | 7.3 | 0.51 | 9.8 | N.S. |
| Occupational status |  |  |  |  |
| no (ref.) | 18.9 | 1.00 | 13.0 | 1.00 |
| yes | 11.8 | N.S. | 11.7 | N.S. |
| Employment |  |  |  |  |
| never (ref.) | 25.0 | 1.00 | 8.9 | 1.00 |
| discontinuous | 23.3 | N.S. | 19.2 | N.S. |
| segmented | 14.7 | N.S. | 12.0 | N.S. |
| continuous | 11.2 | N.S. | 10.8 | N.S. |
| Parents' divorce |  |  |  |  |
| yes | 19.3 | 1.69 | 15.7 | N.S. |
| no (ref.) | 10.9 | 1.00 | 11.1 | 1.00 |
| Residence |  |  |  |  |
| up to 9,999 (ref.) | 10.3 | 1.00 | 11.8 | 1.00 |
| 10,000-99,999 | 17.1 | N.S. | 13.2 | N.S. |
| 100, 000+ | 14.5 | N.S. | 13.8 | N.S. |

Note: The significant values are in bold $(\mathrm{p}<0.05)$.
of cohabiting, which is, on the other hand, reduced when women's opinions are permeated by a decidedly sentimental view of life as a couple and the family.

## 4 CONCLUSION

In summary, we may state that in the most conservative countries (Italy, Spain and Switzerland), the ideational system exercises a fundamental influence on choices of living as a couple, both for men and for women, while the same is not the case in Hungary, Slovenia or, at least for men, Latvia. Human capital, another factor which is sometimes important in determining the type of union, acts in one direction or another according to the context referred to and according to gender. In general, it is observed that in countries with stronger ideational values, a high level of education increases the probability of opting for cohabitation both for men and for women, while the exercising of an economic activity makes men more inclined to marriage and women more oriented towards an informal union. It would therefore appear that economically independent men prefer to make more conventional choices as far as couple life is concerned, as they regard marriage as the most advantageous solution compared to cohabitation, which probably requires a greater involvement of the partner also in the performance of tasks which in a traditional marriage generally fall almost exclusively upon the woman. On the other hand, women who enjoy economic autonomy and feel less bound to traditional models of behaviour as regards the couple appear to be more likely to opt for an informal union, which is more frequently egalitarian.

In Hungary, Slovenia and Latvia, where the influence of the value orientation is weaker and cohabitation is more widespread, albeit for different reasons, human capital also has less marked effects. Both for men and for women, a high level of education or employment pushes mainly in the direction of opting for marriage: in these countries, which are economically less well off than those previously discussed, the possession of an income favours more traditional choices. Human capital therefore drives women to adopt forms of behaviour which are more innovative in the more conservative countries, and more traditional ones in those which are less so. In the case of men, on the other hand, it acts in one direction only: more conventional choices are favoured in all contexts. In conclusion the results obtained highlight the presence of fairly differentiated decision-making processes between the genders, even within the same country. In particular, the ideational system has a strong impact in all countries, and lacks significance only in the cases of Hungarian and Latvian men. However, it takes on different connotations in the other countries: in Italy and Spain, and in Switzerland, the effect of secularization on the decision to cohabit seems decidedly marked, while innovative spirit is more influential in the other countries.

## NOTES

1. The religiousness of the respondent was captured by means of a synthesis of the two variables selected, distinguishing those declaring themselves religious ("yes" and "somewhat") as "practising" if they take part in a religious ceremony at least once a month and "non-practising" if they only take part in compulsory events or once a year or hardly ever; the others are defined as "non religious".
2. The variable "country" was also initially inserted among the predictors taken into account for this group's regression, in order to further test the affinity between Italy and Spain. The non-significance of the coefficient obtained further justified the aggregation of the two groups of respondents.

## CHAPTER 5

# GENDER AND THE DIFFERENTIAL FERTILITY 

ANTONELLA PINNELLI AND PAOLA DI GIULIO

## 1 AIM OF THE PAPER

The analysis of fertility in demographic research has traditionally been performed with reference to women, and thus provides only a partial vision, being limited to just one of the two actors in the reproductive process [Watkins, 1993; Greene, Biddlecom, 1998]. Recent studies have pointed out the need of analyzing the observed fertility in relation to the male situation in society and to the gender division of work in families, but data on men have only been included in a few surveys where aspects of fertility and family formation can be analyzed [Knudsen 1996]. Recently the FFS (Fertility and Family Survey), a survey coordinated by PAU-UNECE in 24 developed countries from 1988 to 1999, was designed so as to interview two independent samples of women and men, even though the sample of men is smaller compared to that of the women, thus introducing certain problems of comparability. The analysis of these data allows for some progress in the study of differential fertility by gender, in a situation of rapid transformation of women's status, in which it is possible for the expectations and aspirations of the two genders not to coincide.

The aim of this paper is to study if women and men have similar or different models of differentials fertility, that is if the same characteristics play a similar or a different role according to gender.

Observations on the data will be necessary in order to underline the limits posed by the available surveys to the analysis of differential fertility from the point of view of gender, given the statistical methods which we wish to use.

## 2 A THEORETICAL FRAMEWORK FOR DIFFERENTIAL FERTILITY STUDIES

The main theory taken as a point of reference to study differential fertility by gender is that of the 'new home economics' (NHE), i.e. that of economic rationality and opportunity costs [Becker, 1981]: if the woman

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A. Pinnelli et al. (eds.), Genders in the Life Course, 113-134.
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possesses resources, she becomes, due to her own economic security, less dependent on the traditional models of behavior regarding life as a couple and the formation of a family, and the opportunity costs associated with domestic tasks and the bringing up of children therefore increase. Knudsen [1996] showed for Denmark that women with higher education and better job position limit their family obligations either by remaining childfree or by limiting the number of children they have. For men an opposite pattern was observed, as men in higher socio-economic positions have relatively more children than women in similar positions. These men are often married to a woman with a shorter education who may have a job which requires less time, and if they are married to a woman with a similar education the proportion with no child is increased. At the bottom of the socio-economic scale unskilled women and women outside the labor market have a high number of children. The situation for the men at the bottom is different because they have higher percentage without family or children. An international study on men and women leaders in business and politics in 27 developed countries has confirmed that women with resources limit their fertility or remain childless more often than men with comparable resources, and that the delays provoked by the prolongation of studies and the consequent delayed achievement of autonomy as regards money and housing influence the fertility of women, who have stronger biological limits to their fertile life-span, but not that of men [Vianello et al., 2000; Di Stefano et al., 2004]. Ekert-Jaffé et al. [1995] show that unlike women, men are not hindered in their careers by having children, because the possession of greater resources makes it possible to afford a family life which is compatible with their own requirements: for example, men with resources can afford a wife who doesn't work, while social and cultural norms make it less easy for women with resources to have an analogous option. Indeed, according to Butz et al. [1979], the higher the income of the man in couples in which the women do not work, the higher the fertility. On the other hand, in couples in which the woman is employed outside the home, fertility drops when the woman's income increases. Lesthaeghe et al. [1994] find that young women endowed with greater human capital are more likely than others to limit their fertility, while the same characteristic makes no difference in the case of men.

The resources available therefore play a different role depending on the gender to which they pertain. This could be considered a specification of NHE theory, useful to explain gender differences in differential fertility.

A second theoretical line, which we shall follow in the subsequent analysis, may be defined as structural, as it associates fertility models to changes in population's structure. Within it two main arguments can be identified. The first regards the marriage market [Mc Donald, 1995; Heer et al., 1981]: the woman's earning capacity may make her a more attractive partner, even if this is in conflict with her reproductive capacity and sometimes preferred to it, and it therefore tends to limit fertility. But "earning" women could have greater
capacity to negotiate with her partner regarding the division of roles and the care of children and could improve the partner's parental commitment, increasing fertility. So the final consequence of a better earning capacity for women on fertility could be negligible.

The second and equally important argument in the structural theory is related to the change over time in the structure of the female population by education and occupation, and concerns the fact that the increase in women's level of education and their integration at a high level in the work sphere leads to a delay in the formation of the family and in the birth of children which is, so to speak, mechanical [Di Giulio et al., 1999]. For women this delay may mean renunciation for various reasons, including biological ones: the biological age-limit for reproduction is much more restrictive for women than for men, given that a woman's fertility starts to decrease after the age of thirty and much more rapidly from thirty-five onwards, ages which are becoming increasingly common for the birth of the first child [Menken et al., 1994; WHO, 1991; Beets, 1995]. It may not be possible to make up for an initial delay later on. In addition to this biological cause, fertility could also diminish as an effect of other interests increasingly competing with the desire to have a family as career involvement grows over time: indeed, the results of Di Giulio et al. [1999] show that the more attached women are to their careers, the more they tend to delay their fertility.

A third theoretical line which has emerged is that of the ideational shifts, that is the long-term trend toward greater individual autonomy in ethical, religious and political domains [Simons, 1982; Lesthaeghe, 1998]. The development of movements of emancipation in the area of gender relations are an important part of these ideational changes. Lesthaeghe and Moors [1994] have shown, in the case of four European countries, that there is an ideational component in the decision to limit one's own fertility. We may expect working women to be selected from an ideational point of view, and therefore less likely to take on traditional female roles as that of mother.

A fourth theoretical line for the interpretation of gender differences in reproductive behavior considers the importance of the institutions: the laws regulating the rights of the two genders both in society and in the family and the institutional support given to the family for functions of care [McNicoll, 1980; Pinnelli, 1995; Mc Lanahan et al., 1995]. Research has shown that constraints vary in force in countries with different institutional frameworks, and in particular that the renunciation of fertility caused by the extension of women's education and participation into the labor market are more attenuated or even non-existent in countries with more favorable contexts [Blossfeld, 1995; Pinnelli, 2001]. The comparison of geographical areas with different institutional set-ups satisfies the need to examine the influence of different geographical-institutional contexts on the family behavior of women and men [Pinnelli, 1999].

Finally, we shall take account of the changes in family behavior which have taken place over the last $20-30$ years: marriage is less universal as a form of first union, unions are less stable, and forming a new union is not of equal probability for the two genders. This may have different consequences on the fertility of women and men.

## 3 DATA

We will use FFS (Family and Fertility Survey) data for four European countries representing different demographic and institutional contexts: Sweden, France, Italy and Hungary.

Previous studies have shown that European countries may be divided into four areas (north, west, south and east) with clearly differentiated characteristics: level of development, diffusion of new forms of union and of marital instability, decreasing fairness of gender system moving from North to South and from West to East (even though women in the Eastern European countries participate in the labor market at the same rates as those in northern Europe); decreasing fertility from north to south, higher in Eastern Europe at the time of the FFS, bearing in mind the fact that the data refer mainly to the period prior to the crisis of the communist block; less favorable institutional set-ups for the support of family life from north to south, but also favorable in the east [Di Giulio, Pinnelli, in this volume; Pinnelli, 2001; De Jong et al., 1999]. A country was chosen to represent each of the four groups, in order to obtain a significant variety of situations, bearing in mind the availability and comparability of the data.

Two national independent samples of women and men were interviewed with the same questionnaire in FFS. The age range was different in the various countries, the largest was 15-69, the narrowest 20-39.

The men and the women analyzed have had at least one union (marriage or cohabitation) or at least one child or two children, according to the different models, and belong to the cohorts 1952-70. Their biographies have all been censored at October 1992 in order to render the samples of the four countries homogeneous.

## 4 THE WOMEN AND MEN CHARACTERISTICS

We will study the determinants of the probability of having a first, second and third child, for men and women separately. We consider as possible determinants of the quantum and timing of the births the following characteristics:

- age at beginning of exposure to the risk of having a first, second, third birth;
- type of union (direct marriage or cohabitation for the first birth, and also indirect marriage or outside a union for second and third births);
- number of unions (only for the intervals between children)(never in a union, only one, more than one, in order to take account of separation and re-partnering);
- education;
- employment before the beginning of each interval;
- urbanization of place of residence at the time of survey (as contextual indicator of modernization);
- religiousness;
- birth cohort, in order to control for differences in cohort structure and time trends (in Sweden only some birth cohorts were included, every 5 years).
The characteristics of women and men at the beginning of three exposure periods are presented in Tab. 5.1. We can see various models of family behavior in the four countries: in Italy women married at older ages and waited before having their first child, whereas in Hungary they married early and had their first child early; in France they started their first union early with a cohabitation, but postponed their first child, and this pattern of behavior was even more pronounced in Sweden. It is fairly frequent to have experienced more than one union in Sweden, less so in France and Hungary and negligibly so in Italy. As far as social-cultural characteristics are concerned, women's standard of education is markedly higher in Sweden than in the other countries. The percentage of women with a job is much higher in Sweden, France and Hungary, but it is much lower in Italy, where it also falls considerably as one passes to the subsequent phases of building a family. Almost half of French women live in highly urbanized areas, while this percentage is much lower in the other countries, and lowest of all in Sweden. Over 60\% of women are not religious in Sweden, a little over half in Hungary, a third in France, and only 15\% in Italy. The percentage of non-religious women falls somewhat in the transition from the first period of exposure to the subsequent ones, and this suggests that there is a link between fertility and religiousness. The same happens for medium and high level of education, and for the degree of urbanization of place of residence.

All the characteristics examined, except the degree of urbanization of the place of residence, are significantly different for women and men. Men enter a union later than women: this difference is greatest in Italy and least in France; they are more likely to opt for cohabitation as their first union, except in Sweden, where this form of union is widespread anyway; they are better educated than women in Italy and France, but less educated in Hungary and Sweden; at the

Table 5.1a. Women's and Men's Characteristics at the Start of Each Interval: Union Start; First Birth; Second Birth (Percentages)

| Variables | Sweden |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Union start |  | First birth |  | Second birth |  |
|  | Women | Men | Women | Men | Women | Men |
| Age |  | * |  | * |  | * |
| $<23$ | 76.9 | 52.2 | 31.0 | 15.4 | 8.2 | 2.7 |
| 23-26 | 15.0 | 31.2 | 29.7 | 33.7 | 28.1 | 18.2 |
| >26 | 8.1 | 16.6 | 39.3 | 50.9 | 63.7 | 79.1 |
| Cohort |  | * |  | * |  | * |
| 1949 | - | 62.8 | - | 67.5 | - | 71.6 |
| 1954 | 48.7 | - | 51.0 | - | 53.5 | - |
| 1959 | 51.3 | 37.2 | 49.0 | 32.5 | 46.5 | 28.4 |
| Education |  | * |  | * |  | * |
| Low | 13.7 | 20.5 | 14.3 | 20.5 | 15.2 | 19.9 |
| Medium | 45.8 | 45.6 | 47.2 | 46.1 | 47.9 | 46.3 |
| High | 40.5 | 33.9 | 38.5 | 33.4 | 36.9 | 33.8 |
| Work |  | * |  | * |  | * |
| No | 21.9 | 13.6 | 12.4 | 5.0 | 20.3 | 3.6 |
| Yes | 78.1 | 86.4 | 87.3 | 95.0 | 79.7 | 96.4 |
| Type of union |  |  |  |  |  |  |
| Direct marriage | 8.4 | 9.7 | 8.8 | 11.3 | 9.5 | 11.3 |
| Indirect marriage | - | - | 34.6 | 39.9 | 51.5 | 57.6 |
| Cohabitation | 91.6 | 90.3 | 49.5 | 42.6 | 39.0 | 31.1 |
| Out of union | - | - | 7.1 | 6.2 | - | - |
| Number of unions |  |  |  |  |  |  |
| Never in union | - | - | 3.8 | 4.9 | 77.7 | 81.8 |
| One union | - | - | 78.4 | 79.5 | 22.3 | 18.2 |
| More than one | - | - | 17.8 | 15.6 | - | - |
| Urbanisation |  |  |  |  |  |  |
| Low | 47.9 | 48.9 | 47.7 | 53.9 | 50.2 | 56.7 |
| Medium | 31.0 | 30.9 | 33.2 | 29.5 | 32.5 | 29.0 |
| High | 21.1 | 20.2 | 19.1 | 16.6 | 17.3 | 14.3 |
| Religiousness |  |  |  |  |  |  |
| Very much | 9.9 | 6.7 | 10.0 | 7.8 | 10.4 | 9.3 |
| Not very much | 28.6 | 22.6 | 29.4 | 23.1 | 30.2 | 24.5 |
| Not at all | 61.5 | 70.7 | 60.6 | 69.1 | 59.3 | 66.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 1,210 | 878 | 1,083 | 742 | 843 | 559 |
|  |  |  |  |  |  | (cont.) |

Table 5.1a. (Continued)

| Variables | France |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Union start |  | First birth |  | Second birth |  |
|  | Women | Men | Women | Men | Women | Men |
| Age |  | * |  | * |  | * |
| <23 | 76.5 | 49.6 | 41.6 | 16.8 | 15.1 | 1.0 |
| 23-26 | 19.4 | 34.9 | 37.4 | 36.2 | 33.4 | 24.9 |
| > 26 | 4.1 | 15.5 | 20.9 | 47.0 | 51.5 | 74.1 |
| Cohort |  |  |  |  |  |  |
| 1952-54 | 16.8 | 22.5 | 22.2 | 31.1 | 31.3 | 34.1 |
| 1955-57 | 18.4 | 23.0 | 23.2 | 32.5 | 36.6 | 32.8 |
| 1958-60 | 19.5 | 28.3 | 22.8 | 36.4 | 32.1 | 33.1 |
| 1961-63 | 14.0 | 26.3 | 13.9 | - | - | - |
| 1964-70 | 31.4 | - | 17.7 | - | - | - |
| Education |  |  |  |  |  |  |
| Low | 44.3 | 37.7 | 50.4 | 39.2 | 53.6 | 43.0 |
| Medium | 53.1 | 53.1 | 38.1 | 47.9 | 35.0 | 46.8 |
| High | 12.6 | 9.2 | 11.5 | 12.9 | 11.4 | 10.2 |
| Work |  | * |  | * |  | * |
| No | 19.8 | 4.9 | 16.2 | 0.7 | 12.2 | 0.0 |
| Yes | 80.2 | 95.1 | 83.8 | 99.3 | 87.8 | 100.0 |
| Type of union |  |  |  |  |  |  |
| Direct marriage | 41.1 | 31.0 | 48.3 | 40.1 | 50.5 | 47.1 |
| Indirect marriage | - | - | 30.3 | 34.6 | 31.6 | 38.2 |
| Cohabitation | 58.9 | 69.0 | 15.5 | 21.0 | 15.9 | 14.7 |
| Out of union | - | - | 6.0 | 4.4 | 2.1 | - |
| Number of unions |  |  |  |  |  |  |
| Never in union | - | - | 4.6 | - | 0.1 | - |
| One union | - | - | 91.0 | 91.0 | 87.1 | 89.4 |
| More than one | - | - | 4.3 | 9.0 | 12.8 | 10.6 |
| Urbanisation |  |  |  |  |  |  |
| Low | 33.3 | 38.5 | 38.0 | 39.2 | 42.3 | 39.6 |
| Medium | 16.9 | 17.1 | 15.5 | 18.2 | 20.4 | 19.1 |
| High | 49.8 | 44.5 | 46.6 | 42.6 | 37.3 | 41.3 |
| Religiousness |  |  |  |  |  |  |
| Very much | 27.3 | 16.1 | 28.1 | 18.4 | 28.7 | 22.0 |
| Not very much | 31.2 | 30.7 | 31.3 | 32.9 | 33.6 | 34.4 |
| Not at all | 32.5 | 44.0 | 31.1 | 38.8 | 28.3 | 32.5 |
| Other | 9.0 | 9.2 | 9.5 | 9.9 | 9.4 | 11.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 1,677 | 697 | 1,315 | 434 | 614 | 293 |

Note: * chisquare $\mathrm{p}<0.05$ indicating significant differences between men and women.

Table 5.1b. Women's and Men's Characteristics at the Start of Each Interval: Union Start; First Birth; Second Birth (Percentages)

| Variables | Italy |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Union start |  | First birth |  | Second birth |  |
|  | Women | Men | Women | Men | Women | Men |
| Age |  | * |  | * |  |  |
| <23 | 52.4 | 18.4 | 31.8 | 17.8 | 11.7 | 18.8 |
| 23-26 | 23.0 | 31.5 | 24.3 | 36.6 | 20.8 | 41.7 |
| >26 | 24.6 | 50.1 | 43.9 | 45.6 | 67.5 | 39.6 |
| Cohort |  | * |  | * |  | * |
| 1952-54 | 24.9 | 24.3 | 25.6 | 35.5 | 37.1 | 47.9 |
| 1955-57 | 25.2 | 27.6 | 26.2 | 37.2 | 33.9 | 52.1 |
| 1958-60 | 24.3 | 22.3 | 23.9 | 27.3 | 29.0 | - |
| 1961-63 | 25.6 | 25.8 | 24.3 | - | - | - |
| Education |  | * |  | * |  |  |
| Low | 49.8 | 50.5 | 52.7 | 52.7 | 59.0 | 60.9 |
| Medium | 38.0 | 36.2 | 36.5 | 35.0 | 30.9 | 26.0 |
| High | 12.2 | 13.3 | 10.8 | 12.3 | 10.1 | 13.1 |
| Work |  | * |  | * |  | * |
| No | 39.9 | 10.1 | 42.7 | 7.1 | 56.1 | 5.2 |
| Yes | 60.1 | 89.9 | 57.3 | 92.9 | 43.9 | 94.8 |
| Type of union |  | * |  |  |  |  |
| Direct marriage | 92.2 | 89.7 | 90.1 | 92.9 | 94.5 | 95.9 |
| Indirect marriage | - | - | 4.2 | 2.7 | 3.1 | 3.1 |
| Cohabitation | 7.8 | 10.3 | 2.4 | 1.1 | 1.4 | 0.5 |
| Out of union | - | - | 3.3 | 3.3 | 0.9 | 0.5 |
| Number of unions |  |  |  | * |  |  |
| Never in union | - | - | 3.3 | 2.0 | - | - |
| One union | - | - | 95.7 | 96.4 | 98.3 | 99.2 |
| More than one | - | - | 1.3 | 1.6 | 1.7 | 0.8 |
| Urbanisation |  |  |  |  |  |  |
| Low | 31.9 | 37.5 | 31.6 | 35.8 | 32.9 | 35.4 |
| Medium | 40.6 | 38.7 | 41.2 | 41.0 | 42.2 | 42.2 |
| High | 27.5 | 23.8 | 27.2 | 23.2 | 24.9 | 22.4 |
| Religiousness |  | * |  | * |  | * |
| Very much | 50.1 | 37.1 | 51.2 | 41.3 | 55.5 | 46.4 |
| Not very much | 33.0 | 45.6 | 33.2 | 44.8 | 31.3 | 45.8 |
| Not at all | 16.9 | 17.3 | 15.6 | 13.9 | 13.2 | 7.8 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 1,533 | 553 | 1,402 | 366 | 766 | 192 |
|  |  |  |  |  |  | (cont.) |

Table 5.1b. (Continued)

| Variables | Hungary |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Union start |  | First birth |  | Second birth |  |
|  | Women | Men | Women | Men | Women | Men |
| Age |  | * |  | * |  | * |
| <23 | 80.6 | 44.3 | 56.6 | 18.8 | 21.6 | 5.6 |
| 23-26 | 14.4 | 40.9 | 30.0 | 41.8 | 40.5 | 24.1 |
| >26 | 5.0 | 14.9 | 13.4 | 39.5 | 37.9 | 70.3 |
| Cohort |  | * |  | * |  | * |
| 1952-54 | 29.9 | 34.9 | 30.1 | 36.3 | 37.7 | 50.5 |
| 1955-57 | 27.5 | 36.5 | 27.8 | 35.8 | 34.9 | 49.5 |
| 1958-60 | 22.6 | 28.6 | 22.5 | 27.9 | 27.3 | - |
| 1961-63 | 19.9 | - | 19.6 | - | - | - |
| Education |  | * |  | * |  | * |
| Low | 48.2 | 58.6 | 49.6 | 59.8 | 52.7 | 64.0 |
| Medium | 37.2 | 27.3 | 36.5 | 26.8 | 35.1 | 26.4 |
| High | 14.6 | 14.1 | 13.9 | 13.4 | 12.2 | 9.6 |
| Work |  | * |  | * |  | * |
| No | 14.3 | 5.8 | 8.8 | 1.8 | 10.8 | 1.0 |
| Yes | 85.7 | 94.2 | 91.2 | 98.2 | 89.2 | 99.0 |
| Type of union |  | * |  |  |  | * |
| Direct marriage | 82.7 | 82.9 | 83.5 | 84.7 | 86.3 | 90.4 |
| Indirect marriage | - | - | 8.8 | 10.0 | 9.4 | 9.2 |
| Cohabitation | 17.3 | 17.1 | 2.7 | 1.9 | 2.5 | 0.3 |
| Out of union | - | - | 5.0 | 3.3 | 1.8 | 0.1 |
| Number of unions |  |  |  | * |  | * |
| Never in union | - | - | 3.6 | 3.0 | - | - |
| One union | - | - | 92.6 | 91.0 | 91.3 | 94.7 |
| More than one | - | - | 3.8 | 6.0 | 8.7 | 5.3 |
| Urbanisation |  |  |  |  |  |  |
| Low | 40.3 | 39.7 | 41.1 | 40.2 | 42.8 | 43.6 |
| Medium | 31.4 | 33.0 | 31.3 | 34.4 | 32.7 | 37.6 |
| High | 28.3 | 27.3 | 27.5 | 25.4 | 24.5 | 18.8 |
| Religiousness |  | * |  |  |  | * |
| Very much | 14.5 | 9.2 | 15.0 | 8.8 | 14.7 | 11.6 |
| Not very much | 35.0 | 32.8 | 34.7 | 33.3 | 35.0 | 34.3 |
| Not at all | 50.5 | 58.0 | 50.3 | 57.9 | 50.3 | 54.1 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 1,872 | 619 | 1,815 | 570 | 1,142 | 303 |

Note: * chi square $\mathrm{p}<0.05$ indicating significant differences between men and women.
beginning of the union they worked more than the women, and the differences are most notable in Italy; they are more often non-religious than women. There is no significant difference between genders according to the degree of urbanization of the place of residence, which was only to be expected, given that the two samples of men and women are formed by the same criteria of geographical stratification.

## 5 METHOD

The differences discovered encourage us to use models of multivariate statistical analysis, allowing us to gauge the influence of each variable, controlling for the others. Such models are distinct by gender and countries. As the fertility data refer to retrospective fertility history, that are right-censored, given that the individuals observed are still in reproductive age, we have applied mixture- models among the various EHA (Event History Analysis) methods.

Through the application of mixture models [Farewell, 1982], we can measure the effect of each covariate measured at the beginning of the period of exposure, controlling for the influence of all the others, on the quantum of fertility - that is, on the final frequency of the events "birth of the first, second, third child" (parameter a) - and on the timing, that is, on the time after the last event (start of a union or previous birth) (parameter b) (see Appendix). A positive value for " a " represents an increase in the likelihood of having a child of a given order, while a positive value for "b" represents a decrease in the time it takes, while the opposite is true for negative values.

Further details on mixture-models are presented in the Appendix whereas results are presented in Table 5.2.

## 6 HYPOTHESES

We want to test the following hypotheses:
a) the delays (in union formation, and in birth of each child) influence the fertility of the woman but not that of the man (or less so), due to the stronger biological constraints on female reproductive life;
b) greater educational resources discourage the woman's fertility but encourage that of the man;
c) work is an obstacle to the fertility of the woman, but encourages that of the man;
d) having the first child when not in a union has a negative influence on women's fertility, but not on that of men;

| Variables | Women |  |  |  |  |  | Men |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | First birth |  | Second birth |  | Third birth |  | First birth |  | Second birth |  | Third birth |  |
|  | a | b | a | b | a | b | a | b | a | b | a | b |
| Age $<23$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Age 23-26 | -0.06 | 0.24 | -0.21 | 0.33 | -0.24 | -0.22 | -0.42 | 0.08 | -0.48 | 0.21 | - | - |
| Age $>26$ | -0.64 | 0.84 | 0.22 | 0.40 | -0.70 | -0.07 | -1.70 | 0.35 | -0.93 | 0.32 | -0.66 | 0.37 |
| Cohort 1949 |  |  |  |  |  |  | 0 | 0 | 0 | 0 | - | - |
| Cohort 1954 | 0 | 0 | 0 | 0 | 0 | 0 |  |  |  |  |  |  |
| Cohort 1959 | -0.46 | -0.10 | 0.26 | 0.23 | 1.07 | -0.28 | -0.27 | -0.29 | 0.57 | 0.35 | - | - |
| Education low | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Education medium | 0.17 | -0.20 | -0.37 | 0.11 | -0.49 | 0.10 | 0.24 | 0.10 | 0.32 | 0.12 | -0.41 | -0.17 |
| Education high | 0.01 | -0.47 | -0.37 | 0.14 | 0.37 | -0.11 | 0.89 | -0.13 | 0.56 | 0.20 | -0.50 | -0.03 |
| Employed | -0.04 | 0.18 | 0.11 | 0.27 | -0.04 | -0.33 | 0.74 | 0.33 | 1.33 | -0.05 | - | - |
| Direct marriage | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Indirect marriage | - | - | 0.55 | -0.18 | 0.45 | 0.08 | - | - | 0.57 | -0.28 | -0.42 | -0.27 |
| Cohabitation | -0.94 | -0.86 | 0.12 | -0.46 | - | - | -2.82 | -0.81 | 0.10 | -0.39 | 0.11 | -0.38 |
| Out of union | - | - | -0.89 | -1.36 | - | - | - | - | -1.07 | -1.19 | - | - |
| Other | - | - | - | - | 0.60 | -0.16 | - | - | - | - |  |  |
| Never in union | - | - | 0 | 0 | - | - | - | - | 0 | 0 | - | - |
| One union | - | - | 0.35 | 0.56 | 0 | 0 | - | - | 0.58 | 0.84 | 0 | 0 |
| More than one union | - | - | -0.51 | 0.25 | 0.18 | 0.35 | - | - | -0.33 | 0.14 | 0.73 | 0.65 |
| Urbanisation low | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Urbanisation medium | 0.13 | -0.04 | -0.21 | -0.05 | -0.08 | -0.18 | -0.64 | -0.10 | -0.17 | -0.20 | -0.19 | -0.01 |
| Urbanisation high | -0.86 | -0.31 | -0.31 | -0.16 | -0.60 | -0.22 | -1.10 | -0.21 | -0.53 | -0.38 | -0.31 | -0.21 |
| Very religious | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Not very religious | 0.31 | -0.12 | -0.55 | -0.13 | -0.75 | -0.08 | -1.82 | 0.05 | -1.48 | -0.34 | -0.61 | -0.08 |
| Not religious | -0.03 | -0.10 | -0.81 | -0.09 | -0.81 | -0.18 | -2.22 | 0.04 | -2.13 | -0.35 | -1.07 | -0.43 |

Note: significant effects (with the posterior distribution not containing 0 between $2.5^{\circ}$ and $97.5^{\circ}$ percentage points) in bold.
Table 5.2b. France - Results of the Mixture Models: Effects of the Variables on the Quantum (a) and Timing (b) of the First, Second and Third Birth

| Variables | Women |  |  |  |  |  | Men |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | First birth |  | Second birth |  | Third birth |  | First birth |  | Second birth |  | Third birth |  |
|  | a | b | a | b | a | b | a | b | a | b | a | b |
| Age < 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Age 23-26 | -0.57 | 0.04 | -0.90 | 0.02 | -1.20 | 0.10 | -0.01 | -0.05 | 0.72 | -0.29 | -0.80 | -0.90 |
| Age $>26$ | 0.42 | 0.00 | -1.35 | 0.02 | -2.02 | 0.14 | 0.00 | 0.17 | 0.78 | -0.56 | - | - |
| Cohort 1952-54 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cohort 1955-57 | 0.25 | 0.04 | -0.08 | 0.11 | -0.27 | -0.01 | 0.54 | -0.01 | 0.30 | -0.18 | -0.03 | 0.51 |
| Cohort 1958-60 | -0.70 | 0.02 | 0.01 | -0.02 | -0.03 | 0.04 | 0.46 | 0.04 | -0.05 | 0.09 | 1.34 | -0.22 |
| Cohort 1962-63 | -0.72 | -0.03 | $-0.50$ | 0.01 | - | - | 0.71 | -0.13 | -0.05 | - | - | - |
| Cohort 1964-70 | -1.27 | -0.10 | -0.17 | -0.16 | - | - |  |  |  |  |  |  |
| Education low | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Education medium | -0.87 | -0.28 | -0.38 | -0.17 | -0.48 | -0.10 | 0.06 | -0.09 | -0.26 | -0.17 | -0.03 | 0.32 |
| Education high | -0.81 | -0.43 | 0.21 | -0.18 | 0.18 | 0.00 | 0.40 | -0.37 | -0.59 | 0.42 | -1.24 | 1.32 |
| Employed | -0.10 | -0.02 | -0.65 | -0.16 | -0.64 | -0.43 | 0.82 | 0.41 | - | - | - | - |
| Direct marriage | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Indirect marriage | - | - | -0.01 | 0.01 | -0.06 | -0.06 | - | - | -0.42 | 0.20 | 0.47 | -0.34 |
| Cohabitation | -0.85 | -0.49 | -0.40 | -0.17 | 0.31 | -0.18 | -1.16 | -0.61 | 0.07 | -0.56 | 1.66 | -0.44 |
| Out of union | - | - | -0.82 | -0.46 | - | - | - | - | 0.35 | 0.12 | - | - |
| Never in union | - | - | 0 | 0 | - | - | - | - | - | - | - | - |
| One union | - | - | 0.64 | -0.21 | 0 | 0 | - | - | 0 | 0 | 0 | 0 |
| More than one union | - | - | -0.16 | 0.84 | -0.29 | 0.18 | - | - | 0.17 | -0.06 | $-0.51$ | -0.05 |
| Urbanisation low | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Urbanisation medium | -0.58 | 0.10 | -0.47 | 0.02 | 0.13 | $-0.25$ | 0.36 | 0.02 | 0.06 | 0.13 | $-0.83$ | -0.06 |
| Urbanisation high | -0.66 | -0.07 | -0.74 | 0.03 | 0.44 | -0.20 | -0.42 | -0.04 | -0.45 | 0.06 | $-0.83$ | 0.05 |
| Very religious | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Not very religious | -0.49 | -0.02 | -0.47 | -0.02 | -0.68 | -0.01 | -0.61 | 0.12 | 0.09 | -0.19 | -0.62 | 0.17 |
| Not religious | -0.43 | -0.02 | -0.55 | 0.04 | -0.45 | -0.11 | -1.05 | -0.20 | -0.61 | -0.18 | -1.41 | 0.35 |
| Other | -0.14 | -0.12 | -0.40 | 0.02 | -0.16 | -0.04 | -0.06 | -0.02 | 0.52 | -0.15 | -1.44 | -0.56 |

Note: significant effects (with the posterior distribution not containing 0 between $2.5^{\circ}$ and $97.5^{\circ}$ percentage points) in bold.
Table 5.2c. Italy - Results of the Mixture Models: Effects of the Variables on the Quantum (a) and Timing (b) of the First, Second and Third Birth

| Variables | Women |  |  |  |  |  | Men |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | First birth |  | Second birth |  | Third birth |  | First birth |  | Second birth |  | Third birth |  |
|  | a | b | a | b | a | b | a | b | a | b | a | b |
| Age <23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Age 23-26 | -0.47 | -0.10 | -0.35 | -0.06 | -1.11 | 0.09 | 0.06 | -0.12 | -1.21 | 0.04 | -1.73 | -0.57 |
| Age $>26$ | -0.63 | -0.09 | -0.84 | -0.10 | -1.56 | -0.02 | -0.59 | -0.16 | -1.34 | -0.04 | - | - |
| Cohort 1952-54 | 0 | 0 | 0 | 0 | 0 | 0 |  |  |  |  |  |  |
| Cohort 1955-57 | -0.14 | -0.05 | -0.25 | 0.06 | -0.06 | 0.13 |  |  |  |  |  |  |
| Cohort 1958-60 | $-0.31$ | -0.14 | -0.05 | -0.07 | -0.01 | -0.38 |  |  |  |  |  |  |
| Cohort 1961-63 | 0.58 | -0.22 | 0.17 | -0.07 | - | - |  |  |  |  |  |  |
| Cohort 1946-50 |  |  |  |  |  |  | 0 | 0 | 0 | 0 | 0 | 0 |
| Cohort 1951-55 |  |  |  |  |  |  | -0.42 | 0.05 | 0.43 | 0.07 | -0.26 | -0.29 |
| Cohort 1956-60 |  |  |  |  |  |  | -0.63 | -0.08 | 0.21 | -0.07 | - | - |
| Cohort 1961-65 |  |  |  |  |  |  | 0.71 | -0.41 | - | - | - | - |
| Education low | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Education medium | -0.36 | -0.31 | -0.05 | -0.21 | 0.01 | -0.15 | 0.36 | -0.33 | -0.73 | -0.10 | $-0.82$ | -1.03 |
| Education high | -0.32 | -0.43 | 1.03 | -0.24 | 0.40 | -0.32 | -0.24 | -0.44 | 0.27 | 0.60 | 0.20 | 0.55 |
| Employed | -0.52 | -0.23 | -0.49 | -0.26 | -0.50 | 0.26 | 0.34 | -0.10 | 0.01 | -0.31 | - | - |
| Direct marriage | 0 | 0 | 0 | 0 | - | - | 0 | 0 | 0 | 0 | - | - |
| Cohabitation | -0.86 | -0.43 | - | - | - | - | -2.07 | -0.87 | - | - | - | - |
| Other | - | - | 0.07 | -0.08 | - | - | - | - | -0.19 | 0.14 | - | - |
| Urbanisation low | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Urbanisation medium | 0.54 | -0.02 | 0.01 | 0.02 | 0.01 | -0.25 | 0.08 | 0.31 | 0.03 | -0.06 | 0.11 | 0.07 |
| Urbanisation high | 0.76 | -0.02 | -0.21 | 0.09 | 0.01 | -0.27 | 0.47 | -0.02 | -0.14 | -0.05 | 0.43 | 0.33 |
| Very religious | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Not very religious | -0.37 | -0.01 | -0.59 | -0.07 | -0.17 | 0.03 | 0.46 | 0.10 | 0.20 | 0.06 | 0.44 | -0.27 |
| Not religious | -0.57 | -0.27 | -0.92 | -0.05 | -1.20 | 0.88 | -1.21 | -0.05 | -1.30 | -0.07 | -0.51 | 0.15 |

Note: significant effects (with the posterior distribution not containing 0 between $2.5^{\circ}$ and $97.5^{\circ}$ percentage points) in bold.

Note: significant effects (with the posterior distribution not containing 0 between $2.5^{\circ}$ and $97.5^{\circ}$ percentage points) in bold.
e) having a complex history of unions has negative effects on women's fertility but not on that of men, due to the effect of accumulated delays;
f) secularization encourages lower fertility in the women as an ideational factor linked to female emancipation, and has less influence on male fertility;
g) residence in urban areas encourages lower fertility among women due to the greater opportunities of emancipation offered, whereas it does not influence that of men;
h) the negative effects on the woman's fertility are attenuated in more favorable contextual conditions from an institutional point of view.

## 7 RESULTS

Between parameters a and $b$, we regard parameters a, related to the quantum, as the most relevant, whereas, as far as the parameters related to the intervals are concerned, we consider of greater importance those regarding the birth of the first child, as they are likely to influence future fertility.

Generally, when both quantum and timing parameters are statistically significant, the effect on fertility is homogeneous, i.e. either the individuals experience the event less often and more slowly (both parameters $a$ and $b$ negative) or they experience it more often and less slowly (both parameters a and $b$ positive). In the first case the arrival of higher order births is undoubtedly discouraged, in the second case encouraged. Rarely, the considered characteristic has significant but discordant effects for the two parameters, on the one hand favoring the arrival of higher order births, but extending the interval between the birth of the first child and that of higher order children (parameter a positive and b negative), or, on the other hand, discouraging the arrival but shortening the length of the interval for those who opt for a higher order birth (parameter a negative and b positive). Such situations will be highlighted when discussing results. In the second mentioned case, delaying the birth of a child generally reduce the probability of having that child.

### 7.1 Age

Age at the beginning of the periods of exposure is classified in three groups: $<23 ; 23-26 ;>26$, for both men and women, and in all three of the intervals observed, in all four countries, for reasons of comparability. The limit inherent in this variable is that the life cycle of men is delayed compared to that of women and varies by country. The modality of comparison is $<23$. In confirmation of our hypothesis, the delaying of the first union/birth of children has a stronger negative influence on women fertility than on men: this is confirmed in

France, Italy and Hungary, where the number of negative effects on the quantum of fertility is always higher for women than for men. In France, men aged over 26 put off the arrival of their 2nd and 3rd child, and they have a third child less frequently than those entering a union/having children at a younger age. Women, on the other hand, always have a lower quantum of fertility. In Italy, almost all the effects are negative, and the negative effects on the probability of having a second and third child are significant for both men and women. In Hungary, the negative effect on fertility is significant from the first child onwards, and it is much more marked for women. The hypothesis that delays have a more negative effect on the fertility of women than on that of men is not, however, confirmed for Sweden, where the delaying of the first union/the birth of children has the general effect of postponing the arrival of the first child/subsequent children, and only diminishes the probability of having the first/second child in the case of men, contrary to our hypothesis.

In conclusion, generally the effect of higher age is mainly that of limiting births of any order for all the women and for Swedish men, and only of second and third order births for men in Hungary, France and Italy. Delay effects on higher order births are limited to second and third order births for men in France, and to first and second order births for women in Sweden. Thus the variable age has mainly effects on the quantum of fertility.

### 7.2 Education

The hypothesis that possessing more resources in terms of human capital might have a different effect on women and men fertility (positive on men, negative on women) is almost always confirmed. In Sweden, average or high educational qualifications delay the arrival of the first child for women, whereas a high degree of education increases the probability of having a first child in the case of men. In France, an average education for women always decreases the probability of having children of any order, and delays the arrival of the first and second child, while a high level of education decreases the probability of having the first child and delays its arrival; for men, on the other hand, an average level of education does not have significant effects, and a high degree of education merely has the effect of delaying the arrival of the first child, whereas it anticipates the probability of having the second and third child. Particularly, a high degree of education anticipates the arrival of the third for men with two children, before a further delay may imply not having that child at all (parameter a negative and b positive). In Italy, an average or high degree of education generally causes more negative effects on the quantum and timing of fertility for women; if we limit our observation to the significant effects, average education has a delaying effect on fertility both for men and for women, and also a negative
effect on the probability of having a second child in the case of men, while high educational qualifications delay the birth of the first child both for men and for women, but increase the probability of having a second child in the case of women. In Hungary, average or high education only has significant negative effects in terms of both quantum and timing in the case of women, but it has no significant effects for men. In conclusion, the hypothesis may be regarded as confirmed, albeit with differing nuances in the four countries. Distinguishing between effects on quantum and on timing of fertility, we notice, as expected, that the effect of an investment on education is always that of delaying the arrival of the first child for women, whereas in the case of men it has the same effect only in France and Italy.

### 7.3 Work

It must be noticed that it is quite rare for a man not to be working at the time of the union, and the probability decreases strongly as they proceed in their life course. Therefore we decided to exclude this variable in the models relative to the third child for Italy and Sweden, and to the second and third child for the two other countries. In Sweden, working has significant positive effects on the quantum and timing of the fertility of men, while it diminishes the probability of having a second and third child, and delays the arrival of a third child for the woman. In France, it has positive, but not significant, effects on the quantum and timing of the arrival of the first child in the case of men, while it has negative effects for women, which are significant in the case of the arrival of the second and third child and the timing of the third. In Italy, it has negative and significant effects of quantum and/or timing only in the case of women. In Hungary, working has fewer overall negative effects, which are more numerous in the case of women but not significantly so. The only significant effect concerns the bringing forward of the arrival of the first child in the case of men. In conclusion, the hypothesis that work has the opposite influence for men and women is confirmed.

### 7.4 Union

The forms of union considered are: direct marriage (no previous cohabitation), indirect marriage (celebrated after a period of cohabitation), cohabitation, and not being in a union at the moment of the birth of the first child. This latter situation causes a different effect on the fertility of the two genders, as it has no significant effects on the fertility of men, but it has significant negative effects on that of women. So women who were neither married nor cohabiting with
a partner at the moment of the birth of the first child (either because they had separated or because they had never been in a union) have a lower probability of having a second child, or do so later on, in the two countries were a sufficient number of such cases was observed.

### 7.5 Number of Unions

Only in Sweden and France is the number of cases of men and women with more than one union sufficient to conduct the analysis, and the results of the model demonstrate more negative effects for women than for men, of which only one is significant: that on the timing of the arrival of the second child, in the case of women.

### 7.6 Religiousness

In Sweden, not being very religious has negative and significant effects on the probability of having the first and second child, and delays the arrival of the second child in the case of men, while it has negative but not significant effects in the case of women. In France and Italy, it has greater significant negative effects, and these are more often significant in the case of women. In Italy, not religious women have the third child less often but earlier (parameter a negative and b positive). In Hungary, the number of negative effects is the same for men and women, but, if we observe the significant effects, not being very religious encourages the bringing forward of the arrival of the first child and significantly decreases the probability of having the second child for men, but significantly decreases the probability of having the first child for women. Overall, then, the hypothesis that greater secularization has a negative influence in the case of women may be regarded as confirmed in all countries except Sweden.

### 7.7 Urban Residence

Residence in an urban area has a negative influence on fertility, which is greater in the case of women, as hypothesized, though the significant effects are few. Only in Sweden there are more negative effects for men than for women. In France, the residence in highly urbanized areas discourages third order fertility for men, but it anticipates the arrival of the child for those who planned to have one. The same happens in Hungary for men with two children, and in this case the effect on the interval between second and third child is even more remarkable (parameters a negative and b positive).

### 7.8 Institutional Factors

The four countries represent different institutional set-ups which may influence the possibility of reconciling work and family for the two genders. Sweden represents the most favorable situation. In order to test whether this influenced fertility, we calculated the percentages of negative effects on both the quantum and the timing, both overall and significant, over the total number of effects, by gender and country. In Sweden the percentage of negative effects is lower, both for men and for women ( $52 \%$ and $58 \%$ ), the difference between men and women in the percentage of negative effects is limited, the percentage of significant negative effects is actually lower for women than for men, and it is the lowest of all for the four countries (17\%). In contrast, Italy has the highest percentage of negative effects and the biggest gender difference ( $56 \%$ for men opposed to $80 \%$ for women). The differences narrow, however, when we observe only the significant effects ( $20 \%$ for men and $27 \%$ for women). Hungary has the highest percentage of negative effects for men, a little higher than that for women ( $70 \%$ as opposed to $69 \%$ ). If we observe the significant effects, however, the position of women becomes the worst for all the countries ( $31 \%$ ), while that of men becomes one of the best ( $15 \%$ ). In France, the percentage of negative effects is higher for women, similar to that in Hungary (69\%), while it is lower for men ( $59 \%$ ). If we only observe the significant effects, men have the lowest percentage (13\%) and women come second place after Sweden. The conclusion which it seems possible to draw is that an institutional context more favorable to the reconciliation of work and family, as the Swedish one, effectively creates fewer constraints on women's fertility. For men, on the other hand, there are more constraints in a context of greater gender equality, given that they have become more involved in family tasks and they too are now faced with having to reconcile work and family.

## 8 SYNTHESIS AND CONCLUSIONS

The analysis of differential fertility by gender was undertaken by building two similar models for the two genders. The choice of variables was undertaken with reference to four theoretical currents of thought, the NHE and the structural, ideational and institutional theories, and bearing in mind changes in family behaviours in the last 20-30 years. FFS data were used for four countries representing the four areas in which European countries may be grouped according to their characteristics of development, gender system, and their demographic and institutional features. Distinct models by country
and gender serve to see whether the two genders have the same or different models of differential fertility, and thus whether the same characteristics play a different role for the two genders, without considering the characteristics of the partner. The findings clearly show that the same variables have more negative effects on female fertility than on male fertility, demonstrating that women are subject to more constraints than men. Living in a more children/woman-friendly context brings the conditions of the two genders closer together and attenuates the negative effects for women in general.

The results obtained demonstrate the desirability of bringing men into the analysis of differential fertility, in view of the changes that gender relations are undergoing as a result of the increases in women's level of education and their participation in the labor market, and the resulting changes in the rules governing the matching of couples on the marriage market and the division of roles and responsibilities.

For future surveys, it should be borne in mind that it would be opportune for the male and female samples to be of the same size, given that the smaller size of male samples in FFS is an element which further complicates the possibilities of comparing male and female behavior. Moreover, if we are to analyze reproductive histories which are retrospectively reconstructed and right censored, we must also obtain a retrospective reconstruction of the characteristics of the partners of the women and men interviewed, as suggested in the Conference on "Couple's careers" organized by Blossfeld [Bremen, 1997]. This requirement was not taken into account by the responsible of the FFS design, which did introduce a sample of men, but left little scope for interrelating partners' biographies. Interviewing both partners in the couple, or collecting information on the partners from the interviewed, seems to be the best approach, hitherto little followed. This difficult path is rendered all the more arduous by the greater frequency of complex partnership histories compared to the past, as reproductive history may be the fruit of different partnerships. The ideal unit of observation therefore remains the individual, man or woman, for whom it is possible to reconstruct the history of unions and fertility, also taking account of characteristics of partner(s), as suggested by Hobcraft [2000] in his overview of the FFS experience, but reconstructed retrospectively, or at least provided at the beginning of periods of exposure, in order to allow the analysis of interrelated right-censored biographies.

In addition to greater attention to sample design and the collection of interrelated biographies, one problem which is even more important for future studies, is that of contents. In order to define the gender system of a country, as in the case of the gender contract within a couple, it is necessary to make explicit reference to the following elements: autonomy, power, roles, access to and control of resources [Mason, 1984; 1995].

The importance currently assumed by the dimension of gender in the declarations of international and national organizations, and in equal opportunities policies, is not being accompanied by corresponding realization on the part of demographers of the changes to survey designs and contents rendered necessary by the gender perspective. Introducing a gender perspective, as we know, is not just a question of observing both men and women, instead of women, but above all of observing the interaction between them and the influence of the gender contract on family and fertility behavior. The new UNECE project, Genders and Generations, who assumed "gender" in its headline, is taking account of these observations in the new round of family surveys.

## APPENDIX

Most event history models (such as discrete-time logit and log-rate, continuous parametric hazard rate, accelerated failure, etc.) implicitly assume that the event of interest would eventually occur to everyone. This assumption is true for death, but it is unrealistic for many other events, such as the birth of a child. Some others traditional event history models (such as Cox's proportional hazards model) are compatible with the possibility that the event of interest would not occur, but they have some difficulty in interpreting the results, because they do not distinguish between the probability of experiencing the event and the waiting time to the event [Farewell, 1982; Yamaguchi, 1992]. Mixture models permit this distinction, allowing the simultaneous estimation of the separate effects of covariates on the probability and the timing of the event. For the analysis of birth histories this means the possibility of distinguishing the determinants of birth stopping from those of birth spacing [Yamaguchi, Ferguson, 1995]. To do this, mixture models combine a logistic regression of the probability of occurrence of the event with a survival model for duration (given that the event occurs).

Various survival models have been proposed to estimate the (separate) effects of the explanatory variables on the timing of the event. Following McDonald and Rosina [1998], for our analysis we have chosen a logisticgeometric piecewise discrete-time model. We have used a Bayesian approach based on Gibbs sampling (a Monte Carlo Markov Chain method) to estimate our model. The priors for the regression effect parameters were independent $\mathrm{N}(0,0.0001)$ distributions, where the second parameter of the normal distribution is the precision (i.e. the reciprocal of the variance). Estimation of the model was carried out using BUGS [Spiegelhalter et al., 1995]. A burn-in of 1000 iteration was used and inference was based on a sample of 5,000 observations from the posterior distribution.

We consider "significant" (even though this term is not appropriate in the Bayesian approach) only the parameters with the posterior distribution not containing 0 between $2.5^{\text {th }}$ and $97.5^{\text {th }}$ percentage points. In the tables we present the mean of the posterior distribution of the parameter estimates.

## CHAPTER 6

# THE NEW ROLE OF THE FATHER 

PAOLA DI GIULIO AND SIMONA CARROZZA

## 1 THE FATHER'S ROLE

Not only do we have an increasing involvement of women and mothers in the labour market, but there is also a change in the structure of families caused by a rise in the number of divorces, the spread of new family forms and extra-marital fertility, which are gradually redefining parents' roles [Bianchi, Casper, 2000]. The 'traditional' father viewed merely as the breadwinner is apparently being replaced by the 'modern' father who provides psychological and physical care for the benefit of the children [Smith, 1996; Harris et al., 1998] and in order to help the mother [Doherty et al., 1998].

The subject of the new role of father has been developed above all by American sociologists, psychologists and economists, from the 1960s onwards. Some of the literature concerns the absent father and reconstituted families, with a special focus on infant poverty, on the emotional wellbeing of children and on the impact that special family contexts have on educational attainment, adolescent fertility and juvenile delinquency [Duncan et al., 1994; Barnes, Farrell, 1992]. Another part of the literature concerns intact families, where renegotiation of the roles between the parents in household work and in the activities related to the upbringing of children is considered a strong necessity.

This work examines the level of cooperation of fathers with mothers in some of the childcare activities performed daily by parents in intact families. Our aim is to highlight the characteristics of the 'modern' father in selected European countries and to study when he is encouraged to participate more in some aspects of the children's life.

Previous research, as reported in Yeung et al. [2001], has highlighted that paternal involvement in nurturing activities, considered in absolute terms, slightly increased between the 1960s and the 1980s, after having fluctuated during the first part of the 20th century [La Rossa et al., 1991; Atkinson, Blackwelder, 1993], but that it is still a great deal lower than maternal involvement when considered in relative terms [Pleck, 1997]. Moreover, qualitative differences
exist between the kind of activity that a mother performs as compared to the ones that the father does. The father has intrinsic preferences for some tasks as opposed to others: for example he cooperates more with the mother in interactive activities, like helping the children with homework or playing with them, and less in the custodial ones, such as cooking their meals [Halle, 2000; Menniti, Palomba, 2002].

In his review of paternal involvement by fathers' socio-demographic and economic characteristics, Pleck [1997] noted that existing research presents a complex picture. In some cases age and sex of the children, or age and education of the father, or his working hours are indicated by developmental psychologists and family scientists as possible, but not always consistent, predictors of the absolute level of fathers' involvement [Barnett, Baruch, 1987; Marsiglio, 1991; Noch, Kingston, 1988].

More specific to our research is the literature concerning the relative levels of involvement. We may identify two general theoretical frameworks for explaining how family work is shared: human capital theory and social-structural theory.

In the human capital theory, the main proponent of which is Becker [1981], the family is an efficient cooperative unit, so that when there are children and the demands of time for both household work and paid labour increases, the spouses specialize according to their relative efficiencies (based on their wages). According to Becker, since the woman is naturally and biologically inclined to look after children, she develops what the economists call a preference for household work; the man, on the contrary, is more efficient in paid work, as he can spend more time on it. So on the basis of the hypothetically neutral concept of efficiency, human capital theory justifies the unequal division between paid and unpaid work. In any case, in individual couples the woman may be more productive than the man in paid work, and the division of household responsibilities turns out to be less discriminated.

In the social-structural theoretical approach [Berk, 1985; England, Farkas, 1986; Ferree, 1990; Peterson, Gerson, 1992] attention moves from the concept of efficiency and from the problem of maximization of a theoretically harmonious household unit to the inequitable access to market resources and the unequal institution of marriage, that warrants different power by gender. According to this theory women are excluded, formally or informally, from the better paid economic careers, and this forces them to enter in the bond of marriage. So women are economically, institutionally, or even ideologically encouraged to handle most of the childcare and housework. The difference with respect to the previous approach is that if the amount of time dedicated to household tasks increases (for example in large families, or in families with young children), then this happens for both partners. In social-structural
theory, the limits imposed by gender segregation and discrimination in the work place are explicitly taken into account, and the behaviour of the couple is explained in terms of socially constructed gender expectations, and not through a biological-deterministic approach or in terms of market efficiency.

Both approaches highlight the social and economic factors that constrain people's choices, and there is often substantial overlap in predictions between the two, but with one important difference: the former tends to accept and justify the status quo, while the latter tends to challenge it [Coltrane, 1996].

Although most of the results from the main research are generally inconclusive, some findings might help empirically to isolate some of the immediate factors associated with different levels of sharing family work.

Consistent links have been found between socio-economic status and fathers' involvement. The quality of a father's interaction with his children is tied to his own success, real or perceived, as a breadwinner [Elder et al., 1984; La Rossa, Reitzes, 1993; Halle, Le Menestrel, 2000]. Higher education, as a cultural value, also improves and encourages fathers' nurturing role [Palomba, 1997; Goldscheider, Waite, 1991, Halle, Le Menestrel, 2000; Goldscheider, Kaufmann, 1996]; indeed, we may suppose that better educated parents are more aware of the developmental benefits that children achieve from a warm relationship with the father [Marsiglio, 1991]. Another important factor is the availability of time. The diversity of husbands' and wives' work schedules are related to the use of fathers as care providers: the key variable in shaping men's involvement is indicated by the number of not-overlapping hours of employment between spouses [Brayfeld, 1995; Presser, 1988; 1989]. From a different perspective, Nock and Kingston [1988] highlight that it is important to consider the diversity between weekdays and weekends in the time use by parents and children. Involvement of the father in nurturing activities is greater during the weekends. It should also be taken into account that economic or financial resources can be used by families to purchase alternative care services, such as babysitting and access to kindergarten and similar structures, especially when the woman is particularly committed to pursuing a career [Marsiglio, 1991; Casper, O'Connell, 1998].

Most couples use a combination of practicality, power and ideology in dividing up household and market labour. Gender ideology probably plays a large part in shaping the attitude towards parental roles: people are socialized to adopt values and beliefs about the appropriateness of various tasks for men and woman, and such values encourage or inhibit the sharing of domestic tasks [Coltrane, 1996; 2000]. In any case, it is worth noting that the culture of fatherhood has changed more rapidly that the actual behaviour of fathers [La Rossa, 1988] and, as Thompson and Walker [1989] conclude, "in spite of all the talk about
egalitarian ideology, abstract beliefs about what women and men 'ought' to do are not connected with the division of family work". In this respect, it is an open question whether more egalitarian arrangements result from husbands or wives’ initiatives.

Finally, it must be considered that many states have tried to promote the autonomy, economic independence and wellbeing of women and mothers, with recent changes in existing legislation and with proposals to reconcile their working and nurturing roles. However, this has reinforced a rigid model of gender roles, underlining that only the mother is strictly necessary for the bringing up of children. The father's role has therefore virtually disappeared from political policies, albeit with important differences between countries [Palomba, 1995].

The aim of our analysis is to understand what factors might influence paternal involvement in instrumental ${ }^{1}$ daily childcare activities in selected European countries. More precisely we define as 'modern' a father who is young (i.e. belongs to a more recent birth cohort) and educated (i.e. shares new cultural values), and we are interested in verifying if this new kind of father cooperates more with the mother, net of the labour market constraints and the characteristics of the mother and family.

## 2 DATA AND METHOD

The data for this analysis come from the Family and Fertility Surveys ${ }^{2}$ (FFS). The data consist of a female and a male sample (the female sample is usually more than twice the size of the male one), both representative of the population of reproductive age in each country. Moreover, if the respondent is currently living in a union, data about the partner are recorded. If there is at least one child in the household aged under 15 , information about childcare activities are collected. Given that this latter type of family only represents a small part of the original sample, we choose to carry out the analysis on the more numerous female sample.

The aim is to measure how much and in what ways the father is involved in the childcare activities that are carried out in the family on a day-to-day basis. The FFS survey questionnaire neither asks about the quantity of time usually spent on unpaid work, nor requests an objective evaluation of the proportion of time (out of the total) spent by men or women on childcare activities. Rather, it requests a qualitative judgement regarding the attribution of responsibilities about a certain activity.

Question v904 in the standard questionnaire asks: "What about the care of children? Could you indicate who usually performs each of the following activities: mostly yourself, mostly your partner, both of you equally, mostly
other members of this household, or mostly other persons not belonging to this household?" The activities taken into account are the instrumental ones: preparing infants' meals, getting them dressed, looking after them when ill, playing with them and helping them with their homework. If some of these items were not pertinent, for example, because of the age of children, the code for the answer was 'not applicable'.

There is 'cooperation between the partners', if the man does the most or if both do an equal amount, and 'no cooperation' in other cases, and on this variable we perform our analysis ${ }^{3}$. It is important to take into account the special nature of such a variable. Firstly, it is not possible to know the total number of hours devoted to household activities, and it is not possible to analyse collaboration between partners by weekdays/weekends. Secondly, it is not possible to estimate to what extent household activities are performed jointly between partners (both parents doing the activity at the same time) or separately (one parent performing the activities while the other one is doing something else). Thirdly, the typology of collaboration in the performance of household work and childcare can be very complex: people can be involved to the same extent, in terms of both responsibility and the practical carrying out of an activity. From this point of view, simply asking who is the main person responsible for an activity provides us with useful synthetic information, but it may conceal very different ways of organizing the family. Fourthly, there is no way of measuring accessibility, i.e. the time of a day when a father is available for the children without doing any special care activity. Engagement, accessibility and responsibility for childcare are the three main dimensions of paternal involvement introduced by Lamb and Pleck and recalled in Marsiglio [1991]. Lastly, we have to take into account that information is given by the woman on the partner's collaboration. When the mother reports about the level of collaboration between partners the risk of underestimating ${ }^{4}$ the collaboration of the father is every time present. In fact, a mother strongly unsatisfied about the relationship with the partner could hardly be objective in reporting the information.

Only in 14 countries the respondents were asked about child care activities (Tab. 6.1).

A very complex picture emerges. Some of the activities seem to be more frequently shared between the parents. As anticipated in previous research, the father is more involved in interactive activities, like playing or helping with homework, and less so in custodial ones. Practically everywhere, the least shared activity is preparing meals, and the most shared one is playing with children; the heterogeneity between countries is higher for the former and lower for latter. According to these data, the Mediterranean countries are the most traditional, presumably because of mothers' lesser involvement in the labour market, but also

Table 6.1. Proportion (\%) of Fathers Usually Involved in Childcare Activities, by Country and Type of Activity

|  | Preparing <br> meals | Getting <br> children <br> dressed | Looking after <br> when ill | Playing | Helping <br> with <br> homework |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Country | 18.0 | 28.5 | 24.9 | 76.6 | 34.6 |
| Austria | - | - | - | - |  |
| Switzerland | 13.0 | -2.1 | 38.5 | 74.5 | 50.2 |
| Germany | 27.7 | 32.1 | 30.1 | - | - |
| Belgium | 21.1 | 32.1 | 34.6 | 71.8 | 47.8 |
| Spain | 24.4 | 25.4 | 27.4 | 66.5 | 36.3 |
| Italy | 10.7 | 20.0 | 32.4 | 69.7 | 54.3 |
| Latvia $^{\text {a }}$ | 21.6 | 18.7 | 43.0 | 75.9 | 48.7 |
| Lithuania $_{\text {Bulgaria }}$ | 34.4 | 42.2 | 45.5 | 70.1 | 44.2 |
| Hungary | 38.1 | 41.6 | 43.2 | 87.1 | 63.4 |
| Czech Republic $_{\text {Poland }}$ a | 19.8 | 43.2 | 34.1 | 78.4 | 63.2 |
| Slovenia $^{\text {a }}$ | 19.5 | 26.9 | 37.9 | 62.3 | 52.1 |

Notes: Age range of female sample size - Fieldwork dates: Austria (Age 20-54) Dec-95 May-96; Switzerland (Age 20-49) Oct-94 May-95; Germany (Age 20-39) Jul-92 Jul-92; Belgium (Age 21-40) Mar-91 Dec-92; Spain (Age 18-49) Nov-94 Nov-95; Italy (Age 20-49) Nov-95 Jan-96; Latvia (Age 18-49) Sep-95 Oct-95; Lithuania (Age 18-49) Oct-94 Dec-95; Bulgaria (Age 18-40) Nov-97 Nov-97; Hungary (Age 18-41) Nov-92 Dec93; Czech Republic (Age 15-44) Oct-97 Dec-97; Poland (Age 18-49) Dec-91 Dec-91; Slovenia (Age 15-45) Dec-94 Dec-95.
${ }^{\text {a }}$ Only a sub-sample of respondents were asked the question.
Source: our elaboration on FFS data.
for cultural reasons. At the opposite end of the scale are the Eastern European countries, where there is a longer tradition of participation in the labour market. Hungary and Italy, respectively, may be regarded as the representative countries of this pattern.

In international comparisons it is important to bear in mind that participation in the preparation of meals, for example, may have a different meaning in countries where it is possible to make use of external services (at least every now and then) and where it is common to use this kind of resource. Moreover, the equity of roles within a couple may depend on the different expectations that each society develops as regards men and women's roles, and those of mothers and fathers in particular. It is on parental roles that the most of society's pressures are concentrated.

We know from previous studies [Pinnelli, Di Giulio, 1999; Pinnelli, 1999; Di Giulio, Pinnelli, Chap.1] that Europe can be divided into four groups, according also to the type of gender system at macro level: Eastern countries, where there is a certain degree of equity in the labour market but less so in participation in political power and post-materialist values are less widespread; Mediterranean countries, where family forms and gender relations are more traditional; Nordic countries, where the gender relations are more equitable and the transformation of family forms is more advanced; and Western countries which lie mid-way between the last two groups.

On the basis of these considerations we choose to perform the subsequent analysis on three selected countries in these areas (only three because no information on childcare activities in any of the Northern European countries was collected). The cross-cultural view is necessary to highlight the fact that gender systems operate at a macro level in the different nations, and that they only become evident when we observe different cultures [Mason, 1995]. Italy, Austria and Hungary were selected as representing Southern, Western and Eastern countries, respectively. A characteristic that is in common between the countries is their prevailing religion, Catholicism.

In Italy, the attribution of roles is culturally rigid, and the mother has the practical and emotional responsibility for housework and childcare activities, even if she is engaged in the workplace; for example, the possibility of obtaining paternity (as opposed to maternity) leave has only recently been introduced into Italian law. Moreover, the chronic lack of facilities permitting an easier reconciliation of maternity and work has been underlined. In Austria the recent political debate has highlighted the need for a more equitable division of household responsibilities between men and women, in both private and public spheres [Buber, 2002]. In Hungary, the state offers a substantial financial support to families with children, but gender relations are still very traditional. As reported in Olàh et al. [2002], in Hungary, labour demand was very strong for both men and women after the Second World War, but this did not imply any change in the division of household tasks in the direction of a more equitable model; policies have been pursued for reconciling work and maternity (above all with the creation of public structures for the care of children), but they do not explicitly involve the partner. So, despite greater equality in the workplace, gender relations in the couple have not changed.

After a description of the social, economic and cultural aspects of the three countries analysed, we will describe and analyse the influence that the parental characteristics most often cited in the literature have on the division of child care activities.

## 3 ITALY, AUSTRIA AND HUNGARY: FAMILIES IN THE HISTORICAL, ECONOMIC AND SOCIAL CONTEXT

Italy's socio-demographic characteristics are typical of the countries of Southern Europe, with a low fertility ( 1.2 children per woman) and traditional patterns of family behaviour. The family and relatives are of great importance in Italy, contributing to economic production (in the form of small family businesses), bearing the cost of children and grandchildren's upbringing and education, providing economic help for other members and taking care of the more needy family members, e.g. the elderly and sick [De Sandre et al., 2000]. In the 1950s and 1960s and towards the end of the 1980s, Italy underwent notable phases of economic development and tertiarization of the economy, and during the 1970s it also underwent important political reforms in the area of family law which indirectly influenced some forms of demographic behaviour, including equality of spouses' rights and obligations, the legalization of divorce and the legalization of abortion. Catholicism is the main religion ( $89 \%$ of the population), ( 1994 data, De Sandre et al., 2000). There is a low level of women's participation in the labour market: $41.5 \%$ in 1995. According to FFS data, about $18 \%$ of currently employed women aged 20-49 work part-time (but about a third of these are childless).

Austria's main demographic trends do not differ much from those of many other western European countries [Prinz et al., 1998]. In 1990, about $60 \%$ of women aged 15-60 were economically active and about one fifth of these were working part-time in 1995. Austria is a fairly homogeneous nation from the point of view of religion: in 1991 78\% belonged to the Catholic Church.

Hungary followed the Soviet model of economic development (incentives for heavy industry and collectivization of agriculture) from the postwar period up to the fall of the Communist regimes at the end of the 1980s and the subsequent collapse of the markets of Eastern Europe. In the subsequent period the economy was gradually tertiarized, and in 1996 about $70 \%$ of working women and $50 \%$ of working men were employed in the services sector. The rate of female employment increased from 35\% in the post-war period to $70 \%$ in the 1980 s, but then it fell back to the $58 \%$ in the 1990s, after the change in regime. Only about $11-14 \%$ of women make use of part time employment. There are paid maternity leave, childcare fees or allowance, which make it possible for the woman to stay at home for the child's initial two years of life, and then to work full time and avail themselves of kindergartens, which are fairly widespread in Hungary and of excellent quality. Indeed, $87 \%$ of children of pre-school

Table 6.2. Characteristics of the Families with at Least One Child Aged Less than 15 (Italy, Austria, Hungary), in Percentages

|  | Italy | Austria | Hungary |
| :---: | :---: | :---: | :---: |
|  |  | Father |  |
| Age |  |  |  |
| <35 | 28.7 | 39.4 | 23.5 |
| 35-44 | 50.9 | 42.3 | 56.7 |
| >45 | 20.4 | 18.3 | 19.8 |
| Education |  |  |  |
| Low | 53.3 | 13.1 | 60.2 |
| Medium | 35.3 | 79.2 | 26.6 |
| High | 11.4 | 7.7 | 13.1 |
| Type of work |  |  |  |
| Not employed | 6.7 | 9.7 | 19.3 |
| Not professional | 52.5 | 35.2 | 51.1 |
| Clerical | 25.0 | 17.6 | 8.5 |
| Professional | 15.5 | 30.6 | 16.3 |
| Not indicated | - | 9.5 | 4.9 |
| Working hours |  |  |  |
| Not employed | 6.7 | 11.5 | 18.0 |
| Up to 34 | 5.3 | 11.5 | 18.0 |
| 35-44 | 49.3 | 54.5 | 47.9 |
| >44 | 38.6 | 34.6 | 18.6 |
| Variable | - | - | 15.5 |
| Religiosity |  |  |  |
| Not religious | 19.5 | 44.5 | 64.7 |
| Somewhat religious | 41.5 |  | 27.9 |
| Very religious | 38.7 |  | 7.4 |
|  |  | Mother |  |
| Age |  |  |  |
| $<30$ ( $<25$ for Hungary) | 17.5 | 25.0 | 15.2 |
| 30-39 (25-34 for Hungary) | 56.8 | 52.0 | 52.9 |
| >39 ( $>34$ for Hungary) | 25.5 | 23.0 | 31.9 |
|  |  |  | (cont.) |

age benefit from these facilities. Marriage and fertility are traditionally precocious in Hungary. As for religion, the most recent available records are for 1949, when $60 \%$ of Hungarians belonged to the Catholic Church. [Kamarás, 1999].

The basic characteristics of the Italian, Austrian, and Hungarians families interviewed belonging to the FFS sample are reported in Tab. 6.2.

Table 6.2. (Continued)

|  | Italy | Austria | Hungary |
| :---: | :---: | :---: | :---: |
| Education |  |  |  |
| Low | 51.3 | 28.1 | 49.4 |
| Medium | 38.5 | 64.4 | 37.2 |
| High | 10.0 | 7.5 | 13.3 |
| Type of work |  |  |  |
| Not employed | 54.0 | 51.3 | 22.2 |
| Not professional | 20.1 | 7.6 | 21.8 |
| Clerical | 21.5 | 15.6 | 26.7 |
| Professional | 4.3 | 9.2 | 25.5 |
| Not indicated | - | 17.0 | 3.8 |
| Working hours |  |  |  |
| Not employed | 54.0 | 51.3 | 22.6 |
| Up to 34 | 13.8 | 22.6 | 5.7 |
| 35-44 | 23.9 | 14.7 | 67.0 |
| >44 | 6.0 | 14.7 |  |
| Variable | 2.1 | - | 4.7 |
| Not indicated | - | 12.1 | - |
| Religiosity |  |  |  |
| Not religious | 14.1 | 30.7 | 52.5 |
| Somewhat religious | 33.8 | 69.2 | 34.6 |
| Very religious | 51.9 |  | 12.9 |
| Urbanization |  |  |  |
| Low | 34.5 | 62.7 | 44.3 |
| Medium | 43.3 | 19.7 | 29.4 |
| High | 22.2 | 17.6 | 26.3 |
| Italian repartition of residence |  |  |  |
| North | 41.1 |  |  |
| Center | 17.6 |  |  |
| South/Islands | 41.3 |  |  |
| Age of youngest child |  |  |  |
| 0-5 | 34.0 | 30.0 | 33.5 |
| 6-14 | 66.0 | 70.0 | 66.5 |
| Number of children |  |  |  |
| 1 | 54.7 | 46.9 | 45.3 |
| 2 | 37.0 | 42.2 | 44.1 |
| 3 or more | 8.2 | 11.0 | 10.6 |
| Partnership status |  |  |  |
| Marriage | 97.3 | 87.9 | 95.7 |
| Cohabitation | 2.5 | 12.1 | 8.0 |

[^9]
## 4 PARTICIPATION OF THE FATHER IN CHILDCARE ACTIVITIES

### 4.1 The Model of Division of Childcare Activities

The women interviewed in the three countries were asked to provide information as to the subdivision of childcare tasks by five activities. Three of these are performed independently of children's age: getting their meals, taking care of them when they are ill and playing with them. As for the other activities, only very young children are helped to dress themselves, and only those of school age require help with homework. In order to avoid a further selection of the sample by taking account of this differentiation of tasks by child's age, we shall henceforth limit our analysis to the first three activities.

If we concentrate our attention on the combination of these activities (Tab. 6.3), it may be seen that the most widespread tendency in all three countries is for the father to participate only in playing with the children ( $39 \%$ of Italian couples, $46 \%$ of Austrian ones and $41 \%$ of Hungarian ones). Total lack of paternal participation is also very high in Italy ( $32 \%$ of couples), a little less so in Austria ( $21 \%$ ) and much less so in Hungary ( $12 \%$ of couples). At the other end of the scale, total participation is typical of $15 \%$ of Hungarian couples, $11 \%$ of Austrian ones and $9 \%$ of Italians. Another common combination is participation in playing with children and also in looking after them, but not in the most typically female and routine activity: that of providing meals ( $26 \%$ of Hungarian couples, $12 \%$ of Austrian ones and $20 \%$ of Italian ones). The other types of choice are less frequent.

It may thus be noted that the most traditional form of behaviour, i.e. for the father not to participate at all or only in games, is characteristic of most of the couples, but that it is more common in Italy ( $71 \%$, summing up the first two lines of the table) than it is in Austria (63\%) or Hungary (only 53\% of couples), Tab. 6.3.

### 4.2 Father's Participation by Each Activity

Some characteristics of the father influence his participation in childcare activities. Our main hypothesis is that a young, educated father is more likely to collaborate with the mother. Indeed, we may suppose that a man of a more recent cohort of birth has grown up in an environment which is on the whole more modern, with widespread, consolidated new ideas about the division of roles between genders and thus less resistance to changes in the traditional norms. We may also suppose that the same effect exists in the realm of the father's education: as his level of education increases, we might expect a greater awareness of the benefits of a closer relationship between father and child on the one hand, and

Table 6.3. Pattern of Childcare Activities in Italy, Austria and Hungary

| Preparing <br> meals | Looking after <br> when ill | Playing | Italy (\%) | Austria (\%) | Hungary (\%) |
| :--- | :---: | :---: | :---: | :---: | :---: |
| No | No | Yes | 39 | 46 | 41 |
| No | No | No | 32 | 21 | 12 |
| No | Yes | Yes | 20 | 12 | 26 |
| Yes | Yes | Yes | 9 | 11 | 15 |
| Other |  |  | 0 | 6 | 4 |
| Total |  |  | 100 | 100 | 100 |

Source: our elaboration on FFS data.
an easier acceptance of the more modern attitudes regarding gender relations on the other. Alongside these two main hypotheses, we might also expect a greater degree of religiousness ${ }^{5}$ on the part of the father to have a negative influence on his collaboration in childcare activities, as religiousness is often an indicator of traditionalism in attitudes and behaviour. On the other hand, in a recent article [Wilcox, 2002] ${ }^{6}$ religiousness in itself is a factor which favours attention towards children's emotional wellbeing, independently either of the influence of the religion in question (i.e. of the moral precepts circulating in the community, regardless of an individual's adherence to them), or of conventionalism (i.e. the tendency to conform to the prevailing culture). This variable may therefore have an effect which is different from the one originally hypothesized, as we shall see further on.

The aim of this analysis is to assess the strength of these hypotheses, independently of the limits posed by the man's type of work and the amount of time available, and of the corresponding characteristics of the mother. Indeed, we may assume that if a father performs a long working week, or is very much engaged in a career (e.g. because he performs a top-level job), then the amount of time available for unpaid domestic work diminishes, as does his psychological inclination to undertake such activities. We may also assume that a father who derives fulfilment from his working career, e.g. in performing a non-manual job, is in a better disposition to enjoy his time with the children. Furthermore, young, educated mothers who are not very religious (an thus not very traditional) are presumably readier to delegate childcare activities to the father or share them with him, to the benefit of both the children's and their own wellbeing. Finally, we might imagine that both a long working week and commitment to a job and career might be a reason for mothers to require greater collaboration from their partner.

Other variables taken into consideration are the number and age of children and the degree of urban development of the place of residence. Indeed, we know from previous studies that the father collaborates less if the children are older, or if there are few of them [Marsiglio, 1991], and that residence in urban areas may mean living in contexts where social norms are more relaxed, making it easier for non-traditional ideas to circulate as regards the division of roles between parents. Only in the case of Italy have we added the geographical breakdown of places of residence (North, Centre, South-Islands), as this dimension is associated with different norms regulating the system of gender relations [Grillo, Pinnelli, 1999]. We do not possess any such classification for the other countries. In the cases of Austria and Hungary, we were able to feed in a variable concerning type of union (marriage or cohabitation). The hypothesis is that cohabiting couples are more egalitarian in their division of household and family tasks compared to married couples. On the other hand, we may also assume that those more inclined to start a family are also more inclined to form a more stable bond, and thus to get married rather than cohabit; in this case we shall observe a greater degree of involvement on the part of the father in married couples. In the case of Italy, the number of cohabiting couples turned out to be too low to include the variable in the analysis.

All the characteristics taken into consideration certainly interact with each other. Our aim is to test whether the differences in behaviour between modern (young, educated, not very religious) and traditional (older, less educated, very religious) fathers which we find at a descriptive level will remain unaltered net of the effect of all the other characteristics previously discussed. In the first step of our work we performed a logistic regression on the binary variable for collaboration/not collaboration of the partner for each childcare activity separately, including the basic variables of our hypothesis (age, level of education and religiosity of the father), and the country of residence. As we can see from the results shown in Tab. 6.4 better educated fathers participate significantly more in each childcare activity and, almost without exceptions, older fathers are less collaborative then younger ones. In this basic model to be religious positively influence the collaboration in looking after ill children, but results for other activities are not significant. Fathers from Hungary and Austria are significantly different in collaboration and generally more collaborating than Italian ones.

To explore the meaning of this diversity we performed logistic regression for each country separately, including more variables, choosing more detailed categorizations, and adding, where necessary, country-specific covariates (like, for example, the region of residence in Italy). Table 6.5 illustrates the results of each model. The variables included are: age, level of education,

Table 6.4. Results of Logistic Regression on Father Collaboration in Childcare Activities, by Activity

|  | Preparing meals |  | Looking after when ill |  | Playing |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Odds ratio | p -value | Odds ratio | p -value | Odds ratio | p -value |
| Italy | Ref. |  | Ref. |  | Ref. |  |
| Austria | 1,621 | <0.0001 | 0,786 | 0,007 | 1,305 | 0,006 |
| Hungary | 1,935 | <0.0001 | 2,087 | <0.0001 | 3,184 | <0.0001 |
| Father's age |  |  |  |  |  |  |
| <35 | 0,952 | 0,576 | 1,012 | 0,863 | 1,040 | 0,642 |
| 35-39 | Ref. |  | Ref. |  | Ref. |  |
| > 39 | 0,908 | 0,363 | 0,845 | 0,040 | 0,686 | <0.0001 |
| Father's education |  |  |  |  |  |  |
| Low | Ref. |  | Ref. |  | Ref. |  |
| Medium | 1,353 | 0,001 | 1,368 | <0.0001 | 1,422 | <0.0001 |
| High | 1,397 | 0,004 | 1,511 | <0.0001 | 1,726 | <0.0001 |
| Father's religiosity |  |  |  |  |  |  |
| Not religious | Ref. |  | Ref. |  | Ref. |  |
| Religious | 0,907 | 0,237 | 1,188 | 0,010 | 1,132 | 0,133 |
| -2Logl |  |  |  |  |  |  |
| Intercept only |  | 4579,2 |  | 6647,6 |  | 5280,1 |
| Intercept and covariates |  | 4504,2 |  | 6464,8 |  | 5056.0 |
| p -value |  | $<0.0001$ |  | <0.0001 |  | <0.0001 |

Notes: detailed descriptions of labels in appendix.
Ref. $=$ reference category .
In bold significant effects.
Source: our elaboration on FFS data.
type of work, working hours (average per week), religiousness of both parents, degree of urban development of place of residence, geographical area of residence (only for Italy), number of children and age of smallest child, and type of union (marriage vs. cohabitation, when the sample size permits it).

### 4.2.1 Provision of meals

## Italy

The provision of meals is the most traditionally female activity. In Italy only $10.7 \%$ of fathers undertake this activity, on their own or together with the mother. This percentage falls to $9 \%$ among younger fathers, increases to $11.6 \%$ among fathers of intermediate age and is roughly equal to the average

Table 6.5. Results of Logistic Regression on Father Collaboration in Childcare Activities, by Activity

|  | Italy |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Preparing meals |  | Looking after when ill |  | Playing |  |
|  | Odds ratio | p-value | Odds ratio | p-value | Odds ratio | p-value |
|  | Father |  |  |  |  |  |
| Age |  |  |  |  |  |  |
| <35 | Ref. |  | Ref. |  | Ref. |  |
| 35-44 | 0.883 | 0.595 | 1.089 | 0.588 | 0.585 | 0.325 |
| >45 | 0.919 | 0.788 | 1.063 | 0.781 | 0.935 | 0.751 |
| Education |  |  |  |  |  |  |
| Low | Ref. |  | Ref. |  | Ref. |  |
| Medium | 1.614 | 0.015 | 1.336 | 0.033 | 1.323 | 0.038 |
| High | 1.394 | 0.324 | 0.922 | 0.732 | 2.182 | 0.002 |
| Type of work |  |  |  |  |  |  |
| Not employed | Ref. |  | Ref. |  | Ref. |  |
| Not professional | 0.893 | 0.595 | 1.326 | 0.052 | 1.028 | 0.849 |
| Clerical or professional | 0.695 | 0.192 | 1.040 | 0.836 | 0.646 | 0.017 |
| Working hours |  |  |  |  |  |  |
| Not employed or up to 34 | Ref. |  | Ref. |  | Ref. |  |
| 35-44 | 0.806 | 0.415 | 0.604 | 0.003 | 1.304 | 0.120 |
| >44 | 0.496 | 0.013 | 0.440 | <. 0001 | 0.999 | 0.994 |
| Religiosity |  |  |  |  |  |  |
| Not religious | Ref. |  | Ref. |  | Ref. |  |
| Somewhat religious | 1.167 | 0.645 | 1.388 | 0.147 | 1.667 | 0.012 |
| Very religious | 1.755 | 0.113 | 1.495 | 0.085 | 1.844 | 0.003 |
|  | Mother |  |  |  |  |  |
| Age |  |  |  |  |  |  |
| <30 | Ref. |  | Ref. |  | Ref. |  |
| 30-39 | 1.219 | 0.495 | 0.848 | 0.355 | 0.946 | 0.746 |
| > 39 | 1.077 | 0.838 | 0.573 | 0.020 | 0.592 | 0.021 |
| Education |  |  |  |  |  |  |
| Low | Ref. |  | Ref. |  | Ref. |  |
| Medium | 0.998 | 0.992 | 1.293 | 0.057 | 1.120 | 0.384 |
| High | 0.981 | 0.954 | 1.249 | 0.352 | 0.869 | 0.577 |
|  |  |  |  |  |  | (cont.) |

Table 6.5. (Continued)

|  | Italy |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Preparing meals |  | Looking after when ill |  | Playing |  |
|  | Odds ratio | p-value | Odds ratio | p-value | Odds ratio | p-value |
| Type of work |  |  |  |  |  |  |
| Not employed | Ref. |  | Ref. |  | Ref. |  |
| Not professional | 3.904 | <. 0001 | 3.365 | <. 0001 | 1.637 | 0.034 |
| Clerical or professional | 3.840 | <. 0002 | 4.085 | <. 0001 | 2.082 | 0.007 |
| Working hours |  |  |  |  |  |  |
| Not employed or up to 34 | Ref. |  | Ref. |  | Ref. |  |
| 35-44 | 1.023 | 0.944 | 0.727 | 0.174 | 1.085 | 0.754 |
| >44 | 1.431 | 0.244 | 0.656 | 0.064 | 1.461 | 0.135 |
| Religiosity |  |  |  |  |  |  |
| Not religious | Ref. |  | Ref. |  | Ref. |  |
| Somewhat religious | 1.133 | 0.728 | 1.021 | 0.935 | 0.846 | 0.488 |
| Very religious | 0.494 | 0.056 | 0.834 | 0.474 | 0.781 | 0.284 |
| Urbanization |  |  |  |  |  |  |
| Low | Ref. |  | Ref. |  | Ref. |  |
| Medium | 0.907 | 0.605 | 0.977 | 0.850 | 1.131 | 0.304 |
| High | 1.242 | 0.304 | 1.016 | 0.917 | 1.158 | 0.324 |
| Italian repartition of residence |  |  |  |  |  |  |
| North | Ref. |  | Ref. |  | Ref. |  |
| Center | 0.665 | 0.053 | 1.014 | 0.927 | 0.848 | 0.279 |
| South/Islands | 0.413 | <. 0001 | 0.999 | 0.996 | 0.792 | 0.068 |
| Age of youngest child |  |  |  |  |  |  |
| 0-5 | Ref. |  | Ref. |  | Ref. |  |
| 6-14 | 1.813 | 0.011 | 1.261 | 0.143 | 0.893 | 0.466 |
| Number of children |  |  |  |  |  |  |
| 1 | Ref. |  | Ref. |  | Ref. |  |
| 2 | 1.553 | 0.022 | 1.010 | 0.939 | 1.140 | 0.303 |
| 3 or more | 1.437 | 0.299 | 0.928 | 0.754 | 0.943 | 0.789 |
| -2Logl |  |  |  |  |  |  |
| Intercept only | 1345.9 |  | 2322.6 |  | 2402.0 |  |
| Intercept and covariates | 1154.3 |  | 2153.6 |  | 2233.3 |  |
| p -value | <0.0001 |  | <0.0001 |  | <0.0001 |  |

Table 6.5. (Continued)

|  | Austria |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Preparing meals |  | Looking after when ill |  | Playing |  |
|  | Odds ratio | p-value | Odds ratio | p-value | Odds ratio | p-value |
|  | Father |  |  |  |  |  |
| Age |  |  |  |  |  |  |
| <35 | Ref. |  | Ref. |  | Ref. |  |
| 35-44 | 0.869 | 0.425 | 0.835 | 0.250 | 0.938 | 0.691 |
| $>45$ | 0.729 | 0.258 | 0.659 | 0.080 | 0.878 | 0.570 |
| Education |  |  |  |  |  |  |
| Low | Ref. |  | Ref. |  | Ref. |  |
| Medium | 1.423 | 0.089 | 0.827 | 0.263 | 0.860 | 0.397 |
| High | 2.290 | 0.010 | 1.402 | 0.221 | 0.749 | 0.318 |
| Type of work |  |  |  |  |  |  |
| Not employed | Ref. |  | Ref. |  | Ref. |  |
| Not professional | 0.519 | 0.050 | 0.480 | 0.017 | 0.829 | 0.575 |
| Clerical | 0.368 | 0.005 | 0.400 | 0.005 | 1.030 | 0.932 |
| Professional | 0.318 | 0.001 | 0.457 | 0.012 | 0.924 | 0.812 |
| Not indicated | 0.408 | 0.014 | 0.508 | 0.040 | 0.799 | 0.521 |
| Working hours |  |  |  |  |  |  |
| Not employed or up to 34 | Ref. |  | Ref. |  | Ref. |  |
| 35-44 | 1.165 | 0.600 | 1.287 | 0.337 | 1.275 | 0.370 |
| >44 | 0.820 | 0.508 | 0.925 | 0.772 | 0.715 | 0.217 |
| Religiosity |  |  |  |  |  |  |
| Not religious | Ref. |  | Ref. |  | Ref. |  |
| Religious | 1.134 | 0.433 | 1.401 | 0.018 | 1.281 | 0.072 |

## Mother

| Age |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| $<30$ | Ref. |  | Ref. |  | Ref. |  |
| $30-39$ | 0.924 | 0.681 | 0.887 | 0.493 | 0.850 | 0.383 |
| $>39$ | 0.652 | 0.139 | 0.802 | 0.375 | 0.725 | 0.203 |
| Education |  |  |  |  |  |  |
| Low | Ref. |  | Ref. |  | Ref. |  |
| Medium | 0.847 | 0.281 | 0.807 | 0.117 | 1.181 | 0.214 |
| High | 1.606 | 0.075 | 1.277 | 0.317 | 1.290 | 0.352 |
|  |  |  |  |  |  | (cont.) |

Table 6.5. (Continued)

|  | Austria |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Preparing meals |  | Looking after when ill |  | Playing |  |
|  | Odds ratio | p -value | Odds ratio | p-value | Odds ratio | p-value |
| Type of work |  |  |  |  |  |  |
| Not employed | Ref. |  | Ref. |  | Ref. |  |
| Not professional | 0.981 | 0.961 | 1.227 | 0.577 | 1.422 | 0.390 |
| Clerical | 0.725 | 0.388 | 1.374 | 0.345 | 1.110 | 0.783 |
| Professional | 1.676 | 0.173 | 2.298 | 0.017 | 3.490 | 0.005 |
| Not indicated | 1.883 | 0.001 | 2.082 | <. 0001 | 1.591 | 0.017 |
| Working hours |  |  |  |  |  |  |
| Not employed or not indicated | Ref. |  | Ref. |  | Ref. |  |
| Up to 34 | 1.117 | 0.729 | 0.904 | 0.732 | 0.904 | 0.771 |
| $\geq 35$ | 1.729 | 0.091 | 1.290 | 0.399 | 0.939 | 0.860 |
| Religiosity |  |  |  |  |  |  |
| Not religious | Ref. |  | Ref. |  | Ref. |  |
| Religious | 0.817 | 0.236 | 0.926 | 0.616 | 0.946 | 0.710 |
| Urbanization |  |  |  |  |  |  |
| Low | ref. |  | Ref. |  | Ref. |  |
| Medium | 0.973 | 0.872 | 0.938 | 0.675 | 1.076 | 0.629 |
| High | 1.183 | 0.325 | 1.503 | 0.007 | 0.927 | 0.629 |
| Age of youngest child |  |  |  |  |  |  |
| 0-5 | ref. |  | Ref. |  | Ref. |  |
| 6-14 | 0.781 | 0.191 | 0.921 | 0.630 | 0.984 | 0.927 |
| Number of children |  |  |  |  |  |  |
| 1 | Ref. |  | Ref. |  | Ref. |  |
| 2 | 1.046 | 0.773 | 0.923 | 0.564 | 1.159 | 0.298 |
| 3 or more | 1.270 | 0.341 | 0.587 | 0.030 | 0.923 | 0.713 |
| Partnership |  |  |  |  |  |  |
| Marriage | Ref. |  | Ref. |  | Ref. |  |
| Cohabitation | 1.336 | 0.137 | 1.269 | 0.187 | 0.927 | 0.704 |
| -2Logl |  |  |  |  |  |  |
| Intercept only | 1698.6 |  | 2024.5 |  | 1955.8 |  |
| Intercept and covariates | 1576.7 |  | 1896.5 |  | 1884.3 |  |
| p-value | <0.000 |  | <0.000 |  | 0.0002 |  |

Table 6.5. (Continued)

|  | Hungary |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Looking after when ill |  | Playing |  |
|  | Odds ratio | p-value | Odds ratio | p-value |
|  | Father |  |  |  |
| Age |  |  |  |  |
| <35 | Ref. |  | Ref. |  |
| 35-39 | 0.963 | 0.790 | 0.638 | 0.077 |
| > 39 | 0.906 | 0.578 | 0.498 | 0.020 |
| Education |  |  |  |  |
| Low | Ref. |  | Ref. |  |
| Medium | 1.283 | 0.049 | 1.121 | 0.532 |
| High | 1.371 | 0.120 | 0.801 | 0.443 |
| Type of work |  |  |  |  |
| Not employed | Ref. |  | Ref. |  |
| Not professional | 1.315 | 0.341 | 0.770 | 0.520 |
| Clerical | 1.075 | 0.820 | 0.961 | 0.932 |
| Professional | 0.988 | 0.966 | 0.839 | 0.677 |
| Not indicated | 0.930 | 0.830 | 0.775 | 0.588 |
| Working hours |  |  |  |  |
| Not employed or up to 34 | Ref. |  | Ref. |  |
| 35-44 | 0.805 | 0.455 | 1.806 | 0.140 |
| >44 | 0.693 | 0.230 | 1.500 | 0.333 |
| Variable | 0.615 | 0.113 | 1.340 | 0.483 |
| Religiosity |  |  |  |  |
| Not religious | Ref. |  | Ref. |  |
| Somewhat religious | 1.128 | 0.381 | 1.027 | 0.893 |
| Very religious | 1.138 | 0.574 | 1.140 | 0.713 |
|  | Mother |  |  |  |
| Age |  |  |  |  |
| <25 | Ref. |  | Ref. |  |
| 25-34 | 0.938 | 0.665 | 0.619 | 0.122 |
| > 34 | 0.954 | 0.797 | 0.744 | 0.395 |
| Education |  |  |  |  |
| Low | Ref. |  | Ref. |  |
| Medium | 1.091 | 0.479 | 1.263 | 0.170 |
| High | 1.322 | 0.176 | 2.182 | 0.020 |

Table 6.5. (Continued)

|  | Hungary |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Looking after when ill |  | Playing |  |
|  | Odds ratio | p-value | Odds ratio | p-value |
| Type of work |  |  |  |  |
| Not employed | Ref. |  | Ref. |  |
| Not professional | 1.042 | 0.947 | 0.266 | 0.164 |
| Clerical | 1.033 | 0.958 | 0.212 | 0.102 |
| Professional | 1.154 | 0.817 | 0.287 | 0.193 |
| Not indicated | 1.054 | 0.927 | 0.559 | 0.467 |
| Working hours |  |  |  |  |
| Not employed | Ref. |  | Ref. |  |
| <35 | 0.987 | 0.984 | 6.039 | 0.072 |
| $>=35$ | 0.951 | 0.934 | 4.378 | 0.114 |
| Variable | 1.328 | 0.660 | 4.199 | 0.142 |
| Religiosity |  |  |  |  |
| Not religious | Ref. |  | Ref. |  |
| Somewhat religious | 1.154 | 0.276 | 1.162 | 0.419 |
| Very religious | 1.700 | 0.005 | 1.335 | 0.302 |
| Urbanization |  |  |  |  |
| Low | Ref. |  | Ref. |  |
| Medium | 1.078 | 0.512 | 1.267 | 0.154 |
| High | 1.307 | 0.034 | 0.969 | 0.857 |
| Age of youngest child |  |  |  |  |
| 0-5 | Ref. |  | Ref. |  |
| 6-14 | 0.818 | 0.805 | 0.622 | 0.030 |
| Number of children |  |  |  |  |
| 1 | Ref. |  | Ref. |  |
| 2 | 1.116 | 0.319 | 1.437 | 0.029 |
| 3 or more | 1.519 | 0.023 | 1.100 | 0.717 |
| Partnership status |  |  |  |  |
| Marriage | Ref. |  | Ref. |  |
| Cohabitation | 0.895 | 0.615 | 0.596 | 0.064 |
|  |  |  |  | (cont.) |

Table 6.5. (Continued)

|  | Hungary |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Looking after when ill |  | Playing |  |
|  | Odds ratio | p-value | Odds ratio | p-value |
| -2Logl |  |  |  |  |
| Intercept only | 2854.7 |  | 1607.1 |  |
| Intercept and covariates | 2797.2 |  | 1520.4 |  |
| p -value | 0.0088 |  | <0.0001 |  |

Notes: detailed descriptions of labels in appendix.
Ref. $=$ reference category .
In bold significant effects.
Source: our elaboration on FFS data.
( $10.6 \%$ ) among older fathers, partly contradicting our hypothesis as regards what is termed the generation effect. It is also true, however, that younger fathers tend on average to have smaller children who are therefore still often strongly dependent on the mother. As far as education is concerned, on the other hand, fathers with medium-level and high qualifications turn out to be more involved in the family routine, offering help in $13.7 \%$ and $13.8 \%$ of cases respectively, while fathers with low educational qualifications collaborate much less (8\%).

As we have already said, it is necessary to test whether the bivariate relations found at a descriptive level are due to the factor itself, and not to the action of other interrelated factors, as we might imagine happens in the case of the father's age, for example. In order to do this, we performed a logistic regression on the variable collaboration/non-collaboration by the father, for each activity and for each country, feeding in all the variables regarding the characteristics of father and mother and the structure of the family. The result is the value of the effects in odds-ratio terms, and each effect is to be read as being net of the effect of the other variables, as illustrated in Tab. 6.5.

The father's age is not significant, so there are no significant differences - after the controlling of the factors regarding availability of time, professional commitment, education, traditionalism and characteristics of mother and family - between younger and older fathers, i.e. between having grown up periods in which the question of equal division of roles between genders was an issue of differing importance. On the other hand, the possession of medium-level educational qualifications is significant, and favours participation by the father. A high level of education is not significant, probably because it is easier for
families to delegate responsibilities in this case, not so much to the mother as to other persons. The religiousness of the father, like his age, turns out to be non-significant, but it should be noted that being very religious, the significance of which is close to the threshold of $10 \%$ statistical significance, notably favours a father's participation, in contrast to the descriptive result. Other variables turn out to be significant: long working hours (over 44 hours a week) limit a father's availability of time. As for the mother's characteristics, working commitment of any type causes the father to collaborate more, while greater religiousness has the opposite effect. However, the mother's working hours turn out to be insignificant: this is evidently controlled by the other factors incorporated in the model.

What emerges from these results is that participation by the father in the provision of meals is not so much tied to "modernity" but is rather favoured both by a greater availability of time on the part of the father and by the space left by the mother; this is necessarily the case if the mother works and if she has a less traditional attitude (measured through religiousness).

Certain characteristics of the family also turn out to be significant: residing in the North of the peninsula, having older children or having more than one child all favour participation on the part of the father.

## Austria

In Austria, $17.8 \%$ of fathers are involved in the provision of meals for their children. Unlike in Italy, the youngest fathers are, on average, more collaborative ( $21.9 \%$ of cases) compared to those of medium age (16.6\%) or the older ones ( $11.9 \%$ ). The pattern is also predictable in the case of education: $24.2 \%$ of fathers with university qualifications collaborate in this activity, compared to $17.7 \%$ of those with an average education and $15.1 \%$ of those with a low level of education. Finally, religious fathers collaborate slightly more than those who are not ( $18.7 \%$ versus $17.1 \%$ ). The first two features therefore influence paternal behaviour in the expected direction, but not the third. We want to test whether the variables also have this effect net of all the others.

Having fed them into the logistic regression, we may note that the age of the father is not significant, while the effect of education is confirmed. Religiousness turns out not to be significant. Of the other variables, the father's occupation, whatever its nature, is unfavourable towards participation in domestic activity of a routine kind. Mothers with a high level of education who work long hours need/ask for and obtain more collaboration from their partners. In conclusion, the participation of the father in Austria in this traditionally female task also seems to be guided more by rational considerations than by "modernity". If the man's occupation permits it and the woman needs it, there is more collaboration.

## Hungary

On average, $19.8 \%$ of fathers are involved in the provision of meals. The percentage varies little, either with the age of the father (in this case the most collaborative are those of intermediate age: $21.6 \%$ ) or with education (similarly, the most collaborative are those with medium qualifications, $21.6 \%$, as opposed to $21.3 \%$ of those with high qualifications and $18.6 \%$ of those with low qualifications). Very religious fathers collaborate more than the others ( $22.5 \%$ as opposed to $19.8 \%$ of the non-religious and $19.0 \%$ of the somewhat religious). This low level of variability is confirmed by the fact that the logistic regression on collaboration in the provision of meals performed with the feeding in of covariates does not appear to be significantly different from the model with no covariates, so the results are not given in Table 6.5. This either means that there is a low level of variability, or that there are other variables, not measured, which might favour the collaboration of fathers.

### 4.2.2 Looking after children when they are ill

## Italy

On average, $27.4 \%$ of Italian fathers look after their children when they are ill, and here too, as in the case of the first activity, it is fathers of intermediate age who take the most responsibility compared to the younger or older groups (the percentages for each are $29.1 \%, 26.7 \%$ and $24.1 \%$ ). In line with expectations, fathers with a low level of education are less involved than those with medium or high educational qualifications $(22.3 \%, 33.9 \%$ and $31.0 \%$ respectively). Finally, the more religious a father is, the more often he is responsible for this activity; the percentage of fathers involved rises from $24.5 \%$ for the not religious to 28.3 percent for the very religious. Having fed all the variables regarding the characteristics of parents and family into the logistic regression, the age of the father turns out not to be significant. Indeed, only medium-level education turns out to be significant, and its effect on collaboration is positive. Religiousness on the part of the father is also significant, and the fact of being very religious favours his participation. This finding contrasts with our hypotheses, and this also happens in the case of other countries and for other activities. Among the other variables, the characteristics of the father's occupation turn out to be significant, namely engagement in clerical work, which favours collaboration, and working medium or long hours, which acts against it. Other factors with a positive effect on paternal involvement are medium-level education on the part of the mother and the fact that she works. On the other hand, a mother who is relatively older, or works long hours in paid employment, receives less help from her partner in looking after sick children. Here too, we may suppose that
a mother who works long hours prefers (or is obliged) to rely on external help as opposed to the collaboration of her partner. What emerges from the findings is that, in the case of looking after children who are ill, parents' choices are conditioned by a larger number of constraints.

## Austria

A slightly lower proportion of fathers collaborate in Austria (24.3\%), compared to Italy. As in the case of the previous activity, it is the youngest fathers who collaborate the most (28.4\%), followed by those of medium age ( $23.0 \%$ ) and the oldest group ( $18.9 \%$ ). Once again, it is the most educated fathers who are most involved (in $34.5 \%$ of cases of looking after children who are ill), compared to $27.3 \%$ of those with a low level of education and those with a medium level $(22.9 \%)$. In this case, fathers who are religious are slightly more involved than the others ( $25.2 \%$ and $23.2 \%$ respectively).

The consequence of the inclusion of all the variables in the logistic regression is that both the variable for the father's age, which has a negative effect on collaboration as age increases, and religiousness, which has a positive effect, turn out to be significant. On the other hand, the father's level of education is not significant. Among the remaining variables, as we have already seen for the previous activity, what is much more important is whether the father is employed or not. If he is not, he is much more likely to participate. Paternal participation also significantly increases when the women is engaged in work and in a career.

Unlike in Italy, where the characteristics of the family were not significant, the father's collaboration in Austria is more frequent among families residing in urban centres, and less frequent the greater the number of children.

## Hungary

In Hungary, fathers collaborate in $43.2 \%$ of cases on average. This percentage rises slightly in the case of younger fathers (44.6\%) and gradually falls as the age of the father increases ( $42.3 \%$ for fathers aged 35-39 years and $41.5 \%$ for fathers aged over forty). On the other hand, and as expected, the opposite trend may be observed in the case of education: less educated fathers collaborate less than those with medium or high qualifications ( $46.1 \%$ and $47.6 \%$ ). Finally, the more a father is religious, the more often he collaborates in looking after children when they are ill. The percentages are $41.0 \%, 46.0 \%$ and $53.0 \%$ respectively for the non-religious, the somewhat religious and the very religious.

When all the variables are fed into the logistic regression for the father's collaboration in looking after children when they are ill, not very many variables turn out to be significant. As far as the father's characteristics are concerned, only education is, confirming the fact that a medium level of education favours
collaboration. High-level education also favours collaboration, but the effect is at the threshold of statistical significance. As far as the mother's characteristics are concerned, a more frequent attendance of religious ceremonies favours collaboration on the part of the father. This result differs from the findings for other countries: indeed, religiousness on the part of the mother is usually unfavourable towards participation on the part of the father. In a certain sense, the behaviour of the two genders in Hungary is much more similar than in other countries.

A high level of urban development of the place of residence is also significant, as is the fact of having three or more children compared to having only one: both are characteristics which have a positive effect on paternal involvement. In synthesis, this activity is not conditioned by availability of time and pursuit of a career, either for the man or for the woman, and the only significant parental characteristics are of a cultural nature.

### 4.2.3 Play

## Italy

Playing with children is the activity most readily shared in all the countries. In Italy, $66.5 \%$ of fathers are involved in play. As expected, participation is greater if the father is young, and as many as $71.5 \%$ of Italian fathers aged under 35 play with their children, alone or with the mother, compared to $66.0 \%$ of fathers of medium age and $59.9 \%$ of those aged over 45 . Fathers with university qualifications collaborate more than those with medium and low levels of education ( $77.4 \%, 70.8 \%$ and $61.2 \%$ ). Participation is not equally sensitive to the father's degree of religiousness, but it may be noted that it is very religious fathers who are the most involved ( $68.7 \%$ of very religious fathers collaborate, compared to $66.4 \%$ of those who are somewhat religious and $62.3 \%$ of those who are not at all).

Once all the variables have been fed into the logistic regression, the positive effect is confirmed of both education and religiousness on the part of the father, probably precisely because play is a type of activity which it is difficult to delegate to other members of the family, with the exception of the mother, or to non-members. As for the variables regarding the father's working commitments, a professional occupation turns out to have a significant, negative effect on participation. It is therefore likely that being very much engaged in a career consumes energy which would otherwise be devoted to playing with the children. Furthermore, older mothers require less collaboration for this kind of activity, unlike working mothers, especially if they are engaged in clerical or professional occupations. As is the case with the provision of meals, residence in the South of Italy or in the Islands significantly lowers the level of paternal
participation, net of all the variables considered, but no other variable concerning the family is statistically significant.

## Austria

In Austria, fathers are more involved in play than in Italy. On average, $76.5 \%$ of fathers participate in this activity; this percentage reaches $78.7 \%$ for young fathers (dropping to a level of $72.1 \%$ for the older ones), and $77.6 \%$ for religious fathers ( $75.1 \%$ for non-religious fathers). Surprisingly, very educated fathers appear to collaborate less than fathers with low-level qualifications ( $75.2 \%$ and $78.1 \%$ respectively), in contrast to expectations and to the behaviour of fathers as regards the previous activities.

After feeding the variables in the logistic regression, only religiosity of the father turns out to be significant: religious fathers collaborate more often than non-religious fathers. The only other significant variable is the type of job of the mother, that when is professional (or not indicated, that could hide a special case) favours the collaboration of the father. The effect of the type of job of the father is not at all significant, although it was a very important variable in Austria for the first two activities.

## Hungary

In Hungary, almost all fathers (86.9\%) collaborate in playing with their children. This average value varies both with the father's age and with his levels of education and religiousness. Young fathers are more often involved in this activity ( $89.2 \%$ ), and the percentage falls as age increases, dropping to $81.8 \%$ for the older fathers. $88.9 \%$ of fathers of medium-level education are involved in play, as opposed to $85.7 \%$ of fathers with a low level and $88.3 \%$ of those who are university educated. Very religious fathers collaborate more often than the slightly religious and the non-religious $(90.2 \%, 87.6 \%$ and $86.2 \%$ respectively).

As regards the father's characteristics, only his age turns out to be significant in the logistic regression, and the effect is as expected. A high level of education on the part of the mother and the fact that the mother works short hours compared to not working at all both favour collaboration, in contrast to expectations. In the case of the latter variable, we may note that the other two categories (relatively long or flexible working hours) have the effect of favouring collaboration, with a degree of significance close to the threshold.

Finally, having children of school age and cohabiting as opposed to being married have a negative effect. In this case the fact of being married might indicate a greater attachment on the part of the father to family values; having two children as opposed to one significantly increases the degree of paternal collaboration.

## 5 DISCUSSION AND CONCLUSIONS

In conclusion, it seems that there are real differences between the three countries as regards the participation of the father in childcare activities, not just in the level of collaboration between partners, but also in the factors which explain this.

Although the most common tendency in the three countries as regards the division of childcare tasks is the most traditional one (i.e. for the father not to participate at all, or to participate only in play), the cases of Italy, Austria and Hungary are separated by up to ten percentage points: $71 \%$ of Italian couples, $63 \%$ of Austrian ones and $53 \%$ of Hungarians fall into this category. Moreover, Italy exhibits the most traditional division of tasks and Austria the most rational, at least insofar as the father's availability of time is concerned, while the factors considered in Hungary do not appear to be particularly important in determining an effect.

As regards our hypothesis on the "modern" father (young, educated, secular-minded), the youngest fathers seem to participate more, but the highest level of education is not always associated with more widespread collaboration, probably because a higher level of education is accompanied by a higher socioprofessional status and a greater availability of income, making it possible to take advantage of alternative services. In both cases we may therefore conclude that our initial hypothesis is partially confirmed. Religiousness turns out to play an intriguing role. Religiousness has rarely been taken into account as an indicator of traditionalism on the part of the parents in previous studies on this subject. Does more religious invariably mean more traditional? Not always, at least in these countries and according to these data. In Italy and Austria, for example, religious fathers collaborate more. The same is true in Hungary, even though the effect is not significant in this case. Being a very religious father might therefore mean being not so much more traditional as more sensitive to the family's wellbeing and more attentive to the needs of children, and thus sharing responsibilities more frequently. In Italy and Austria on the other hand, religiousness on the part of the woman acts in the opposite direction, and religious women involve their partner less in looking after the children compared to non-religious women. In this case, secular-mindedness might mean greater modernity for women, and greater inclination to accept not only the positive effect of day-to-day contact with the father on their children's wellbeing, but also for a more egalitarian vision of parental roles to be transmitted to their children in the family context. In Hungary, on the other hand, being religious also means obtaining greater collaboration from a partner in the case of the mother, probably because it is a non-conformist attitude in this country and is therefore more modern in a certain sense. What emerges
from these results is that the equation between religiousness and traditionalism cannot be taken for granted, and depends a lot on the subject under examination.

The objective constraints on the sharing of roles, i.e. the father's type of employment and weekly working hours, have very different effects from country to country. There is no empirical confirmation here of the theory that the father's psychological wellbeing, deriving from fulfilment of his role as "breadwinner", might have positive effects on the sharing of the activities of childcare. In Italy, the father collaborates more in childcare if he is engaged in clerical employment as opposed to not working at all, and he collaborates less in play if he is engaged in high-level employment. The other effects are not significant. In Austria, on the other hand, it is unemployed fathers who collaborate most in the provision of meals and in looking after children when they are ill. In Hungary, the father's type of employment is not significant. The father's working hours are only significant in Italy, with the expected effect.

With regard to the hypotheses advanced concerning the mother's characteristics, being a working mother in Italy significantly favours collaboration from the father, as expected, independently of the type of employment undertaken. This effect is also present in Austria (when the mother's employment is highlevel or not indicated), but not in Hungary. Only in Italy does the age of the mother turn out to be significant, in two out of the three activities, suggesting that older mothers need/ask for less collaboration, while the effect of the father's age is not significant. In Italy, what therefore seems to be more important is whether the mother belongs to a recent generation and therefore grew up at a time when modern attitudes on the sharing of roles between genders were more widespread compared to previous years. In this case, the collaboration of the father would appear to depend, at least in part, on a greater ability and inclination on the part of the woman to delegate traditionally female tasks to the man. The woman's level of education rarely turns out to be significant. In those cases where it is, minimum qualifications are unfavourable towards the involvement of the father, as expected.

The hypotheses concerning residence in an urban context, or in the North, in the case of Italy, are generally confirmed.

The type of bond between partners only turns out to be significant in Hungary, and married couples emerge as being more egalitarian than cohabitants, albeit exclusively in the organization of playtime activities. The hypothesis that would therefore appear to prevail is that the partners most interested in family values (the married ones) are also more collaborative in looking after children.

Age and number of children produce different effects from country to country, and a greater number of children, net of other factors, does not bring about any greater involvement on the part of the father, contrary to the assertions of social structural theory.

In this analysis it was not possible to include certain characteristics which are important in determining the extent of paternal involvement. For example, we were unable to include the couples' income, in order to measure the possibility of purchasing alternative services, or respondents' opinions on family life and gender relations (information not available for the partner when the female sample is observed).

The structure of gender relations in the couple is one of the characteristics with the highest resistance to change, even now that a certain model of behaviour is becoming even less efficient and advantageous. The most flexible couples, who are least subject to conditionings of a cultural nature or due to the internalization of rigid gender roles, are those best equipped to respond and adapt more quickly to the changes which have taken place in the requirements of everyday life. There is constant emphasis in the public debate on the importance of the woman's working and reproductive role at a social and economic level, especially now that the population is constantly ageing and that the population of working age is set to shrink. From this point of view, the reconciliation of women's division of time and roles ought to be an essential priority in public policy, and one of the most efficient routes towards this would appear to be precisely that of paternal involvement, also in the long-term. Indeed, in this respect, one of the most important variables in forming the gender identity of the child is precisely the perception of the roles played by his/her own parents in the various facets of day-to-day life and its newly emerging demands. In a certain sense, the parents of today are "constructing" the future framework of gender relations in society.

## APPENDIX

For Hungary, we made exclusive use of the FFS survey data. For Italy, we were able to supply the information missing in the FFS data for type of work by making use of the national database. For Austria, we replaced FFS information on level of education with the national data, which is more precise. All analyses are weighted with post-stratification weights, when available.

## EDUCATION

for Italy and Hungary
low: up to ISCED level 2, stage 1
medium: ISCED level 2, stage 2
high: ISCED level 3 or more

```
for Austria
    low: up to compulsory school
    medium: apprenticeship/vocational training; training college (3 or 5 years);
        general secondary education
    high: graduation or educational establishment similar to university
        (Akademien)
```


## TYPE OF WORK (ISCO ‘88 CLASSIFICATION)

For Austria and Hungary
Professionals: legislators and senior officials, corporate managers, general managers, physical mathematical and engineering science professionals, life science and health professionals, teaching professionals, other professionals, physical and engineering science associate professionals, life science and health associated professionals, teaching associate professionals, other associate professionals
Clericals: office clerks, customer service clerks, personal and protective services workers, models, salespersons and demonstrators, armed forces
Non-professionals: market-oriented skilled agricultural and fishery workers, subsistence agricultural and fishery workers, extraction and building trades workers, metal, machinery and related trades workers, precision, handicraft, printing and related trades workers, other craft and related trades workers, stationary-plant and related operators, machine operators and assemblers, drivers and mobile-plant operators, sales and services elementary occupations, agricultural, fishery and related labourers, labourers in mining, construction, manufacturing and transport
For Italy
Professionals: Employers, professionals, managers, executives, professors
Clericals: Office clerks, second level teachers, first level teachers (or preceding first level)
Non-professionals: own account, cooperative, unpaid in family business, skilled workers, foremen, unskilled worker, others, workers at home, junior clerks

## RELIGIOSITY

For Italy and Hungary
Very religious: at least somewhat religious and attends religious services (apart from weddings, funerals, baptisms, and the like) at least once a month.

Somewhat religious: at least somewhat religious and attends religious services (apart from weddings, funerals, baptisms, and the like) only at official holidays, or once a year.
Not religious: not religious at all, or attends religious services (apart from weddings, funerals, baptisms, and the like) practically never.
For Austria is the answer to the question: "are you religious ? yes/no".
In table 6.4 the coding used for Austria has been chosen for all countries, for comparation reasons.

## URBANIZATION

For all countries the urbanization of the place of current residence is coded as:
low: up to 9,999 inhabitants
medium: 10,000-99,999 inhabitants
high: more than 100,000 inhabitants.

## NOTES

1. Instrumental activities are all those activities that pertain to the daily organization of the family but do not predominantly involve the emotional sphere of interaction between parents and children.
2. Complete information about the FFS can be found at www.unece.org/ead/pau/ ffs/ffs_h.htm
3. It is possible that some of this activities were not applicable because of the age of the child. For example, parents can only help with homework when they have a child of school age; on the other hand, babies only need help with dressing. For each activity, the analyses are only performed on the total number of couples with at least one child of the relevant age.
4. For Italy we could analyze the data about the sub sample of couples that were interviewed in the national version of the FFS survey (Seconda Indagine Nazionale sulla Fecondità). The questionnaire used in the national version is richer in details than the standardized questionnaire and was asked to about 600 partners of some of the women interviewed (about 400 of them had with children less than 15 years of age in the family). When the question about collaboration in childcare activities is asked to both partners separately we can quantify the bias of asking only the mothers about it, and in particular the possible overestimation of women's childcare involvement. The percentage of men who provided a different answer than their partner in preparing meals, taking care of children when ill and playing with the children is respectively $8.3,7.9$ and $2.1 \%$. Of particular interest is to analyze the case when the mother declares that it is her own responsibility to perform certain childcare activities. Out of 309 women declaring that they usually prepare the meals, only $12.3 \%$ of their partners disagree, saying that it is their own main responsibility or that the responsibility is
shared equally in the couple. The percentage is higher in the case of taking care of children when ill ( $24.1 \%$ of partners of 249 women give a different answer) and highest in the case of playing with children ( $37.6 \%$ of partners of the only 93 women who advocates to themselves the main responsibility). Of course we cannot be sure if these discrepancies are due to the possible father's underestimation of the mother's own childcare work, or to the overestimation of their own childcare work, but they ask for a further analysis.
5. Religiousness is measured via frequency of participation in religious ceremonies. Only in the case of Austria is it classified differently (see appendix).
6. In which religiousness was taken into account as an explanatory factor of the father's involvement in certain activities less related to day-to-day domestic organization, namely talking to children, being present at evening meals and being involved in the associative activities in which their children take part.

## CHAPTER 7

# GENDER AND FIRST UNION DISSOLUTION 

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## 1 INTRODUCTION

The study of union dissolution from a gender perspective is quite straightforward simply because of the dualistic nature of conjugal couple life. By definition, the end of a partnership is the result of a conflict between a man and a woman who live together and are attached to one another by sexual and sentimental bonds [White, 1990]. It is widely accepted that the phenomenon of union dissolution has to be brought within the framework of conflict theory [Chafetz, 1980; Klein, White, 1996; Sprey, 1999]. Looking for the determinants of conflict between the male and female partners in a couple means that all the aspects of the relationship are to be taken into account, including role division, the sharing of duties and resources, and the different expectations from a loving and intimate relationship. Both the factors affecting the risk of a union break-up and the way in which each partner faces the consequences of separation are highly dependent on the characteristics and personal resources of the two [Thompson, Walker, 1989], and on quality of the relationship [Amato, Rogers, 1997]. The effect of gender differences and inequalities on the stability of the union is not always the same, but is related to the social condition of the couple [Perry-Jenkins, Folk, 1994] and, more generally, it is linked to the family, cultural and institutional context, which contributes to define the prevailing gender system in a given society [Trent, South, 1989].

The analysis of union dissolution from a gender perspective should be performed at different levels: starting with individuals, account must be taken of the differences between man and woman as to socio-economic characteristics and resources and as to the personal attitudes and expectations with regard to partnership; then, at couple level, the gender contract has to be explored, meaning

[^10]the way in which the two members share duties and resources and agree upon a given division of roles, not necessarily balanced, but accepted by both; finally, the contextual variability of the gender system and the related social and cultural norms which might influence the conflict resolution are to be considered.

From an operative point of view, this theoretical framework is quite complex and hard to test empirically [Marini, 1992]. The first consequence is that the unit of observation should be the union itself and not the individuals. What we want to explain is the splitting up of a couple that depends not only on the individual propensity of any partner to separate but also - and perhaps much more - on the break-up of the gender contract between the two and the subsequent conflict. The second consequence, which is closely related to the first one, is that we should follow the life cycle of the couple and observe changes over time not only in individual characteristics, but also in union quality, including changes in gender roles (due, for example, to the birth of a child) and any renegotiations of the gender contract.

As far as we know, there is no family survey in Italy, nor in the other countries of Europe, that has explicitly collected life-history data on conjugal union. The well known comparative survey - Fertility and Family Surveys in the ECE Countries - for example, gives us fairly complete partnership histories of women and men, but no data are available on union history and its possible break up. What we can do with these data - and what we have done in this study - is to compare male and female propensities to split up and to assess specific hypotheses on the effect of gender characteristics on the risk of union dissolution, but there is no way of taking into proper account either the characteristics of the other partner or the quality of the relationship.

In the first part of this work (sections 2-3-4) we will study determinants and hypotheses of union dissolution in Italy. In the second part we will compare our results with the ones obtained by other authors, under similar hypotheses, in relation to union dissolution in Spain, Sweden, and Hungary. In this way we could discuss the relation between gender and union dissolution in two countries characterized by low levels of union dissolution and two characterized by high levels.

## 2 THE HYPOTHESES

The general increase in divorce rates in European countries has been considered as being one of the main characteristics of the second demographic transition [Lesthaeghe, 1995].

The rising divorce figures seem to be strongly related to changes in the value of marriage but also in gender systems and gender relations in society, such as the gradual elimination of gendered items in legislation and the growing
tendency of women to take up paid employment. The increasing presence of women in the labour market affects the traditional gender division of labour in the family. Such incompatibilities (between work outside and inside the home) generate new needs and may produce an imbalance in the relationship between partners.

The main hypothesis is that if a traditional division of housework still prevails between partners, relationships in which both partners are employed are less stable than the ones in which only the male partners is employed [Bracher et al., 1993]. Empirical evidence (especially for the US) shows that the most unstable relationships are the ones in which there are economic problems due to male unemployment. In particular, we will examine the extent to which employment plays a different role for women than for men; i.e. women's employment is associated with a higher risk of marital instability [Barbagli, Saraceno, 1998], while male employment is associated with higher union stability [Tzeng, 1992].

In the same way, it is expected that education plays an important role on the couple's stability [Becker, 1981; Blossfeld et al., 1995; Blossfeld, Huinink, 1991]. For both sexes, the higher the educational level, the more likely it is that an individual will adopt non-traditional behaviour. Education also plays an important role in the participation levels of women in the labour market, which implies a stronger effect of this variable on the risk of union instability. In general, education is associated with high risk of union instability because it favours non-traditional family behaviour.

The other variables we consider in the analysis are those related to the individual.
Age at union formation. The younger the person is at the time of union formation, the higher union instability becomes [Morgan, Rindfuss, 1985].
Precocious intercourse with the other sex. One indicator of this is the timing of first sexual intercourse, i.e. whether first sexual intercourse took place before entry into the first union or within the first union [Khan, London, 1991]. The logic behind this indicator is that early sexual interaction with the other sex is seen as an indicator of non-traditional behaviour.
Inherited divorce propensity as an indicator of "behaviour learning" from the family of origin. Different authors [Mueller, Pope, 1976; Bumpass et al., 1991; Amato, 1996] believe in the intergenerational transmission of behaviour. Children who experience parental separation are more likely to experience separation themselves, independently of the gender.
Religiousness as an indicator of social control on couple behaviour [Sgritta, 1993]. Our hypothesis states that the stronger a person's religion, the more stable his or her union with a partner will be. Frequency of attending religious
services is the main indicator of the religiousness of a person, especially in Italy where a large part of the population claims to be religious.
Among indicators of the couple we consider:
Age difference between partners. It has been hypothesized [Tzeng, 1992; Tzeng, Mare, 1995] that relationships in which there is more homogamy between partners (age, education, earning capacity) are the ones characterized by a non-traditional division of roles, and thus by a lower sense of unfairness. Considering the age difference, the most stable relationships are those in which partners are more or less of the same age $(+/-3$ years).
Type of union. Starting the union with cohabitation, possibly followed by marriage, instead of a direct marriage has a strong effect on union instability [De Rose, 1998].
Children. Children inside the union have been shown to have a positive impact upon stability [White, 1990; De Rose, 1992; Goode, 1993]. On the other hand, pre-union children as well as children born in a previous relationship increase the risk of union dissolution.
Period. One of our hypotheses looks at the extent to which divorce law and its reforms have an impact on family stability at a macro level. From 1865 to 1970 , under the Civil Code marriage could only end with the death of one of the partners. In other words, marriage was indissoluble, regardless of whether the couple lived together or not, and remarriage was impossible. With law n. 898 of 1 December 1970, divorce was introduced in Italy. Divorce is permitted when there is no possibility of maintaining communion between the two partners. It is important to underline here the difference between divorce and separation. In contrast to divorce, separation is considered a transitional step at a legal level, and can simply be terminated if the separated partners start to live together again. Separation does not mean the end of a marriage, so it does not permit entry into a new marriage. We can distinguish two kinds of separation: legal or de facto (that is, separation without any legal execution). Legal separation can be executed by either mutual or judicial consent. Mutual consent is based on an agreement of the two partners upon separation. In this agreement, issues such as child custody and economic issues may play a central role. To be valid, the agreement has to be approved by a court. Judicial consent is granted upon the request of one of the two spouses and implies a separation court ruling. Since 19 May 1975, it has been possible to make the request for judicial separation without the consent of both parties. In the case of judicial separation, the legal authority to identify a responsible party is vested in the judge. Another reform of 1 August 1978 considers new economic sanctions with the intent of giving economic protection to the weakest partner. With the reform of 6 March 1987, couples need three years of separation instead of five to obtain a divorce. While the effects of the 1970 law curtailed
the increase in the number of separations, the reform of 1987 gave a new impulse to the number of separations. We hypothesised that the introduction of more liberal norms with respect to the legal resolution of marital conflict have a positive effect on risk of union dissolution, whatever the form of the union itself (marriage or cohabitation). We shall explicitly take into account the historical passage of time and the introduction of the most recent reforms, by introducing a time-dependent covariate and by subdividing the variable period into two periods: the first period is up to March 1987 and the second one is after that date.

## 3 DATA AND METHOD

The analysis is based on the 1996 Fertility and Family Survey (FFS) data for Italy, and we used the two independent samples of man and women.

The samples are composed of people who either are or have been in a union. We have excluded from the data people who have never been in a union. The participants are surveyed either up to the interview or to the end of their union. We have not considered unions ending in the death of a partner. There are so few cases in the sample in which the union ends with death that the omission of these cases does not influence the results in any way. These factors reduce the samples to 3,225 women and 642 men. We focus on the dissolution of a union, making no distinction between cohabitation and marriage. A union is defined as over when the partners no longer live together.

The number of events of interest (union dissolution) is 203 and 59 respectively. This means that $6.3 \%$ of unions dissolved by disruption in the female sample, while in the male sample this percentage is $9.2 \%$.

The analysis is based on a piecewise-linear hazard model. The mathematical model is simply:

$$
\ln \lambda(t)=y(t)+\sum_{j} \alpha_{j} x_{i j}(t)
$$

where $y(t)$ is the logarithm of the baseline intensity for union disruption. Its origin is at the beginning of the union, independent of the type of union (marriage or cohabitation). To fit the model, we have introduced the variables of interest step by step. First, we have considered all the fixed variables; then we have introduced the time-varying covariates step by step to obtain the final model, comprised of all the fixed and time-varying variables.

## 4 RESULTS

Modelling divorce highlights the extent to which social, economic, and institutional factors can impact in different ways on male and female behaviour. The changing role of women in society and the wider range of behavioural patterns open to them have a strong effect on union stability. Couples seem unwilling to adapt their relationship to changes that may produce a major upheaval in a partnership.

Table 7.1 shows the coefficients separately for men and women. First of all, we may note the difference in significant effects between men and women. This first result may induce us to consider women's characteristics as having a greater influence on the probability of union dissolution than men's characteristics. Actually, the two samples are of different sizes: the male sample contains 642 individuals and 59 events, and this could influence the convergence and significance of the model.

As we can see, age at first union has quite a strong effect on union stability. Women aged under 23 have a higher risk of their union ending than do women aged 23 or over: the older the age at union formation, the lower the level of risk. However, the decrease in risk is more pronounced at relatively young ages. The male sample reveals similar patterns, although the estimated effects are not significant.

For women, parents' separation affects the risk of instability, especially if she was less than 18 years old at the moment of parental separation. For men, on the other hand, parental separation has no significant effect on union stability.

There is a strong impact on risk for both sexes if the interviewee has pre-union children. This result confirms the hypothesis that having pre-union children (before the first union) has a negative effect on union quality. It means that most of the unions with pre-union children are 'shotgun weddings'. On the other hand, having a partner with pre-union children has a positive effect on union stability in the female case. This confirms the idea that these kinds of union are stronger due to awareness of the partner's situation.

There is a significant effect of education on the level of risk. This variable is used as an indicator of the changed status of women in society: the higher the education level of women, the higher the risk of union dissolution. The effect of education is not so strong for men.

As we have already said, the religious variable can be problematic as its level can change depending on the time at which it is observed. In any case, when "other religions" are treated as a category of reference, the shape of the trend is the expected one. There is a strong effect on union disruption of lack of religiousness in the male case.
Table 7.1. Risk of Dissolution of First Union for Women and Men for Italy (Fixed \& Time-Varying Variables)

| Predictors | Women |  | Men |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $e^{B}$ | SE B | $e^{B}$ | SE B |
| Age at first union (20-22 years) |  |  |  |  |
| $<20$ years | 1.56** | 0.19 | 1.23 | 0.88 |
| 23-25 years | 0.77 | 0.20 | 1.43 | 0.54 |
| $\geq 26$ years | 0.53 ** | 0.26 | 0.89 | 0.56 |
| Age at parents separation (No separation) |  |  |  |  |
| $<18$ years | 2.70*** | 0.27 | 0.98 | 1.16 |
| $\geq 18$ years | 1.19 | 0.76 | 1.23 | 2.54 |
| Partner with children (No) |  |  |  |  |
| Yes | 0.44** | 0.33 | 0.19 | 1.19 |
| Pre-union childbearing (No) |  |  |  |  |
| Yes | 4.96*** | 0.20 | 3.04** | 0.50 |
| Education (Low level) |  |  |  |  |
| Medium level | 1.44** | 0.17 | 0.93 | 0.37 |
| High level | 1.90 *** | 0.24 | 1.57 | 0.46 |
| First sexual intercourse (within ${ }^{\text {st }}$ union) |  |  |  |  |
| Before first union | $1.48 * *$ | 0.19 | 2.40 | 0.70 |
| Religion (Other religions) |  |  |  |  |
| Catholic High Frequency | 0.61 | 0.48 | 1.51 | 1.03 |
| Catholic Medium Frequency | 0.78 | 0.47 | 1.81 | 0.70 |
| Catholic No Frequency | 1.49 | 0.47 | 1.79 | 0.69 |
| No religion | 1.23 | 0.49 | $10.92^{* * *}$ | 0.76 |
|  |  |  |  | (cont.) |

Table 7.1. (Continued)

| Predictors | Women |  | Men |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $e^{B}$ | SE B | $e^{B}$ | SE B |
| Age difference with partners (Man older) |  |  |  |  |
| Same age | 0.84 | 0.15 | 0.46 | 0.57 |
| Woman older | 0.42 | 0.59 | 0.48* | 0.43 |
| Type of union (Cohabitation) ${ }^{\text {a }}$ |  |  |  |  |
| Marriage | 0.15*** | 0.26 | 0.03*** | 0.41 |
| Marriage after cohabitation | $0.32^{* * *}$ | 0.34 | 0.10** | 1.04 |
| Childbearing (Parity 0$)^{\text {a }}$ |  |  |  |  |
| Parity 1 | 0.48*** | 0.21 | 0.54 | 0.66 |
| Parity 2 | $0.28{ }^{* *}$ | 0.28 | 0.38 | 0.85 |
| Parity 3 | $0.17{ }^{* * *}$ | 0.48 | 0.36 | 1.50 |
| Employment (No job + housewife + student + others) ${ }^{\text {a }}$ |  |  |  |  |
| Employed < 35 hours | 1.67* | 0.28 | 1.53 | 0.81 |
| Employed 35-44 hours | 1.50** | 0.20 | 0.69 | 0.42 |
| Employed 45+ hours | 2.40 *** | 0.22 | 0.71 | 0.49 |
| Self employed | 1.23 | 0.30 | 0.23* | 0.88 |
| Period (Before the divorce reform) ${ }^{\text {a }}$ |  |  |  |  |
| Divorce reform - March 1987 | 1.38* | 0.17 | 2.29** | 0.36 |

Notes: Reference category shown in brackets; ${ }^{* * *} p<1 \% .{ }^{* *} p<5 \% .{ }^{*} p<10 \%$; ${ }^{\text {a }}$ Time-varying variables
Source: FFS Italy 1995/96.

Age difference between partners does not display any significant difference between categories. Only for men is there a significantly lower risk of union disruption when the woman is more than three years older. This means that in a future perspective, in which the marriage market will be open to this kind of unions, the relationship should become more stable.

For the variable type of union we have considered cohabitation as a reference category so as to pick up the effect of marriage. Marriage represents one of the elements of union stability (in both cases: with or without previously cohabiting). This strong difference in the risk between the two kinds of union is linked to the meaning of cohabitation. Cohabitation does not have a legally recognized status in Italy, as it does in many countries. Cohabiters do not have reciprocal rights and duties and either party may consider ending the relationship at any time. The absence of any legal or recognised protection automatically gives instability to this kind of union. Hence, getting married markedly reduces the risk of union disruption. Marriages prior to which the couple have cohabited also have a higher risk of divorce compared to marriages where the couple have not previously cohabited. It seems that there is a process of selection of type of union by individuals who are less family-oriented, and that these individuals prefer to opt for informal unions involving less commitment.

As regards childbearing within a union, children have a significant effect on union stability, as we expected. The human capital and the economic investment represented by children constitute a strong bond between partners. This variable has a stronger effect for women than it does for men.

As for the employment variable, the category of reference is the "no job/housewife" category. It is quite evident that if the woman is employed the risk of union dissolution is higher than for women in the unemployed/housewife category. This conclusion remains valid when observing the whole category of employed people. Considering subgroups by hours of work, we see that the group of women working over 45 hours a week experiences a very high risk of union dissolution. In this case the risk is $140 \%$ higher than in the reference category. This result confirms our hypothesis: the absence of union stability is closely related to the new forms of behaviour and habits accessible to women. The changing behaviour of women has not been matched by the necessary changes needed in a relationship. If the woman is out of the home for many hours, it represents a shock to the equilibrium of the couple. In the male case, the special category of self-employed is associated with the lowest risk of dissolution. Working men do not represent a risk factor for union stability: their strong presence in the labour market is an indicator of union stability. The risk of union dissolution is lower if the man has a full-time job. This reduction is an indicator of the extent to which the gender system remains traditional although the labour market is changing.

Finally, if we consider the variable period, we can see the strong effect on union stability of new legislative reform. Reform law n. 74 of 6 March 1987 gave impulse to union dissolution by simplifying the process and shortening the time-scale needed to obtain the freedom to re-marry.

Considering the results of the first model, we have investigated the interaction between educational level and employment. There is a strong relation between a person's job and their educational level: working many hours has a different impact on union stability depending on the social status of the couple. Educational level, in this case, may be considered a proxy of the social status. Table 7.2 a shows the result of a new model with the same variables as the first one except for the absence of education and occupation. Table 7.2b, shows the interaction between the education and employment variables for both women and men. Looking at Table 7.2a, we can see that the pattern of union disruption, for fixed variables, is more or less the same as for the first model (Table 7.1).

From Table 7.2b, it is evident, in the case of women, that the interaction between high education and full-time employment leads to a greater union instability. The risk decreases with a lower education level and a shift from employment to unemployed/housewife status. The lowest risk corresponds to women with the lowest level of education and who are not employed. The ratio between unemployed and employed women by level of education shows that for low and medium education levels, unemployed women have a lower risk than those employed. For a high level of education there is no difference between the two categories. This group has the highest risk of union dissolution. Looking at the last four columns of Table 7.2b, we may analyse the interaction for men. The reference category is again men with a high level of education and full-time work. In this case, a full-time job is an indicator of lower instability for all education levels. Again, the ratio between unemployed men and employed ones shows higher union instability for men with no work.

## 5 INTERNATIONAL COMPARISON

In this section we are interested in analysing how gender differences in different social contexts affect partnership relations. In particular, we are interested in analysing if the Italian results are typical of the country's specific characteristics.

First of all we have compared results for Italy with the same model for Spain. Spain is very similar to Italy from cultural, geographical, and historical points of view; moreover both countries are characterized by very low levels of divorce. Secondly, we have considered Olàh's research on Hungary and Sweden (2001), two countries that are characterized by very high levels of divorce rates
Table 7.2a. Risk of Dissolution of First Union for Women and Men for Italy. Fixed Variable in the Model with the Interaction between Education and Occupation

| Predictor | Women |  | Men |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $e^{B}$ | SE B | $e^{B}$ | SE B |
| Age at first union (20-22 years) |  |  |  |  |
| $<20$ years | 1.50** | 0.18 | 1.80 | 0.58 |
| $23-25$ years | 0.82 | 0.20 | 1.11 | 0.44 |
| $\geq 26$ years | 0.66 | 0.26 | 0.77 | 0.44 |
| Age at parents separation (No separation) |  |  |  |  |
| $<18$ years | $3.34{ }^{* * *}$ | 0.26 | 1.58 | 1.29 |
| $\geq 18$ years | 0.96 | 0.73 | 0.72 | 2.03 |
| Partner with children (No) |  |  |  |  |
| Yes | 1.26 | 0.29 | 1.00 | 0.99 |
| Pre-union childbearing (No) |  |  |  |  |
| Yes | 5.54*** | 0.19 | 8.76*** | 0.44 |
| First sexual intercourse (within ${ }^{\text {st }}$ union) |  |  |  |  |
| Before first union | $1.72^{* * *}$ | 0.18 | 1.78 | 0.66 |
| Religion (Other religions) |  |  |  |  |
| Catholic High Frequency | 0.38* | 0.50 | 0.13* | 1.09 |
| Catholic Medium Frequency | 0.56 | 0.48 | 0.33 | 0.77 |
| Catholic No Frequency | 1.12 | 0.49 | 0.46 | 0.79 |
| No religion | 1.13 | 0.50 | 1.93 | 0.80 |
| Age difference with partners (Man older) |  |  |  |  |
| Same age | 0.92 | 0.09 | 0.64 | 0.53 |
| Woman older | 0.69 | 0.59 | 0.62 | 0.39 |

[^11]Table 7.2b. Relative Risk of Dissolution of First Union for Women and Men for Italy. Interaction between Education and Occupation

| Education | Employment |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Women |  |  | Men |  |  |
|  | $35+$ <br> hours | Other | Other/35+ hours | 35+ hours | Other | Other/35+ hours |
| Low | 0.58* | 0.26 *** | 0.46 | 0.26*** | 0.75 | 2.88 |
| Medium | 0.82 | 0.47** | 0.58 | 0.38** | 1.60 | 4.24 |
| High | 1.00 | 1.15 | 1.15 | 1.00 | 1.03 | 1.03 |

Notes: Reference category shown in brackets; ${ }^{* * *} p<1 \% .{ }^{* *} p<5 \%$. ${ }^{*} p<10 \%$; Source: FFS Italy 1995/96.
and which differ from Italy and Spain not only in their social and cultural characteristics, but also in their gender system, which is less unequal than that in Italy or Spain [Pinnelli, 1999; Pinnelli, Di Giulio, 1999; Angeli, De Rose Chap.8].

Italy and Spain are similar in many respects: geographical position, strong Catholic culture, and a historical-political framework that has influenced economic and social development in the same direction. In both countries, which are characterized by strong family ties, divorce legislation was introduced quite late compared to other European countries (1970 in Italy and 1981 in Spain). Both countries feature a strong polarization between North and South; the northern regions are strongly integrated into the European context and more influenced by new patterns of behaviour. In neither country have national policies succeeded in aiding the social-economic development of the southern regions. Moreover, the Catholic Church has always exerted a strong influence on individual behaviour and the gender system [Reher, 1998].

These elements explain a large proportion of the low levels of divorce in the two countries at macro level. Here, we are interested in analysing whether the macro-convergence between the two countries is also visible at micro-level. We have used the Spanish FFS data (1994/95) and applied the same model previously explained.

The divorce law in Spain was passed in June 1981. The period variable is fixed at this date and, as expected, there has been a strong effect on union dissolution since the divorce law was introduced. The results show a very similar pattern for Spain compared to Italy (Table 7.3). Age at marriage, parental separation, premarital sex, and the presence of extramarital childbearing
Table 7.3. Risk of Dissolution of First Union for Women and Men for Spain (Fixed \& Time-Varying Variables)

| Predictor | Women |  | Men |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $e^{B}$ | SE B | $e^{B}$ | SE B |
| Age at first union (20-22 years) |  |  |  |  |
| $<20$ years | $1.85{ }^{* * *}$ | 0.19 | 0.97 | 0.31 |
| 23-25 years | 0.88 | 0.20 | 0.56** | 0.29 |
| $\geq 26$ years | 1.02 | 0.02 | $0.21^{* * *}$ | 0.42 |
| Age at parents separation (No separation) |  |  |  |  |
| $<18$ years | 1.19 | 0.31 | 0.96 | 0.76 |
| $\geq 18$ years | $2.41^{* *}$ | 0.42 | 2.25 | 0.62 |
| Partner with children (No) |  |  |  |  |
| Yes | 0.99 | 0.27 | $0.15 * * *$ | 0.58 |
| Pre-union childbearing (No) |  |  |  |  |
| Yes | 4.75*** | 0.19 | 5.03 *** | 0.33 |
| Education (Low level) |  |  |  |  |
| Medium level | 1.61 *** | 0.18 | 1.80** | 0.27 |
| High level | 1.30 | 0.27 | 1.79 | 0.36 |
| First sexual intercourse (within ${ }^{\text {st }}$ union) |  |  |  |  |
| Before first union | 1.32* | 0.17 | 3.02 ** | 0.47 |
| Religion (Other religions) |  |  |  |  |
| Catholic High Frequency | 0.53* | 0.35 | 0.58 | 0.63 |
| Catholic Medium Frequency | 0.53 ** | 0.31 | 0.39** | 0.48 |
| Catholic No Frequency | 0.77 | 0.28 | 0.33** | 0.45 |
| No religion | 0.79 | 0.27 | 0.43** | 0.38 |
|  |  |  |  | (cont.) |

Table 7.3. (Continued)

| Predictor | Women |  | Men |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $e^{B}$ | SE B | $e^{B}$ | SE B |
| Age difference with partners (Man older) |  |  |  |  |
| Same age | 0.95 | 0.15 | 1.02 | 0.43 |
| Woman older | 2.09 | 0.59 | 1.05 | 0.31 |
| Type of union (Cohabitation) ${ }^{\text {a }}$ |  |  |  |  |
| Marriage | $0.10^{* * *}$ | 0.21 | $0.14 * * *$ | 0.39 |
| Marriage after cohabitation | 0.23 *** | 0.29 | $0.37 * *$ | 0.40 |
| Childbearing (Parity 0) ${ }^{\text {a }}$ |  |  |  |  |
| Parity 1 | 1.09 | 0.22 | 0.64 | 0.37 |
| Parity 2 | $0.54 * *$ | 0.30 | 0.40* | 0.50 |
| Parity 3 | 0.89 | 0.34 | 0.77 | 0.64 |
| Employment (No job + housewife + student + others) ${ }^{\text {a }}$ |  |  |  |  |
| Employed < 35 hours | $1.57{ }^{* *}$ | 0.22 | 0.44 | 0.55 |
| Employed 35-44 hours | $1.45 * *$ | 0.18 | 0.58* | 0.31 |
| Employed 45+ hours | $1.78^{* * *}$ | 0.20 | 0.47 ** | 0.36 |
| Period (Before the divorce reform) ${ }^{\text {a }}$ |  |  |  |  |
| After 1981 - Divorce law | 1.54* | 0.24 | 2.18** | 0.36 |

Notes: Reference category shown in brackets; ${ }^{* * *} p<1 \% .{ }^{* *} p<5 \% .{ }^{*} p<10 \%$; a Time-varying variables.
Source: FFS Spain 1994/95.
have a positive effect on the risk of union dissolution. As for education, a medium educational level has a positive effect on the risk, while (unlike Italy) higher union instability does not seem to follow from a high educational level. This might be explained by the greater diffusion of this behaviour among the population, whereas in Italy it may still be typical of innovating individuals, who are characterized by special economic-demographic-social characteristics. The effect of religiousness on union stability is not as strong as in the Italian model. Type of union has a strong effect on the union: cohabitation is still characterized by a high level of instability. The human capital represented by children affects partnership relations in the expected way. Women's participation in the labour market makes the union more unstable, as does male unemployment status. In Spain the interaction between education and occupation is not as strong as in Italy.

Comparison between the two countries highlights a different level of diffusion of this behaviour in the two countries. This is important, because it defines the level of acceptance of the new behaviour in society. In Italy union dissolution seems to be characteristic of a special group of people, with a specific economic-socio-demographic profile - in general higher than that of the population - while in Spain, such behaviour seems to be less dependent on individual social status.

Our last observation concerns the number of significant effects. There are 2000 men and 4000 women in the Spanish sample, so there is no marked differences in the number of significant effects between men and women. This is not true for Italy, where the small male sample ( 642 men versus 3225 women) probably affects the results.

Let us now observe the results for Sweden and Hungary. Both countries are distant from the Italian and Spanish culture-value-behavioural patterns. Both are characterized by high divorce rates and are quite different in their political and historical events and economic and social structures. Moreover, they are marked by a history of liberal divorce legislation, state-support for families with children, fairness in division of (economic) resources and joint custody of children after divorce. Both Sweden and Hungary have a more gender-symmetric labour market. Based on their similarities as well as on their differences, these two countries provide us with a good comparative analysis, with Italy and Spain, of gender relations and family stability.

Olàh [2001] tested two main hypotheses, namely (1) that changes in gender relations with regard to paid and unpaid work influence family stability, and (2) that there are gender differences in the effects of the partners' characteristics, especially as regards labour-market behaviour, which influence family dissolution. The empirical analysis is based on the Swedish Survey of Family and Working Life and the Hungarian FFS, in 1992/93. The analysis is based on
a piecewise-constant proportional-hazards model; in the sample those respondents have been selected who have reported one or more marital or non-marital unions and have produced at least one child in a union.

We suggest referring to the original paper for more details [Olàh, 2001], while in this context we would like to highlight the author's intention to observe couple interaction using the information on parental leave for Sweden, and the opinion of both partners on gender roles in the case of Hungary. The results show that sharing childcare (Sweden) and open attitude towards gender equity (Hungary) have a positive effect on union stability. The results (Tables 7.4a and 7.4b) also show how women's participation in employment increases the risk of union disruption in Sweden and Hungary (less strongly). Male occupation has a protective effect on the union in these two countries (as in the other two). Increasing women's and men's education decreases the risk of union

Table 7.4a. Relative Risk of Dissolution of the First Parental Union for Sweden, Women and Men. Main Results from the Final Model

|  | Women | Men |
| :--- | :--- | :---: |
| Father took leave after first birth (No) |  |  |
| Yes | $0.70^{* * *}$ | 0.81 |
| Other | 1.07 | 0.94 |
| Current educational attainment (Compulsory education) |  |  |
| Lower level vocational school | $0.70^{* * *}$ | 0.75 |
| Gymnasium | $0.56^{* * *}$ | 0.78 |
| Post Gymnasium | $0.63^{* * *}$ | $0.63^{*}$ |
| Current employment status (Full-time) |  |  |
| Long part-time | $0.76^{*}$ | 1.81 |
| Short part-time | $0.41^{* * *}$ | $3.26^{*}$ |
| On parental leave | $0.45^{* * *}$ |  |
| Own-household work | $0.60^{* * *}$ |  |
| Unemployed | 0.87 | $3.10^{* *}$ |
| Student | $1.51^{*}$ | 1.18 |
| Other non-employed | $0.47^{* * *}$ | 0.86 |
| Current policy period (Jan 1974 - June 1983) |  |  |
| Jan 1964-Dec 1973 | 0.92 | 0.91 |
| July 1983-June 1993 | $1.30^{* *}$ | $1.74^{* * *}$ |

[^12]Table 7.4b. Relative Risk of Dissolution of the First Parental Union for Hungary, Women and Men. Main Results from the Final Model

|  | Women | Men |
| :--- | :---: | :---: |
| Gender-role attitude (Egalitarian) |  |  |
| Intermediate | 1.01 | 1.29 |
| Traditional | 1.83 | 0.61 |
| Attitude to parenthood (Child-centered) | 1.25 | 1.33 |
| Self-centered | 0.89 | 1.04 |
| Other |  |  |
| Current educational attainment (Compulsory education) |  |  |
| Lower level vocational school | 1.13 | $0.65^{*}$ |
| Gymnasium | 0.83 | $0.60^{*}$ |
| Post Gymnasium | 0.82 | 0.64 |
| Current employment status (Full-time) |  |  |
| Part-time | 0.75 | $4.17^{* *}$ |
| Own-household work | 1.50 | 1.81 |
| Unemployed | $0.60^{* *}$ | 3.62 |
| Student | $0.34^{*}$ | 1.53 |
| Other non-employed |  |  |
| Current policy period (Jan 1964 - Dec 1973) | $1.34^{*}$ | 1.22 |

Notes: Standardized for childhood family, age at first birth, first birth interval, first birth union order, marital status, current age of the youngest child, and age of the first child. Significance: ${ }^{*}=10 \%$..** $=5 \%$.** $=1 \%$.
Source: Olàh, 2001, Hungary, FFS, 1992/93.
dissolution, while in Italy and Spain it has the opposite effect. This is possible because the higher the level of acceptance of modern patterns of behaviour in the society, thanks to the general increase in the educational level, the weaker the link between education and the risk of union dissolution becomes [Blossfeld et al., 1995].

## 6 CONCLUSION

The analysis of the micro data from the FFS throws some light on the explanation of union dissolution from a gender perspective. Starting from the Italian results, we may conclude that a number of individual characteristics (level of education and religiousness) have the same effect on union stability whether
they are measured for man or woman. The same applies to the nature of the union itself (marriage or cohabitation, early or late) and to changes in family composition (the arrival of any child). An important difference is observed in relation to employment status: if a woman is employed full time, the risk of her union dissolving is higher than for non-working women; the same condition for men has precisely the opposite effect.

This last result appears to be confirmed by a comparative analysis with other FFS data for European countries (Spain, Sweden and Hungary). The most important gender difference regarding the risk of union dissolution is professional status: a good position for the man has a stabilizing effect on the couple, while female involvement in a full-time job might increase the risk of splitting up.

Many questions remain to be answered, precisely in relation to these findings: what happens in the couples where the woman has a full-time job? What kind of role division and resource sharing is there? What causes the breakup of the gender contract? It should be clear that we can go no further with the available data in research into the ultimate causes of gender conflict, and once more we want to stress the need to collect the proper data, best if at international level, to study couple relationships. If it is recognized that the only way to fully understand family behaviours is from a gender perspective, it is really necessary to build data bases which help in describing family events as results of life as a couple, i.e. depending not only on his or her characteristics and voluntary actions, but also on the complex system of sentimental ties, agreements and conflicts which characterizes living in a coresidential partnership.

## CHAPTER 8

# WOMEN AND MEN AFTER THE FIRST UNION DISSOLUTION 

AURORA ANGELI AND ALESSANDRA DE ROSE

## 1 INTRODUCTION

The increasing instability of conjugal unions in European countries has urged social researchers to deepen gender studies from the point of view of the consequences of couple instability.

The living arrangements of male and of female partners after splitting up is quite different, and so are the economic and social conditions [Barbagli, Saraceno, 1998; Zanatta, in this volume]. Separated or divorced women form lone-parent families more often than men, and rarely enter a new union [Zanatta, 1996; Bimbi, 2000; De Rose, 2000]; their economic condition frequently worsens after the break up of the conjugal union (while that of the male partner hardly changes), and this increases the female risk of poverty [Duncan, Hoffman, 1985; Del Boca, 1998; Ruspini, 2000; Zanatta, 2002]. More in general, the negative consequences are usually heavier for women than for men [McLanahan et al., 1995].

In this work, we are interested in verifying if there are any differences in the forms of behaviour exhibited by men and women following the break-up of a union. We start with the hypothesis that the ways in which men and women face the period of life following the break-up of the relationship are different and that these ways are strongly tied to the resources available, to family conditions and to personal characteristics, not to mention the institutional and cultural context. We will focus, in particular, on gender differences as to the transition to a second union, final living arrangements, and changes in employment status, and we shall adopt an international comparative perspective.

[^13]
## 2 RESEARCH HYPOTHESES

We tested the following hypotheses:

1) The propensity to form a second bond after the first break-up is higher for men than for women, because men have better chances in the marketplace of second marriages and second informal unions [Wilson, Clarke, 1992];
2) The family fate of the members of the couples that break-up are differentiated in a traditional manner (women form the single-parent nucleus or live alone, men go back into the family of origin or enter a new union), but there are differentiated paths in accordance with initial personal resources [Chiswick, Lehrer, 1990; Freguja et al., 1998]. It is documented that the gender difference in the likelihood of entering a new union depends upon a different economic situation and upon the presence of not-yet-independent children [Kuijsten, 1996];
3) Professional careers after a divorce are influenced differently for men and for women [Festy et al., 1999]. In particular, men tend not to modify their professional position, whereas women's participation in the job market changes quantitatively (more women work) and qualitatively (the professional position adapts to new family rhythms and commitments);
4) Changes in living arrangements and in career are related;
5) Different welfare systems and family and employment policies can modify gender differences after divorce. The bargaining processes that come into being at the moment of divorce are particularly influenced by the legal and social system of a country. Variations in the laws and rules are often regarded as exogenous events whose effect on individual behaviour is not always easy to measure. Institutions play a fundamental role in establishing many relations following a break-up, for example the time-sharing of the children between parents [Del Boca, 2001]. In countries with relative gender equity, the behaviour of men and women is substantially the same [Bernhardt, 2000]. International comparison of the legal framework is therefore fundamental [Cuyvers, Kiely, 2000], even if its effects on behaviour related to the period following a marriage's break-up cannot always be identified so clearly [Hantrais, 1997].

## 3 DATA AND VARIABLES

### 3.1 Data

The most suitable source of data is the Fertility and Family Survey in ECE countries, carried out in the 90 's. We examine eight countries chosen in pairs in areas that can be identified on the basis of different forms of family
behaviour and their relations with the gender system [Pinnelli, 1995; Pinnelli, Di Giulio, 1999]: Sweden and Finland for Northern Europe, Hungary and Latvia for Eastern Europe, Switzerland and Austria for Central Europe, Italy and Spain for Southern Europe. Out of these, a smaller number of cases has been selected, upon which to perform deeper explanatory analyses.

The focus of this study is on individuals who have experienced the break-up of their first union, and the period observed is therefore that following that event. Cohabitation and marriage are considered jointly, and we focus our attention on the break-up and formation of stable relationships that envisage living together.

With the available data it is possible to study:
a) Transition to a new union, independently of the legal aspect, by attempting to verify whether the formation of such a stable relationship following the break-up of the first bond involves the two genders in different fashions;
b) Living arrangements (as a couple, in the family of origin, in a single-parent family, as a single person) at the moment of the interview - since it is not possible to reconstruct such a variable as time dependent;
c) Changes that have taken place in employment status (work-not work, not work-work, work-job change) after the break-up of the union, and the interaction between these transitions and changes in the partnership condition.

The size of the sub-sample taken into examination is quite different among the countries and between the genders, with figures that are particularly low in Italy and Spain (Tab. 8.1).

Table 8.1. Samples Size and First Unions Dissolved

|  | Sample size |  |  |  | First unions dissolved |  |
| :--- | :---: | :---: | :---: | :---: | :---: | ---: |
|  | Men | Women | Total |  | Men | Women |
| Sweden | 1,666 | 3,318 | 4,984 |  | 699 | 1,083 |
| Finland | 1,670 | 4,155 | 5,825 |  | 384 | 967 |
| Latvia | 1,501 | 2,699 | 4,200 |  | 366 | 887 |
| Hungary | 1,933 | 3,554 | 5,487 |  | 295 | 643 |
| Austria | 1,539 | 4,585 | 6,124 |  | 333 | 1,108 |
| Switzerland | 3,006 | 2,958 | 5,964 |  | 600 | 676 |
| Italy | 1,206 | 4,824 | 6,030 |  | 65 | 257 |
| Spain | 1,992 | 4,021 | 6,014 |  | 139 | 305 |

Source: FFSs, 1990s.

### 3.2 Variables

On the basis of the comparable information contained in the set of data, the following variables have been defined and built in order to describe:

- Characteristics of the first dissolved union (type of union; reason for break-up; duration);
- Information on the second union (type of union);
- Individual characteristics (birth cohort; religiousness; residence up to the age of 15 ; level of education reached; work experiences);
- Individual characteristics in relation to the first dissolved union (age at start of this bond, respondent and partner's age; age at end of the first union; employment status at moment of the break-up; number of respondent's children at moment of the break-up; number of the minors living in household at moment of break-up);
- Changes in employment status (the first change to take place after break-up and its distance in time from the latter, overall number of changes which have taken place prior to second relationship or interview).
In some cases, the information contained in the file was not sufficient for us to construct all of these facts, which made it impossible to include all individuals who had experienced the break-up of a bond in the analysis.


## 4 A DESCRIPTIVE ANALYSIS

In all the countries, the most common cause of break-up of the first relationship is represented by divorce or separation, amounting to over $90 \%$ of cases in many countries, especially for men (Tab. 8.2). In the case of two countries, Spain and Hungary, even the event "forced LAT" (living apart together) seems to be widespread ${ }^{1}$ : in Spain it represents about $23 \%$ and $13 \%$ of the cases respectively for males and females; in Hungary and Latvia 7\% and $4-5 \%$ for the two sexes respectively. Widowhood in the various countries seems to play a less important role. Italy and Spain are the only countries where the percentage of relationships that have come to an end due to the death of one partner is close to $20 \%$.

With respect to the type of union, only in Sweden are the dissolved partnerships mainly consensual relationships, for both males and females, and to a lesser extent in Switzerland. In Eastern European countries the first relationship is more often a marriage for both genders. In Southern European countries this is mainly true for women: $60 \%$ of men start the relationship with cohabitation (Tab. 8.2).

Not every dissolved first union is followed by a second union, and this happens with a strong degree of gender heterogeneity: apart from Sweden,
Table 8.2. Percentage of Women and Men by Characteristics of First and Second Union

|  | Mode of break-up |  |  |  | Mode of entry into union |  |  | Proportion of $1^{\text {st }}$ unions dissolved not followed by a $2^{\text {nd }}$ one | Proportion of second unions as cohabitations |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Divorce/ separation | Widowhood | Forced LAT | Not indicated | Marriage | $\begin{aligned} & \text { Marriage } \\ & \text { after } \\ & \text { cohabitation } \end{aligned}$ | Cohabitation |  |  |
| Sweden |  |  |  |  |  |  |  |  |  |
| Women | 92.8 | 1.9 | 5.3 | - | 6.2 | 20.5 | 73.3 | 29.9 | 95.8 |
| Men | 94.4 | 0.8 | 4.9 | - | 3.2 | 17.4 | 79.5 | 30.4 | 96.1 |
| Finland |  |  |  |  |  |  |  |  |  |
| Women | 91.7 | 7.5 | - | 0.7 | 40.9 | 22.4 | 36.7 | 42.7 | 88.4 |
| Men | 96.3 | 2.1 | - | 1.5 | 22.3 | 27.5 | 50.1 | 29.9 | 93.3 |
| Latvia |  |  |  |  |  |  |  |  |  |
| Women | 82.0 | 12.6 | 5.1 | 0.2 | 57.6 | 25.2 | 17.3 | 46.7 | 66.0 |
| Men | 88.5 | 4.1 | 7.1 | 0.3 | 51.6 | 19.7 | 28.7 | 34.4 | 72.5 |
| Hungary |  |  |  |  |  |  |  |  |  |
| Women | 85.8 | 9.6 | 4.3 | 0.2 | 67.5 | 13.7 | 18.8 | 41.2 | 66.9 |
| Men | 87.5 | 5.8 | 6.8 | - | 54.9 | 11.5 | 33.6 | 38.0 | 60.1 |
| Austria |  |  |  |  |  |  |  |  |  |
| Women | 89.3 | 8.6 | 1.1 | 1.0 | 39.1 | 25.1 | 35.8 | 45.8 | 82.2 |
| Men | 91.1 | 4.4 | 3.6 | 0.8 | 24.6 | 25.0 | 50.4 | 32.4 | 88.4 |
| Switzerland |  |  |  |  |  |  |  |  |  |
| Women | 91.3 | 5.3 | 2.3 | 1.1 | 23.2 | 22.2 | 54.6 | 36.1 | 83.3 |
| Men | 95.8 | 1.2 | 2.1 | 0.8 | 16.5 | 22.4 | 61.1 | 34.5 | 84.0 |
| Italy |  |  |  |  |  |  |  |  |  |
| Women | 76.7 | 19.1 | 4.2 | - | 77.3 | 6.6 | 16.1 | 63.8 | 76.3 |
| Men | 94.2 | 0.9 | 4.9 | - | 38.0 | 6.0 | 56.0 | 52.3 | 83.9 |
| Spain |  |  |  |  |  |  |  |  |  |
| Women | 70.4 | 16.8 | 12.7 | - | 62.0 | 6.6 | 31.4 | 58.8 | 87.3 |
| Men | 71.4 | 4.5 | 22.5 | 1.7 | 29.5 | 10.1 | 60.4 | 37.1 | 77.3 |

where the percentage of separated women and men not entering a second union is $30 \%$ for each, the percentage is higher for women in the other countries. This suggests that men and women have different chances of entering a new relationship, and that such chances differ among countries. To better explore these data, taking account of the censored nature of the samples, we applied a survival analysis. The results highlight that, in general, men have a second relationship more often and earlier than women. In Sweden, Switzerland, and Hungary the situation appears fairly similar for both sexes: in Sweden 30-31\% of men and women do not enter a second relationship, and the levels hover around $32-33 \%$ for Switzerland. In the case of Sweden, $50 \%$ of men and women has moved into another relationship within three years after the break-up of the first relationship. In the Southern European countries (Italy and Spain) over half of those who have experienced a break-up do not rebuild a new relationship; the figure for Italy is particularly high: over $60 \%$ for women and also very high for men.

Finally, the second relationship is almost always an informal cohabitation. This is a common trait among all countries considered: only in the Eastern European countries is the percentage of second unions starting as cohabitation slightly lower (Tab. 8.2).

## 5 CHOICE OF THE COUNTRIES FOR AN IN-DEPTH ANALYSIS

The above analysis confirms the existence of different conjugal models by geographical area and according to gender. Moreover, there is no lack of heterogeneity between countries within the areas. An in-depth comparison of behaviour between men and women in the different countries required a selection of a more limited number of countries for which it is important to depict the specific social, institutional and cultural backgrounds. We took one country from each of the European macro areas (North, East, West and South) characterized by differences as to social and economic organization, cultural norms and values and consequently different levels of equity in the gender system [Pinnelli, Di Giulio, in this volume]. The countries which we concentrated on are: Finland, Austria, Hungary and Italy-Spain (observed together, because of the few cases recorded and the small size of their male samples). These five countries also have the best FFS data comparability, according to our hypotheses [De Rose, Kljizing, 1999].

Among the different countries, there are first of all differences in the main demographic indicators in the way of perceiving and experiencing the institution of marriage. In all the countries considered, marriage still plays an important role in the life path taken by an individual, even though the alternative
forms of life as a couple have different degrees of popularity and social acceptance. While respect for tradition also induces the youngest to choose marriage as the main form of starting a life together in Italy-Spain [De Sandre, Ongaro, Rettaroli, Salvini, 2000; Delgado, Castro Martin, 1999], cohabitation appears to be the first stage of a conjugal union for Finnish couples, even though it is more rarely regarded a definitive life-style [Nikander, 1998].

In Austria, too, where there has been an increase in non-conjugal unions in recent decades, such relationships are in many cases experienced as a prelude to marriage and not as an alternative form of life-style for a couple [Nebenführ, 1995; Prinz et al., 1998]. In Hungary, marriage is still the most common way of starting a cohabitation, but this is largely due to problems relating both to employment difficulties and to the availability of housing (a lot of couples find themselves in having to start their life together with informal cohabitation and seek the help and co-operation of their families of origin) [Kamarás, 1999].

In the 1990s, there were evident changes in marriage and divorce in all the countries [Eurostat, 2000]; in particular we witnessed an increase in age at first marriage in all countries and a growing instability of formal relationships.

We must not forget that divorce was introduced in different years in the different countries, and that familiarity with the phenomenon and its social acceptance have therefore reached different levels. Divorce was first introduced in Finland, in the early decades of the 20th Century, and a modification of the law in 1988 eased and shortened the legal procedures. In Austria the divorce law was substantially modified in 1978, with the introduction of the consensual divorce; in Hungary, a modification of the 1987 family legislation introduced procedures to make divorce more difficult. In Italy a reform of 1970 divorce law was also introduced in 1987, partly modifying the existent norms in a more liberal direction; in Spain, the law reintroducing divorce after the Franco period only dates back to 1981 .

The content of the divorce law has an important effect on the consequences of splitting up, both for partners and for children, and it is influenced by the cultural context and by the organization of the welfare state [Roca Trias, 2000; Ronfani, 2001; Strell, 1999].

Of all the countries observed, Finland is characterized by the strongest welfare state, providing a considerable amount of assistance, and it may be defined as a society free of discrimination, also from the gender point of view [Bradley, 1998; Oinonen, 2000]. In Hungary too, there is still considerable assistance to families and to the poorest, even since the economic crises of the 1990s [Kangas, 1999]. In Austria, on the other hand, where the number of lone-mother families is rapidly increasing, the intervention of the welfare state is not as high as might be expected [Strell, 1999]. In the Mediterranean countries social
policy tends to favour the traditional family forms, and there is a scarce attention to the needs of "new families" and their social and economic disadvantages [Zanatta, 1996].

## 6 TRANSITION TOWARDS THE SECOND UNION. EXPLANATORY FACTORS

We then went on to evaluate how some variables marking the individual dimension at the time of the break-up of the first union act differently upon the probability of transition to a second relationship, between men and women and among the selected countries.

The first factor we considered is the age at which the break-up occurs, which is generally closely associated with the duration of the union itself. Previous studies have clearly shown that the probability of remarriage, or of moving into a new relationship in general, is associated with the age at which the break-up occurs [Haskey, 1992]. In terms of gender differences, we expect that for women the higher the age the lower the likelihood of entering a new relationship, while no effect is expected for men.

From an economic point of view, duration of first union can be used as an indicator of the level of "specific skills and experiences acquired during marriage", which can be transferred to a new union, as an analogy to the common interpretation of experience acquired during one's time in the job market [Chiswich et al., 1990]. This typology of human capital, in terms of experience in domestic work and knowledge of culture and religion of the partner, is a key factor for women. So we expect to find a stronger effect for women than for men.

Children born or present at the time of the break-up also represent investments in relationship-specific human capital, which are not, however, transferable to any second relationship [Chiswich et al., 1990]. The presence of children from the first may indicate a potential reduction of the contribution that their mother can give to a new partnership. Becker [1981], too, hypothesizes that the presence of children from a previous relationship may have a negative effect on the probability of a new union for women, while quite no effect is expected for men.

The typology (marriage or consensual) of the broken relationship may be related to the probability of each single partner moving onto a new relationship. As we know [Manting, 1994], the characteristics of consensual unions with respect to marriages (direct or indirect) are rather different, as are those of the partners living in one form of union or the other; even the risk of break-up varies, being higher for consensual relationships. We may then expect that the risk of forming a second union is different, depending on whether the subject comes from one typology or the other, and that it is presumably higher for the partners
originating from a prior consensual relationship. On the other hand, we have no research findings or particular reason to hypothesize that such differences are in turn differentiated according to gender.

We do expect the effect of the relationship type to be diminished by the holding constant of the declared degree of "religiosity", measured as regular attendance of service, which is strongly associated with the choice of the type of relationship. Cultural significance of this variable certainly varies from country to country and among the areas represented by the countries we have chosen, so any interpretation must be cautious.

A strategic role in explaining the risks of entry into a second union by gender is played by the material conditions of the two partners both at the moment of the break-up and in the subsequent time periods. As with the formation of the first union, economic independence and the human capital acquired through education tend to postpone or avoid entry into second relationships for women, whereas the effect would be positive for men [Becker, 1981].

In this case, however, the situation appears more complicated: individuals who have already gone through a relationship reach the marriage market with a quite different backgrounds compared to those who enter it the first time, and the differences between men and women are even more marked. Women often have children and are older and therefore less competitive compared to younger women. In this situation, economic independence is fundamental for a woman in order to survive, whereas in the case of the first relationship such a condition can only have the effect of being more selective in choosing the ideal partner, and to lengthen the period devoted to find him [Oppenheimer, 1994], a length of time that women with an experience of an already failed relationship and a high average age obviously cannot afford. On his part, a man has little chances of success in the search for a new partner if he does not have the necessary economic resources. In other words, we expect the fact of working to have a negative effect on the transition to a second relationship for women, and a positive one for men and we expect a similar result as levels of education rise.

Finally, we expect the international comparison to reveal a reduction of the differences between males and females in those social contexts in which there is greater gender equality, both at an institutional level and at that of the spread of modern patterns of behaviour, including the principle of equal opportunity and the sharing of tasks and powers within a couple. In particular, we expect to find differences between men and women which are greater in Italy-Spain and less marked in Finland and Hungary, with Austria at an intermediate position.

As for the statistical model, we have applied a piecewise exponential model that assumes constancy of risk level at defined time intervals, measured
in terms of number of months passed since end of first union. This was done to take account of the change over time of the probability of forming a second relationship, which it is assumed to decrease with distance from the first relationship. The variables for which we wish to estimate the proportional effect on the risks are: age at end of the first union, type of union, duration of first union, birth cohort, education level and employment condition at moment of the break-up, with any possible change in professional conditions that has occurred subsequently (time-varying variable), and degree of regular attendance of religious service at time of interview as proxy of religious values. To include the influence of the previous union, we consider also the number of children below age 13 present at the moment of break-up. We refer only to very young children, because they are certainly on charge and entail complex organization problems for the granting parent. Further, the majority of the welfare legislations of all the examined countries provide for helps up to this age.

In the models, the files relative to Italy and Spain were joined together, given the paucity of data for both those exposed to risk and observed events, under the obvious assumption that women and men from these two countries might behave in the same way. To control for possible differences (country effect), a dummy variable (value 1) was inserted if the individual was Italian. The country effect does not emerge as significant, a sign that the error created by keeping the two samples together is irrelevant for the purposes of the current analysis.

An initial look at the results (Tab. 8.3) reveals a discrete variability between genders and among countries as to the significance of the effects, but substantial stability as to the direction of hypothesized effects. Counting the number of significant effects we may see that the number is higher for men rather than for women in all countries except Hungary, and that individuals from different countries differ in the typology of risk factors rather than in the number of the factors in themselves (in other words, men and women are different everywhere, but for partially different reasons from country to country).

But let us come to the findings relative to our individual hypotheses. The time effect, as expected, acts negatively on the possibility of moving on to a new relationship, with hardly any distinction of gender or country. Age at end of first union (and thus at the start of the interval of exposure to the risk of entering a new relationship) has, as expected, a negative effect for women in all countries, but, surprisingly, also for men. Only in Italy-Spain, the propensity of forming a new union does not depend on the age at which men enter the marriage market after a separation. The cohort effect appears of little importance, even though it acts everywhere in the hypothesized direction: the more recent the generation, the higher the risk.
Table 8.3. Determinants of Transition to Second Union by Gender and Country

| Covariates | Austria |  | Finland |  | Hungary |  | Italy + Spain |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Women | Men | Women | Men | Women | Men | Women | Men |
| Period 1: <2 years | -5.80 | -4.37 | -5.45 | -5.54 | -5.45 | -4.59 | -6.72 | -6.04 |
| Period 2: 2-5 years | -5.91 | -4.58 | -5.48 | -5.62 | -5.32 | -5.05 | -6.65 | -6.25 |
| Period 3: $>5$ years | -6.61 | -4.91 | -5.73 | -6.28 | -5.95 | -6.00 | -6.91 | -5.89 |
| Age at first-union end (ref. $\geq 35$ years) |  |  |  |  |  |  |  |  |
| $<25$ years | 1.40 | 0.86 | 0.67 | 0.87 | 0.98 | 0.82 | 1.42 | 0.47 |
| 25-34 years | 0.91 | 0.66 | 0.37 | 0.59 | 0.85 | 0.58 | 0.90 | -0.04 |
| Birth cohort (ref. < 1950) |  |  |  |  |  |  |  |  |
| 1950-59 | 0.12 | 0.62 | 0.62 | 0.25 | 0.04 | -0.09 | 0.34 | 0.01 |
| > 1959 | 0.07 | 0.36 | 0.68 | 0.34 | 0.14 | 0.07 | 0.05 | -0.05 |
| Duration of first union (ref. > 120 months) |  |  |  |  |  |  |  |  |
| <24 months | -0.09 | -0.63 | 0.19 | -0.55 | 0.51 | -0.22 | 0.00 | -0.74 |
| 24-120 months | 0.07 | -0.59 | 0.17 | -0.81 | 0.36 | -0.21 | 0.18 | -0.86 |
| Cohabitant children < 13 years (ref. 2 or more) |  |  |  |  |  |  |  |  |
| 0 边 | 0.64 | 0.10 | 0.46 | 0.38 | 0.52 | -0.03 | 0.78 | 0.24 |
| 1 | 0.35 | -0.47 | 0.15 | -0.18 | 0.16 | 0.07 | 0.15 | 1.37 |
| Type of first union (ref. Free cohabitation) |  |  |  |  |  |  |  |  |
| Marriage | 0.09 | -0.05 | -0.12 | 0.04 | 0.00 | 0.05 | 0.07 | 0.34 |
|  |  |  |  |  |  |  |  | (cont.) |

Table 8.3. (Continued)

| Covariates | Austria |  | Finland |  | Hungary |  | Italy + Spain |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Women | Men | Women | Men | Women | Men | Women | Men |
| Religiosity (ref. Much religious) |  |  |  |  |  |  |  |  |
| Quite religious | - | - | 0.19 | 0.80 | -0.08 | -0.06 | 0.04 | -0.34 |
| Not religious | 0.00 | 0.24 | 0.17 | 0.53 | 0.11 | 0.17 | 0.17 | 0.43 |
| Working at dissolution (ref. No) | 0.08 | 0.19 | 0.15 | 0.34 | -0.21 | 0.18 | 0.03 | 1.09 |
| Level of education (ref. Low) |  |  |  |  |  |  |  |  |
| Middle | 0.04 | -0.09 | -0.25 | 0.18 | -0.29 | 0.25 | 0.21 | 0.57 |
| High and University | -0.60 | 0.17 | -0.19 | 0.63 | -0.52 | 0.31 | 0.12 | 0.46 |
| Working status change (ref. No change) |  |  |  |  |  |  |  |  |
| Not work-work | - | - | 0.00 | 0.62 | -0.18 | 0.80 | -0.07 | -0.03 |
| Work-not work | - | - | $-0.20$ | 0.39 | 0.02 | -0.39 | 0.41 | -0.16 |
| Work-change job | - | - | -0.08 | 0.10 | 0.00 | 0.06 | -0.34 | -0.09 |
| Country (ref. Italy) |  |  |  |  |  |  | -0.17 | -0.22 |

[^14]Of extreme interest are the findings concerning duration of first union and number of children: as we clearly stated, we expected that the longer the first relationship lasted, the higher would be the "capital" acquired in terms of being able to manage a relationship as a couple, and that this would have a positive effect on the likelihood of forming a new relationship. Well, this only seems to be true for men: the effect of a short duration compared to those of over 10 years is negative and significant in all countries, but it is positive and non-significant for women, except in Hungary. Vice versa, number of children (indicating an investment on the part of the couple) only negatively influences women's risk of entering a new relationship: what really discriminates women on the marriage market is the fact of having or not having children (the effect of the " 0 children" mode is always positive). Once again, Latin males stand out: those who have had only one child from the first union have a lower tendency to form a new relationship compared to those who do not have any or those who have more than one.

Type of relationship was found to be of little or no importance: probability of entering a new union is practically the same regardless of whether he/she has started the first one with a marriage or with a cohabitation, and there are no significant differences between genders. As expected, the effect of religiousness is strong: those declaring themselves as not practising have higher risks of transition towards a second union than those who attend regular service. It should be noted, however, that contrary to expectation, the only significant effects are in the models on men and not on women, and the only country in which there is no effect is Hungary. Naturally, the significance of the effects of religiousness is lessened by its interaction with respondents' other characteristics, namely age and generation to which the individual respondent belongs.

The influence of employment status at moment of first-union dissolution appears to be of little importance for either men or women. However, it is interesting to note the gender difference: for men (at least in Finland and Italy-Spain), being in a professional condition at the moment of separation significantly increases the chance of finding a new partner, as each element of mobility (changes in status during episode considered, not available for Austria) has a positive effect. For women, on the other hand, the hypothesis of economic independence does not seem to work, if we consider all the other variables together with work: only for Southern European women may the fact of losing one's job after separation significantly increase the propensity to search for a new partner. Education, on the other hand, as an indicator of human capital and thus of potential economic independence, acts in the expected way and with the hypothesized gender differences: the higher it is in the case of women, the rarer and more delayed is transition to the second union, while in the case of men exactly the opposite is true.

## 7 LIVING ARRANGEMENTS AT TIME OF INTERVIEW

Entering a second union is only one of the possible family statuses which the survivor of a broken partnership can fall into. We were interested in seeing what happens to those "not forming a new couple". Unfortunately, the data do not allow us to study the process of family transition in a time dependent fashion. We were forced to limit our analysis to living arrangements at time of interview, always from a gender and country comparative perspective.

The data in Tab. 8.4 show figures in agreement with the starting hypotheses about gender differences in "family destinies" after splitting up; they also provide evidence of the expected inter-country and inter-generation heterogeneity. Most men are in a new union at the moment of the interview. Among the men "not in a union", the most common condition is that of single status in all countries except Spain and Italy. Here, the youngest generation (born after 1965 and aged under 30 at the moment of the interview) exhibits behaviour that is entirely consistent within the phenomenon of their staying for a long time in the family of origin; the data show a widespread return to their parents' home after the break-up of the first union. Even in Hungary, the phenomenon appears widespread among the youngest, especially for men. In this case, however, the forms of behaviour can be heavily influenced by the unfavourable economic situation: between 1970 and the first years of the 90 's (the survey took place in 1992 and 1993) there have been changes in this country, sometimes operating in different directions. Corresponding to a rapid improvement in the levels of education for both sexes, growing unemployment in the same period has caused the impoverishment of families; in particular pensioners and lone mothers have borne the brunt of social change [Meszaros, 1992; European Parliament, 1998]. Among women, the alternative living arrangement to staying in a couple is that of lone-mother: indeed it is the most frequent family condition for women in the earlier generations, and especially in Italy-Spain. Here, again for women, the youngest prefer (or are forced) to return to the parental home instead of staying single or entering a new couple.

To sum up, gender differences lessen as we move from the countries of Southern Europe towards the Scandinavian area. The spread of divorce and the familiarity with the phenomenon reached at a social level can affect transition to new forms of living arrangements. According to Cherlin [1992], in places where union dissolution takes place more frequently and earlier, post-divorce status does not necessarily imply forming a new couple or remaining a lone parent, but may include other forms of living arrangement. On the other hand, in countries where divorce is less common, society is also less ready to face the consequences of a union's dissolution, the costs of which continue to be borne by women and by intergenerational solidarity.
Table 8.4. Living Arrangements at Interview by Gender, Country and Birth Cohort (Percentages)

| Birth cohort | Age at interview |  | Living arrangements at interview |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | In parental home |  | Lone-parent |  | Single |  | In union |  | Total cases |  |
|  | Women | Men | Women | Men | Women | Men | Women | Men | Women | Men | Women | Men |
| Italy |  |  |  |  |  |  |  |  |  |  |  |  |
| $\leq 1954$ | 41-49 | 41-49 | 5.7 | 10.0 | 53.8 | 5.0 | 12.3 | 15.0 | 28.3 | 70.0 | 106 | 20 |
| 1955-64 | 31-40 | 31-40 | 12.6 | 32.3 | 42.7 | 9.7 | 9.7 | 32.3 | 35.0 | 25.8 | 103 | 31 |
| 1965+ | 18-30 | 20-30 | 44.7 | 85.6 | 14.9 | - | 17.0 | 7.2 | 23.4 | 7.2 | 47 | 14 |
| Spain |  |  |  |  |  |  |  |  |  |  |  |  |
| $\leq 1954$ | 41-49 | 40-49 | 11.1 | 0.5 | 56.5 | 0.5 | 11.1 | 30.0 | 21.3 | 60.0 | 108 | 40 |
| 1955-64 | 31-40 | 30-39 | 18.8 | 25.0 | 30.8 | 3.1 | 7.7 | 20.3 | 42.7 | 51.6 | 117 | 64 |
| 1965+ | 18-30 | 19-29 | 33.3 | 48.6 | 10.7 | - | 31.0 | 29.7 | 25.0 | 21.6 | 84 | 37 |
| Austria |  |  |  |  |  |  |  |  |  |  |  |  |
| $\leq 1954$ | 41-54 | 41-54 | 2.1 | 4.2 | 39.3 | 10.1 | 20.8 | 28.6 | 37.9 | 57.1 | 433 | 119 |
| 1955-64 | 31-40 | 31-40 | 1.3 | 5.6 | 41.2 | 6.5 | 8.4 | 24.2 | 49.1 | 63.7 | 381 | 124 |
| 1965+ | 20-30 | 20-30 | 12.2 | 7.5 | 27.8 | 6.3 | 21.4 | 32.7 | 38.6 | 53.5 | 295 | 90 |
| Hungary |  |  |  |  |  |  |  |  |  |  |  |  |
| $\leq 1954$ | 38-41 | 39-45 | 5.1 | 12.7 | 44.9 | 9.1 | 6.2 | 27.3 | 44.4 | 50.9 | 178 | 110 |
| 1955-59 | 33-37 | 34-38 | 6.7 | 22.0 | 38.1 | 1.2 | 5.2 | 24.4 | 50.0 | 52.4 | 194 | 82 |
| 1960+ | 18-32 | 19-33 | 22.1 | 36.9 | 25.1 | 1.9 | 10.3 | 16.5 | 42.4 | 44.7 | 271 | 103 |
| Finland |  |  |  |  |  |  |  |  |  |  |  |  |
| $\leq 1949$ | 40-52 | 45-49 | 0.2 | 6.9 | 34.2 | 11.1 | 21.9 | 27.1 | 43.6 | 54.9 | 415 | 144 |
| 1950-59 | 30-39 | 35-39 | 0.6 | 5.0 | 33.7 | 5.0 | 10.7 | 34.0 | 54.9 | 56.0 | 335 | 141 |
| 1960+ | 22-29 | 25-29 | 3.7 | 4.0 | 17.9 | 2.0 | 37.8 | 40.4 | 40.6 | 53.6 | 217 | 99 |

Note: Row percentage.

## 8 CHANGES IN EMPLOYMENT STATUS

In this part of the paper, we asked whether splitting up also has an impact on the professional condition of individuals and if this happens differently between men and women. The aim is to analyse the first change in conditions after the break-up of the first union (work-not work, not work-work, work-job change) if individual characteristics and changes in partnership are held constant. At the moment of splitting up, the majority of women and almost all men were employed. The figures for women only come down for Austria, Italy and Spain. Here the percentage of those who have never worked is fairly high (over 15\% in Italy), and it is not negligible for men either ( $9 \%$ in Austria). In the Eastern countries, as expected, gender differences are minimal, in that over $80 \%$ of women work. As we know, the relatively high frequency of young students who have already started living together is quite a common condition in the Scandinavian countries.

Table 8.5 shows the percentage distribution of men and women after the break-up of the first union with respect to the type of change undergone in employment status after the separation itself, for all the countries analysed here (except Austria, a country for which such information is not available). There is a clear difference between Italy-Spain and the other countries: the proportion of individuals whose condition does not change is over $60 \%$ both for men and for women, whereas elsewhere the proportion stands at around $40 \%$. Furthermore, we find the hypothesized gender difference in the Latin countries: a higher frequency of women starting work after separation, more frequent losses of employment among the men, and greater male professional mobility. In Hungary and Finland, the situation is different: in Hungary, gender differences are practically irrelevant as to mobility, but, like in Italy-Spain, separated women

Table 8.5. First Changes in Employment Status After First-Union Dissolution by Gender and Country (Percentages)

|  | Italy + Spain |  | Hungary |  | Finland |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Women | Men | Women | Men | Women | Men |
| Change |  |  |  |  |  |  |
| No change | 64 | 61 | 44 | 43 | 30 | 39 |
| Not work-work | 19 | 14 | 10 | 5 | 19 | 11 |
| Work-not work | 11 | 15 | 17 | 21 | 25 | 19 |
| Work-change job | 6 | 10 | 30 | 31 | 26 | 30 |
| Sample size | 561 | 207 | 642 | 292 | 966 | 362 |

seek an employment more often than men; in Finland, on the other hand, mobility seems to affect women more than men (only $30 \%$ do not change their condition after separation) and the percentage of women who start working after separation is higher than for men (similarly to the other countries), but that of women losing their job is also higher.

Naturally, these transitions from one professional condition to another become intertwined with the changes in living arrangement. Models for the risks of transition to a second relationship have shown (see again Tab. 8.3) that workrelated changes only moderately affect the passage to a new relationship and only in the case of men.

Let us see now, still with the aid of piecewise exponential models, how entry into a new relationship influences specific changes in employment status in different ways for men and women. The analysis was carried out for Hungary and Finland, because the number of cases relative to Italy and Spain was too small.

The basic hypothesis is that, all other conditions being equal, the formation of a new relationship (introduced as time-varying in the models) might have an effect on professional mobility which is significant for women and nonsignificant for men. In particular, we expect that the women's model will show a positive sign of this effect on the work-not work transition, a negative one on the not work-work transition, and non-significant one for the work-job change transition.

The results shown in Tab. 8.6 widely confirm these hypotheses. The changes in occupational status for men are not influenced at all by the possible entry into a new relationship, except for the work-job change transition in Hungary, which appears to be stimulated by the presence of a new female partner (positive, significant effect). For women, on the other hand, changes in status are all dependent on the situation of the couple, and in the expected direction.

Level of education plays an important role as a mobility factor. It has a positive and significant effect on the possibility of women who are not working at the moment of separation of finding a job, even controlling for the formation of a new couple. It has also a protection effect on the risk of losing one's job for both men and women (negative effect, almost always significant), whereas it seems to offer very little explanation for changes in employment (positive, significant effect only in the case of Finnish males).

The factors that determine professional mobility are certainly much more complex than the individual situation of a couple, and the models utilized here have not been fine-tuned to test specific ad hoc hypotheses. Indeed, the results allow us to strengthen the hypothesis of a significant gender effect of splitting up on employment status in the period following separation.
Table 8.6. Effect of Entry into Second Union on Employment Status Change

|  | Not Work-Work ${ }^{\text {a }}$ |  | Work-Not Work |  |  |  | Work-Change Job |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | FinlandWomen | HungaryWomen | Finland |  | Hungary |  | Finland |  | Hungary |  |
|  |  |  | Women | Men | Women | Men | Women | Men | Women | Men |
| Period 1: $<1$ year | -4.19 | -2.88 | -5.45 | -6.67 | -5.09 | -5.00 | -4.51 | -4.14 | -4.65 | -6.26 |
| Period 2: $>1$ year | -4.42 | -2.81 | -5.62 | -6.90 | -4.56 | -4.84 | -5.25 | -4.19 | -4.83 | -6.11 |
| $2^{\text {nd }}$ union (ref. No) |  |  |  |  |  |  |  |  |  |  |
| Yes | -0.75 | -0.54 | 0.38 | 0.09 | 0.74 | -0.15 | -0.56 | 0.00 | -0.11 | 0.44 |
| Age at first union break up (ref. > 35) |  |  |  |  |  |  |  |  |  |  |
| <25 | 1.62 | -0.14 | 0.93 | 0.50 | -1.50 | -2.09 | 0.61 | 0.64 | -0.15 | 0.68 |
| 25-34 | 1.18 | -0.55 | 0.47 | 0.13 | -0.82 | -1.89 | 0.47 | 0.28 | -0.36 | 0.72 |
| Length of first union (ref. > 120) |  |  |  |  |  |  |  |  |  |  |
| $<24$ months | -0.21 | -0.37 | 0.39 | 0.37 | -0.51 | 1.52 | 0.11 | -0.73 | 0.18 | -0.26 |
| 24-120 | -0.37 | -0.59 | -0.07 | -0.42 | -0.57 | 1.38 | -0.05 | -0.47 | 0.22 | -0.31 |
| Cohabiting children aged under 13 (ref. 2+) |  |  |  |  |  |  |  |  |  |  |
| 0 | -0.49 | 0.36 | 0.31 | 1.37 | 0.23 | -0.10 | 0.16 | -0.66 | -0.12 | 0.52 |
| 1 | 0.01 | 0.74 | -0.18 | 0.83 | 0.00 | -0.62 | -0.10 | -1.08 | -0.11 | 1.15 |
| Birth cohort (ref. < 1950) |  |  |  |  |  |  |  |  |  |  |
| 1950-59 | 0.41 | -0.19 | 0.26 | 0.35 | 0.63 | 0.53 | 0.22 | 0.37 | 0.22 | 0.06 |
| >1959 | 0.36 | -0.39 | 0.13 | 0.33 | 1.29 | 1.53 | 0.68 | 0.90 | 0.31 | 0.46 |
| Level of education (ref. Low) |  |  |  |  |  |  |  |  |  |  |
| Middle | 0.08 | 0.23 | -0.18 | 0.27 | -0.53 | -0.39 | -0.26 | -0.19 | 0.02 | 0.23 |
| High | 1.39 | 1.38 | -0.21 | -1.10 | -1.32 | -1.18 | 0.03 | 0.45 | -0.05 | 0.20 |

[^15]
## 9 CONCLUSION

Women and men who break up follow different destinies after the end of a first union. Men find a new partner more often than women and maintain weaker ties with the children of the previous bond; they experience few changes in life style and their career is rarely affected. This basic hypothesis, strongly supported by common experience and hearsay, is greatly corroborated in the findings of the analyses that we have undertaken in this work.

The survival curves show, generally, greater frequency and speed in the formation of a new relationship for men compared to women.

The multivariate analysis of the risks of transition to a new relationship shows the different roles played by personal characteristics and by experience as a couple in the case of men and women, in terms of the negative effect of ageing for both (but crucial only for women), of the responsibility for children (only for women), of limited experience as a couple (only for men), of lack of resources and social mobility for men and, vice versa, of human capital for women, not to mention religiousness, which acts as a moral restraint, especially for men.

Observation of family status at the moment of the interview demonstrates how, independently from the path followed between the first separation and the survey, women who have come out of a failed first union more often find themselves in the condition of single mothers, whereas men are still part of a couple, or, in Southern Europe, go back to their family of origin.

The study of professional mobility, although limited, confirms the strong link that exists between the situation of a couple and work, in the case of women, and the substantial independence between the two spheres in the case of men.

Finally, international comparison confirms that an institutional and legislative context favourable to an equitable gender system tends to reduce the differences that separate men and women in their final destiny (in Hungary, Sweden and Finland the difference between the survival curves are minimal, as are the differences in living arrangements at the moment of the interview and in professional mobility), but this does not prevent personal characteristics and family responsibilities from acting differently upon the forms of behaviour of the two genders in all the countries, all other conditions being equal.

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## NOTES

1. By definition, the state LAT as a possible way of ending living together suggests that a sentimental tie between the two partners nonetheless exists, despite forced noncohabitation. However a significant number of second unions are observed among both the men and the women in this category, and this has prompted us to retain LAT as a cause of union dissolution.

## CHAPTER 9

# GENDER AND MIGRATION: TWO CASE STUDIES* 

PATRIZIA FARINA AND LAURA TERZERA

## 1 INTRODUCTION

The increase in women's international mobility is one of the recent and most significant traits of the phenomenon of migration. It is also a sign of its coming to maturity. The female invisibility induced by the stereotype of the young, economically motivated male followed by the female wife and mother is giving way to a more detailed and complex picture.

These days, foreign women are not only group-members engaged in looking after the families with whom they have become reunited. Indeed, they are taking on roles which are increasingly active, economically speaking, and there is no longer the previous relationship of mutual exclusivity between care of the family and paid extra-domestic work [Kofman, 1999].

The increase in the number of women immigrants has led to the incorporation of factors which are also decidedly female into the main theories on international migration, such as the desire to escape the constraints associated with traditional roles, or the economic vulnerability determined by gender itself. In this sense, the growth of the number of migrant women has contributed to the development of a gender perspective in studies on international migration, especially concerning push and pull factors and the analysis of family strategies. In the Italian context, the joint existence of women and men in the immigrant population is a relatively recent phenomenon, partly (but not only) due to the stabilization of a considerable proportion of foreigners. The proportion of males is consequently lower, and the foreign population is simultaneously transformed from a sum of individuals into a composite reality, within which there is also a

[^16]notable increase in the number of families [Terzera, 2002]. Such transformations in the types of settlement of the foreign population make the analysis of the phenomenon of migration more complex, if only because it must be recognized that the families which have re-united in this country exhibit hierarchical and organizational systems which are different from those traditional to the country of origin, affected as they are by the experience of migration [Lim, 1994]. Indeed, women immigrants are often called upon to undertake "public functions": they entertain relations with educational institutions and at the same time mediate between different cultures in dealings between institutions, their community and their own family nucleus. They are also the main persons delegated with the possibility of acceding to the health service, for themselves (for medical care, childbirth, abortion) and on behalf of the other members of the family [Castiglioni, 2001]. In other words, women immigrants, although a minority in absolute terms, are decisive in the undertaking of important functions benefiting all those to whom they are linked in emigration, often presenting themselves as a common trait of the various experiences. Indeed, while they are individual subjects with their own instances, as workers, mothers or both, these women also undertake essential functions both for the maintenance of a certain level of quality of life for the nucleus of which they form a part, and for the responsibilities with which surrounding society often charges them [Favaro, Tognetti, 1991].

The protagonism of the women foreigners as a whole is probably the reproposal of the assumption of consolidated gender roles against the backdrop of the scenario of migration, but with a decidedly original character compared to what might normally be expected in the countries of origin: the world of women in emigration is more heterogeneous, and of greater interest, than that of men, at least as far as the potential wealth of situations of contact with the host population and therefore opportunities for socialization is concerned [Piccone, Saraceno, 1996; VV.AA., 1994]. The intensity of such contacts obviously depends on many different factors, such as the type of employment, migration plan and expectations of each woman, the type of family of which they form a part, their culture of origin, etc. Situations of extreme malaise can arise from the combination of each of these elements, such as prostitution, or "segregation" in the homes of the elderly, as can circumstances which are more favourable and profitable. For example, foreign women are normally expert weavers of a network of relations outside and inside their own community, thanks to the use of spontaneous or organized associations. They find forms of aggregation and communication which are suited to both their material needs (information and concrete assistance) and their immaterial ones (mainly to escape from solitude and homesickness). In addition, this network also satisfies their needs for play and recreation, which helps to banish both the image of the woman who is unhappy because she comes from an illiberal culture and that of the woman who
has escaped slavery simply by virtue of having reached Italy, a country which is economically developed and therefore balanced as far as gender is concerned ${ }^{1}$ [Tacoli, 1999; Kelson, DeLaet, 1999].

The abandonment of such interpretations, which greatly oversimplify the situation of male and female migration, and the introduction of a systematic and relational perspective of the phenomenon is the starting point of this chapter. We propose to establish whether there are any gender differences between men and women from two different countries, Ghana and Egypt, whether these change due to the experience of migration and, if so, how much and in what direction this event changes the position of each of the persons involved compared to the others.

## 2 DATA AND METHODS

The data used ${ }^{2}$ derive from a project promoted by Eurostat and the Netherlands Interdisciplinary Demographic Institute (NIDI) with the aim of identifying the push and pull factors determining international migration flows ${ }^{3}$. Two nationalities of migrants were considered for each nation of arrival. In the case of Italy, these were Egypt and Ghana, two culturally different realities characterized in the main by different migration plans.

In order to determine the push and pull factors, the different nationalities were captured in the countries of origin (Egypt and Ghana) and in those of destination (Italy) through samples representative of the populations under study ${ }^{4}$. Almost identical questionnaires were issued to respondents in the different countries (subjects aged between 18 and 65), which made it possible to compare three types of individuals: current migrants (Egyptian or from Ghana) in Italy (IM), return migrants (MR), i.e. individuals with a previous experience of migration to another country (not necessarily Italy), and non-migrants, i.e. persons who had never migrated (NM). In other words, three distinct contingents with respect to the experience of migration and the place in which they were interviewed.

The total sample size was equal to 10,126 respondents (Tab. 9.1). About $15 \%$ of which represents the sample of individuals having emigrated to Italy ( $68.3 \%$ Egyptian and the remaining $31.7 \%$ from Ghana). Of the interviews conducted in Ghana, two thirds of respondents were non-migrants, a proportion which rises to $73.6 \%$ in the case of the sample constructed in Egypt. It should also be remembered that some of the questions were not put to the entire sample, but only to those persons identified as "family representatives" or potentially so, thus obtaining a subsample consisting of $77.5 \%$ of respondents.

Given the sampling techniques used and the aims of the Eurostat/NIDI study, the subdivision as to the type of experience of migration (no experience, currently migrated, previous migration) is not representative of the effective

Table 9.1. Samples Size, by Gender and Migratory Experience

|  |  | Migratory experience |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  | Residents | Migrants | Repatriates | Total |
| Egypt |  | 1,934 | 530 | 906 | 3,370 |
|  | Men | 2,988 | 179 | 152 | 3,319 |
|  | Women | Total | 4,922 | 709 | 1,058 |
| 6,689 |  |  |  |  |  |
|  | Men | 945 | 583 | 236 | 1,764 |
|  | Women | 1,343 | 236 | 94 | 1,673 |
|  | Total | 2,288 | 819 | 330 | 3,437 |

situation in the countries observed. However, this does not distort the analysis, because our interest is concentrated on the degree of discrepancy between the genders for each of the three distinct types of experience ${ }^{5}$.

The questionnaire is structured in two parts: the first concerns information about the family (composition of nucleus, housing, economic status, remittances, etc.), the second concentrates on individual characteristics (social and demographic characteristics, employment, migration history, support networks, etc. $)^{6}$. This made it possible to identify four spheres of analysis, each of which captures a fundamental aspect which is complementary to the others in order to analyse gender differences and their potential variations owing to the experience of migration. These spheres were studied in all the geographical contexts taken into consideration thanks to the construction of indicators deriving from the synthesis of a series of pre-existing variables. In particular, the indicators were determined by means of the combination (arithmetical or logical, depending on the type of variable) of the different values.

The spheres identified and the variables utilized in order to define them were as follows:
a) Social status. Two indicators were constructed: the first considers variables traceable to the family economic situation, and is the result of the combination of variables inherent to type of housing conditions (separately at home and in the place of migration) with variables relative to availability of a series of instrumental assets (use and possession of telephone, television, etc.); the second focuses on the participation of the individual in the labour market: the corresponding indicator is constructed by combining variables concerning occupational status, type of employment and professional status.
b) Migration dynamics. Two indicators were also identified in this case: the first concerns migration capacity, as defined by individual propensity to migrate, reason for migration and autonomy of the decision to migrate. The second
indicator, strength of network, focuses on the relations activated by migrants between country of origin and host country. A distinction was also made between strictly material aspects (remittances) and those regarding networks of support and help for migration.
c) Cultural dimension. This label comprises variables expressing the respondent's opinions on various subjects, many of which are closely related to the dimension of gender. In particular, three synthetic indicators were identified: the first concerns the attitudes with which the different situations of life are tackled (fatalism, resignation, activism, combativeness, etc.); the second is centred on opinions concerning forms of gender discrimination in contexts such as education (for boys $v s$ for girls), work (for women) and emigration (of young and single women); the third regards opinions on roles in the couple, with particular attention to decisions of a financial nature and to woman's obedience to her husband.
d) Social integration. This aspect draws attention to the individuals' ability and desire to build relations and contacts outside the family nucleus. In this sphere we aim to analyse the level of involvement with and propensity towards a series of activities of different types, all characterized, necessarily, by autonomous contact with "the outside world". Three variables/indicators were taken into consideration: the first concerning participation in activities (recreational, political, religious, etc.); the second concerning the various contacts, or relations, created in social life for immigrants from Egypt or Ghana in Italy (with fellow nationals, Italians, or foreigners of other nationalities); the third regards the ability to turn to persons or bodies external to the family context for loans, in the case of financial need.

The study is divided into three phases. First, the socio-demographic conditions of the two countries are described. Then there is a descriptive analysis, focusing on the four spheres (social status, migration dynamics, cultural dimension and social integration) with a view of highlighting different conditions and forms of behaviour among the nationalities and genders and as regards individual migration experience. In order to identify specific profiles of the different dimensions introduced, we used multidimensional methods of analysis, allowing for the identification of types associated by distance from the barycentre, i.e. from the average profile.

Then, on the basis of the indications which emerged at a descriptive level and with a view of testing the study hypothesis, we proceeded with the application of a model of logistic regression ${ }^{7}$ aimed at evaluating the explanatory capacity of certain variables in determining the construction of the asymmetries. To this end, we constructed a dependent variable, termed "asymmetry", synthesizing the relational aspect, i.e. the perception of oneself (man/woman) with respect to the other (woman/man) ${ }^{8}$. This was possible through reference to the questions
implying a judgement on what it would be best for men and women to do in certain circumstances, i.e. some variables from the sphere of the cultural dimension ${ }^{9}$. The combination of these variables produced an indicator which takes on its lowest value (0) in the situation of greatest imbalance and its highest value (7) in that of perfect equilibrium. Having tested that the differences of the "asymmetry" variable with regard to nationality, sex and migration experience were not attributable to chance, we proceeded, having first dichotomized the variable ${ }^{10}$, with the identification of the factors with the greatest influence on these differences, using this regression model.

## 3 EGYPT AND GHANA COMPARED

The possibilities of changing the gender contract through the effect of the migration experience depend largely on the specific nature of the contract itself, i.e. on consolidated asymmetries. For this reason, it seems opportune to highlight in advance certain significant indicators of the differences between men and women's status and the differences between these indicators in the country observed and those at an aggregate level (Tab. 9.2).

An initial comparative element of interest consists of the gap in wealth existing between the two countries: Ghana's GDP is about a third lower than that of Egypt, and the worse economic conditions of the Ghanaian population compared to that of Egypt are only confirmed by other indicators, such as the percentage living below the poverty line, life expectancy at birth and infant mortality. Despite this, Ghana presents relatively better picture if one takes into account gender sensitive indicators such as the percentage of female literacy, the rate of female employment, the presence of women in executive positions in the public administration and the participation of women in politics, which are all indicative of smaller gap between men and women than that recorded in Egypt. This situation confirms the weak association between wealth and women's status ${ }^{11}$ and, on the other hand, highlights two different social contexts: one, the Egyptian one, which tends to be more discriminatory, and the other, in Ghana, which is more balanced, leading us to suppose that relationships and roles will be more asymmetrical in the former.

The notable differences emerging between Egyptians and Ghanaians become less marked as we move from participation in social and political life to "role-related responsibilities". Indeed, the information deriving from the Demographic Health Surveys (DHS) as regards childcare shows that men in both countries only concern themselves with children to a negligible degree, even when their partner works. This task is, on the other hand, undertaken more frequently by the mother or by other women in the family, and it is interesting to note that men's lack of interest in looking after small children is also the result

Table 9.2. Ghana and Egypt Profile, According to Some Economic, Demographic and Gender Indicators

|  | Ghana | Egypt |
| :---: | :---: | :---: |
| Population (millions) | 18.9 | 66.7 |
| Gender Human Development Index | 0.538 | 0.620 |
| Life expectancy at birth | $\mathrm{W}=57.9 ; \mathrm{M}=55.3$ | $\mathrm{W}=68.5 ; \mathrm{M}=65.3$ |
| Mean number of children | 4.6 | 3.4 |
| Average family size | 4.8 | 4.9 |
| Proportion of women-headed families | 37.0 | 13.0 |
| Gross domestic products (\$) | $\mathrm{W}=1.618 ; \mathrm{M}=2.145$ | $\mathrm{W}=1.847 ; \mathrm{M}=4.954$ |
| Population below the poverty threshold (\%) | 31.4 | 22.9 |
| Female activity rate | 80.6 | 34.5 |
| Literacy rates (\% among $>15$ years) | $\mathrm{W}=61.5 ; \mathrm{M}=79.4$ | $\mathrm{W}=42.8 ; \mathrm{M}=66.1$ |
| School participation rate, age group 15-24 | 87.3 | 61.7 |
| Parliamentary seats occupied by women (\%) | 9.0 | 2.0 |
| Women in ministerial top positions (\%) | 9.0 | 6.0 |

Note: $\mathrm{W}=$ women, $\mathrm{M}=$ men. Source: Undp, Wistat, 2001.
of a different process of socialization as children and adolescents, as highlighted by the data concerning the numbers of girls and boys taught to look after their brothers and sisters (Tab. 9.3).

On the other hand, there are no big differences between Ghanaian and Egyptian women in the sphere of women's autonomy, measured by the possibility of spending personal earnings. However, the distance between men and women is really significant in the two nationalities: while $77 \%$ of Ghanaian women enjoy total autonomy in spending their own earnings, this percentage falls to nearly half in the case of Egyptian women, with such decisions tending more to be shared.

The profiles emerging from the information provided by international agencies and surveys such as the DHS are confirmed by the data of the Eurostat-NIDI Survey, which is classified by nationality, gender and type of migration (Tab. 9.4). The most striking gender difference which emerges from these data lies in women's different degree of participation in employment

Table 9.3. Roles and Autonomy in Ghana and Egypt

|  | Ghana | Egypt |
| :--- | :---: | :---: |
| Person taking care of children under 6 years of age | if the mother is working |  |
| Mother | 47.6 | 17.0 |
| Partner | 2.8 | 2.7 |
| Other relatives | 22.1 | 37.0 |
| Institutions | 14.0 | 24.5 |
| Child's sisters | 6.2 | 7.9 |
| Child's brothers | 1.9 | 2.1 |
| Others | 5.4 | 8.8 |
| Total | 100.0 | 100.0 |
| $\quad$ Person deciding how to spend earnings deriving from (married) women's |  |  |
| The women | 76.5 | 33.4 |
| Partner | 7.4 | 2.3 |
| Both | 15.3 | 63.3 |
| Others | 0.8 | 1.0 |
| Total | 100.0 | 100.0 |

Source: DHS, 1995; 1998.
outside the home. Indeed, Egyptian women are far less engaged in working outside the home than their male counterparts or Ghanaian women. Nonetheless, if they have returned from a period of migration, they are more likely to undertake jobs which are on the whole more qualified, such as management or teaching, compared to the employment contracted during migration, usually having consisted of unqualified "indoor and female" activities, e.g. as home helps or waitresses, often in small family-run restaurants ${ }^{12}$.

On the other hand, working experience does not discriminate between men and women of Ghanaian citizenship: at least $70 \%$ of both groups work, independently of whether or not they have experienced a period of migration. Street selling is one of the main activities performed by men and women in the country of origin, but when they emigrate they adapt to jobs which are compatible with local demand: men work mainly in construction, while women meet the demand for family care and services.

The comparison between the two communities according to migration type (non-migrant, currently migrated or return migrants) shows substantial differences between Ghanaian and Egyptian women, already identified in the DHS surveys and national indicators. Indeed, Egyptian women are basically housewives and have lower educational qualifications (especially in the case of women who have never emigrated), even lower than their Ghanaian counterparts.

Moreover, when they do experience migration it is almost always as a couple, because they do not have any plans apart from simply joining their husbands. In general, the difference between Egyptian and Ghanaian women in any migration type is a constantly recurring element originating in the different cultural references and different gender asymmetries produced in the two societies of origin.

## 4 THE SPACES OF THE DIFFERENCES

### 4.1 Dynamics of Migration

The analysis of the dynamics of migration introduces explanatory factors of a social type - individuals and/or collectives - capable of discovering whether and to what extent the reasons for emigration might differ between men and women. For example, the abandonment of the stereotype of the young, economically motivated male, despite the fact that this used to dominate, has also made it possible to identify a female flow which consists not only of those joining their spouses but also of active forerunners. In this sphere of research, the expression "dynamics of migration" refers both to the decision-making process, which is often collective, leading to the identification of the subjects entitled to migrate, the construction of a network and the modalities of participation in this network. As already indicated, this sphere is defined by two dimensions. The first, synthesized by the expression "strength of network" has the goal of measuring any gender differences in the construction of the substance of the network and in its maintenance. The underlying hypothesis of this dimension attributes the function of supporting the family economically mainly to men. They have the role of breadwinner, while more importance is attributed to women as caregivers. The latter are part of a network woven by themselves, with consolidation of the aspects of care and affective relations, to the benefit of their own nucleus.

This dynamic is confirmed by the fact that Egyptian men emigrating to Italy undertake the duty of sending remittances to their families (42.1\% considering both frequent and rare senders, Tab. 9.5) to a much greater extent than women ( $26.3 \%$ in total), who are mainly in Italy to be with their families anyway, while the men are mainly there for reasons of employment and therefore to increase or obtain an income ${ }^{13}$.

The division of roles is not so strict among the Ghanaians. A comparison within the same nationality certainly reveals a greater proportion of women emigrating for family purposes compared to the men. However, there is also a greater degree of economic motivation among the women, and they participate in the sending of remittances back to their country of origin to the same extent as the men, thus confirming a more homogeneous status also in the functions assigned to them.
Table 9.4. General Characteristics of the Egyptian and Ghanaian Sample, by Gender and Migration Typology

|  | Men |  |  | Women |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Residents | Migrants | Repatriates | Residents | Migrants | Repatriates |
|  | Egyptians |  |  |  |  |  |
| Men age | 34.7 | 33.7 | 40.5 | 36.5 | 29.3 | 38.9 |
| \% with partner | 50.2 | 60.8 | 82.7 | 72.0 | 96.1 | 69.1 |
| \% illiterates | 17.9 | 3.4 | 18.3 | 43.2 | 5.6 | 5.9 |
| \% employed | 72.3 | 89.1 | 86.3 | 19.4 | 20.3 | 34.9 |
| Prevalent occupations \% |  |  |  |  |  |  |
| Farmers | 25.9 | - | 21.6 | 25.7 | - | - |
| Building workers | 7.3 | - | - | - | - | - |
| Waiter's assistants | - | 31.0 | - | - | 11.1 | - |
| Cleaning workers | - | 10.9 | - | - | 57.8 | - |
| Dirigents | - | - | 9.4 | - | - | 11.3 |
| Teachers | - | - | - | 14.4 | - | 35.8 |
|  | Ghanians |  |  |  |  |  |
| Men age | 35.1 | 33.1 | 38.4 | 35.2 | 32.0 | 38.7 |
| \% with partner | 53.6 | 66.2 | 69.9 | 58.5 | 71.2 | 69.1 |
| \% illiterates | 4.3 | 1.4 | 2.1 | 14.1 | 2.5 | 16.7 |
| \% employed | 74.4 | 79.3 | 85.1 | 76.3 | 71.9 | 77.5 |
| Prevalent occupations \% |  |  |  |  |  |  |
| Street traders | 16.0 | 9.6 | 21.6 | 23.1 | - | 19.1 |
| Factory workers | - | 35.7 | - | - | - | - |
| Housewife | - | - | - | - | 67.3 | - |
| Caretakers | - | - | - | - | 13.4 | - |
| Teachers | 7.9 | - | 10.8 | 7.8 | - | 12.8 |

Source: Eurostat-NIDI Survey.

In the sphere of the dimension of what has been termed "capacity to migrate", other differences can be underlined, for example as regards subjects' ability to move abroad autonomously, undertaking on their own the decision to migrate taken at the time of expatriation, or their reliance on the existence of relatives in the place of destination. In this case, the asymmetries generate an advantage for women, because their model of settlement implies the preliminary arrival of other subjects who then function as an "assistance centre". From this point of view, the female component is divided by type of reference (Tab. 9.5). among Egyptian women, these are family members in the close sense (chiefly the husband, $58 \%$ ), while Ghanaian women tend to entrust themselves to friends and other relatives (51.2\%).

Men, on the other hand, go abroad more often without any fixed points of family reference, usually putting more stock in networks of friends. In this sphere, besides the differentiation between men and women, we should also point out another important difference between the different types of migration: independently of gender, emigrants who have returned to the country of origin tend more often to declare that they emigrated without any support in the host country. This situation may be explained above all if we consider these individuals as pioneers of a process which today has reached a certain degree of maturity, and which now allows those emigrating to fall back on the network built by those preceding them. The differences between men and women within each community which have already been demonstrated for the migrated population are also confirmed within the class of return migrants, albeit to a lesser degree.

Finally, autonomy should also be included in the dimension of "migration capacities", consisting mainly of having chosen to migrate without having to submit to the decisions of others. The interpretation of the data on this subject is more complicated because as to the type of migration within each nationality, the behaviour among men is homogeneous and in most cases they have made an independent decision to emigrate abroad (Tab. 9.5). This is not the case for the women of either country: indeed, while the decision was autonomous for most of those currently migrated, the decision was usually taken with or by others in the case of women who have returned to their country of origin. It may be the result of a combination of two different elements: a change over time of female roles which has also created the possibility of being more active and totally autonomous in decisions among currently living abroad or the level of autonomous choice declared by them is due to a post factum appreciation of their condition.

Some of the elements described are used to synthesize the dynamics of migration through multiple correspondence analysis ${ }^{14}$ (MCA). Information was selected concerning the incidence of and reasons for migration ${ }^{15}$, each as an expression of ability to migrate. The main reason for emigration (income, family,
Table 9.5. Migratory Dynamics: Network Power and Migratory Potentiality (Percentages)

|  | Egypt |  |  |  | Ghana |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Repatriates |  | Migrants |  | Repatriates |  | Migrants |  |
|  | Men | Women | Men | Women | Men | Women | Men | Women |
|  | Network power |  |  |  |  |  |  |  |
| Migrants' remittances |  |  |  |  |  |  |  |  |
| Never | 89.9 | 81.6 | 57.9 | 73.7 | 73.9 | 57.4 | 37.7 | 34.6 |
| Seldom | 7.4 | 11.8 | 34.3 | 21.2 | 19.6 | 28.7 | 50.7 | 53.8 |
| Often | 2.7 | 6.6 | 7.8 | 5.0 | 6.5 | 13.8 | 11.6 | 11.5 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Persons known before migration |  |  |  |  |  |  |  |  |
| Nobody | 79.7 | 92.8 | 42.8 | 20.8 | 56.4 | 64.9 | 44.2 | 28.5 |
| "Close" family members | - | 3.9 | 0.6 | 58.3 | - | 12.8 | 0.6 | 20.3 |
| Extended family's members | 7.5 | 0.7 | 18.0 | 8.3 | 12.3 | 11.7 | 11.0 | 16.3 |
| Friends | 9.2 | 1.3 | 33.6 | - | 25.4 | 4.3 | 38.6 | 21.1 |
| Various kind of people | 3.6 | 1.3 | 5.0 | 12.5 | 5.9 | 6.4 | 5.6 | 13.8 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Table 9.5. (Continued)

|  | Egypt |  |  |  | Ghana |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Repatriates |  | Migrants |  | Repatriates |  | Migrants |  |
|  | Men | Women | Men | Women | Men | Women | Men | Women |
|  | Migratory potentiality |  |  |  |  |  |  |  |
| Main reason to migrate |  |  |  |  |  |  |  |  |
| Economical | 84.2 | 29.4 | 77.0 | 20.8 | 77.3 | 54.7 | 89.7 | 69.1 |
| Family | 10.3 | 58.8 | 8.1 | 70.8 | 2.7 | 24.5 | 5.4 | 23.6 |
| Other | 5.5 | 11.8 | 14.8 | 8.3 | 20.0 | 20.8 | 4.9 | 7.3 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Who decided to migrate |  |  |  |  |  |  |  |  |
| Mainly the individual | 94.5 | 41.2 | 84.7 | 89.9 | 76.8 | 43.1 | 73.2 | 77.5 |
| Together with others | 3.5 | 35.3 | 14.0 | 10.1 | 14.4 | 41.2 | 25.6 | 21.2 |
| Mainly others | 2.0 | 23.5 | 1.3 | - | 8.8 | 15.7 | 1.2 | 1.3 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Mean number of international migrations | 2.0 |  | 1.2 |  | 2.0 |  | 1.2 |  |

other) and the decision-maker of the same event (i.e. taken independently, with others or by others), on the other hand, constitute the information which is relevant as regards the autonomy of the decision.

The results of this analysis reveal some quite distinct profiles. One is that characterized by female gender when it has submitted to the decision of others to migrate, and left the country of origin mainly for family reasons. This profile contrasts with the male one, which has mainly emigrated by autonomous decision, and for economic reasons. The second dimension, on the other hand, captures migration type, contrasting returned and highly mobile migrants, who are mainly of Egyptian nationality, with the Ghanaians, who are less mobile and tend to be still living abroad.

### 4.2 Social Status

Another area of interest is social status, defined by material living conditions and by participation in the labour market. As far as the first aspect is concerned, regarding the possession of material goods and housing conditions, the experience of migration (whether currently underway or experienced in the past) has improved material conditions among both Egyptian and Ghanaian women, and this is especially true for those Egyptian women who have returned to their home country (Tab. 9.6, 9.7).

The distance between the material conditions of men and those of currently migrated Egyptian women depends on the migration type of the latter who, as we have already suggested, "take advantage" of their husband's initiative in finding acceptable living conditions prior to their own transfer, thus avoiding the situations of greater hardship typical of first settlement. This is less true for Ghanaian women, who have more autonomy of movement, and emigrate more frequently as the principal subjects.

The situation of men is more heterogeneous and varied. In comparative terms, the experience of migration does not contribute to raising the standard of living with the same intensity as for women, and it is certainly not always an instrument for improving social status, because although the number of those whose status has improved is growing, so is that of those living in conditions of hardship ${ }^{16}$.

The second aspect consists of participation in the labour market (Tab. 9.6, 9.7). Egyptian women work less than men, regardless of type of migration. However, they participate more in the labour market if they are return migrants, perhaps thereby indicating a greater capacity of movement - won or conceded - subsequent to the experience of migration.

The Ghanaian group does not follow this path. Women and men differ neither in intensity of participation, nor as to type of employment, at least half
Table 9.6. Socio-Economical Status and Labour Market Participation Among Egyptians (Percentages)

| Egyptians | Men |  |  | Women |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Residents | Migrants | Repatriates | Residents | Migrants | Repatriates |
| Occupational condition |  |  |  |  |  |  |
| Employed | 72.3 | 89.1 | 86.3 | 19.4 | 20.3 | 34.9 |
| Unemployed | 27.7 | 10.9 | 13.7 | 80.6 | 79.7 | 65.1 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Availability of consumer goods |  |  |  |  |  |  |
| Small | 17.4 | 43.8 | 15.8 | 19.0 | 19.6 | 3.3 |
| Medium | 48.8 | 29.4 | 43.7 | 46.8 | 36.9 | 11.8 |
| Large | 35.8 | 26.8 | 40.5 | 34.2 | 43.6 | 84.9 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Housing conditions |  |  |  |  |  |  |
| Good | 75.4 | 85.1 | 80.0 | 73.8 | 98.9 | 98.7 |
| Precarious | 24.6 | 14.9 | 20.0 | 26.2 | 1.1 | 1.3 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Job typology |  |  |  |  |  |  |
| Low status | 43.2 | 45.7 | 49.5 | 50.1 | 22.2 | 98.1 |
| Medium-high status | 56.8 | 54.3 | 50.5 | 49.9 | 77.8 | 1.9 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Perception of one's own condition |  |  |  |  |  |  |
| Positive | 70.6 | 66.9 | 64.9 | 69.0 | 77.0 | 83.6 |
| Negative | 29.4 | 33.1 | 35.1 | 31.0 | 23.0 | 16.4 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Table 9.7. Socio-Economical Status and Participation to the Labour Market Among Ghanaians (Percentages)

| Ghanaians | Men |  |  | Women |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Residents | Migrants | Repatriates | Residents | Migrants | Repatriates |
| Occupational condition |  |  |  |  |  |  |
| Employed | 74.4 | 79.3 | 85.1 | 76.3 | 71.9 | 77.5 |
| Unemployed | 25.6 | 20.7 | 14.9 | 23.7 | 28.1 | 22.5 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Availability of consumer goods |  |  |  |  |  |  |
| Small | 17.5 | 48.7 | 22.0 | 24.5 | 27.5 | 13.8 |
| Medium | 53.2 | 26.2 | 42.8 | 51.2 | 33.1 | 50.0 |
| Large | 29.3 | 25.1 | 35.2 | 24.3 | 39.4 | 36.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Housing conditions |  |  |  |  |  |  |
| Good | 36.3 | 76.9 | 37.0 | 34.8 | 91.1 | 57.0 |
| Precarious | 63.7 | 23.1 | 63.0 | 65.2 | 8.9 | 43.0 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Job typology |  |  |  |  |  |  |
| Low status | 41.6 | 29.4 | 46.8 | 35.7 | 21.1 | 42.6 |
| Medium-high status | 58.4 | 70.6 | 53.2 | 64.3 | 78.9 | 57.4 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Perception of one's own condition |  |  |  |  |  |  |
| Positive | 31.5 | 38.7 | 35.2 | 32.1 | 44.1 | 42.6 |
| Negative | 68.5 | 61.3 | 64.8 | 67.9 | 55.9 | 57.4 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

of which is low-profile. Nonetheless, women seem to benefit more from the experience of migration in this case too, in order to accede to higher-status occupations when they return to their country of origin.

Two important dimensions emerge from the MCA: the first of participation in the labour market, and the second of socio-economic status, through certain significant clusters. The first represents the currently emigrated male employed in a low-status occupation. This group contrasts with that of return migrants, who enjoy better working conditions and greater wealth. However, it should be said that this is chiefly a Egyptian characteristic, since objective material conditions and subjective perception both yield a picture of instability and poverty among Ghanaians. The female universe, on the other hand, is characterized by a non-migrant nature: women are mainly non-migrant and nonemployed, due more to the contribution of Egyptian women that to that of the Ghanaians, who are more involved in work outside the home, both abroad and in their home country.

### 4.3 The Cultural Dimension

In order to undertake the analysis of the cultural context, it was deemed useful first of all to identify the different attitudes to life, i.e. those inclinations which are strongly conditioned by cultural background, by traditions and by habits (Tab. 9.8). The distinctive element in this sphere seems to be a strong characterization by nationality: while the Ghanaians have a positive view of life and, above all, attribute the possibility of improving their own status to active attitudes, such a mentality is less common among the Egyptians, who tend to be more fatalistic (among non-migrants over $50 \%$ are passive in attitude).

Proceeding with a more detailed analysis, however, clear differences emerge which are determined not only by place of origin, but also by gender and by undergoing or having undergone the experience of migration. To be specific, with regard to the Ghanaian group, the distinctive elements are: a substantial uniformity of answers between men and women, with a slight increase in the percentage of those (of both genders) with an open-minded conception of life among those individuals who have experienced emigration in the past compared to non-migrant individuals. This latter aspect could have two different origins, both affected by the decision to emigrate, with a connotation which is strongly centred on the will of the individual: on the one hand, subjects who have emigrated may belong to a "selected" population, i.e. they already hold a particular view of life from the start; on the other hand, it could be the very experience of having emigrated which has influenced the change in mentality. This latter hypothesis would appear to be the more plausible, given that the only case which differs from the general pattern may be located, paradoxically, in the
increase in passive attitude among Ghanaian men who have currently emigrated, which may be ascribed principally to the idea that it is better to accept what life brings without making any plans.

Bearing in mind that migration from Ghana is distinguished by a strong imbalance between the sexes in favour of males, a more acute passive attitude among men who have currently migrated could be mainly due to the fact that they are the pioneers of the experience of migration, with all the uncertainties and doubts inherent in such a role, and that they have therefore come into collision with a situation which is very different from the one they imagined.

As for the Egyptians, two aspects deserve attention. The first concerns the high degree of gender difference, which may be seen mainly among nonmigrants: 58\% of Egyptian women who have never emigrated display an attitude of renunciation, compared to $37.5 \%$ of men. Moreover, the element which most greatly affects this difference lies in women's "doubts" that it is a good thing to plan their own lives. However, this discrepancy is considerably reduced among migrants, as it is among those who have returned to their home country: it would therefore seem reasonable to suppose that women's experience of migration also has a drastic effect on their view of life, due to its uprooting effect and the dramatic separation from the family of origin, even though it is mainly experienced in the role of co-protagonist.

Confirmation of this may be derived from analysis of the indicator synthesizing the variables relative to opinions on "relationships" between the genders (an indicator which captures both the level of discrimination and asymmetry in couple roles, Tab. 9.8): as many as $67.3 \%$ of Egyptian women with no experience of migration approve of the discrimination of women (compared to $74.5 \%$ of men), but this proportion is halved if emigration has been experienced in the past. On the other hand, there is no analogous change among men: even when they have lived abroad, they remain largely convinced of the desirability of different patterns of behaviour between men and women, to the advantage of the former.

If we analyse the variables giving rise to the indicators considered here ${ }^{17}$, it is possible to identify the factors mainly influencing the asymmetries. In particular, the discrimination of women which exists among non-migrants in Egypt is to be ascribed mainly to relations in the conjugal sphere (for example, $84 \%$ of men and $82.1 \%$ of women think that the husband should take decisions of a financial order, and $63.1 \%$ and $61.1 \%$ respectively think that a wife should even obey her husband when she thinks he is making a mistake). Moreover, a further element of disparity concerns women's autonomy: as many as $95.6 \%$ of men and $93 \%$ of women disapprove of a single woman emigrating. However, this disapproval is reduced, especially among women, if the latter is for the purposes of typically female employment or, even more so, for study. The importance of education seems to be a factor which has been assimilated by women who, in this case,
Table 9.8. Main Features Related to the "Cultural Dimension" (Percentages)

|  | Men |  |  | Women |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Residents | Migrants | Repatriates | Residents | Migrants | Repatriates |
|  | Egyptian |  |  |  |  |  |
| Attitudes towards life |  |  |  |  |  |  |
| Passive | 37.5 | 30.3 | 34.7 | 58.0 | 39.7 | 37.5 |
| Medium | 55.1 | 23.6 | 55.9 | 35.8 | 24.8 | 53.1 |
| Active | 7.3 | 46.1 | 9.4 | 6.2 | 35.5 | 9.4 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Roles inequality |  |  |  |  |  |  |
| High | 74.5 | 46.0 | 71.6 | 67.3 | 29.0 | 36.0 |
| Medium | 18.3 | 33.9 | 18.6 | 21.8 | 48.2 | 31.3 |
| Low | 7.1 | 20.2 | 9.8 | 11.0 | 22.7 | 32.8 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
|  | Ghanaians |  |  |  |  |  |
| Attitudes towards life |  |  |  |  |  |  |
| Passive | 22.2 | 29.7 | 18.5 | 25.1 | 23.8 | 21.2 |
| Medium | 31.0 | 29.0 | 39.2 | 33.5 | 27.6 | 36.5 |
| Active | 46.8 | 41.3 | 42.3 | 41.4 | 48.6 | 42.4 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Roles inequality |  |  |  |  |  |  |
| High | 24.7 | 22.2 | 17.4 | 22.9 | 11.2 | 12.2 |
| Medium | 32.5 | 38.5 | 30.1 | 31.4 | 20.9 | 30.5 |
| Low | 42.8 | 39.2 | 52.5 | 45.7 | 67.9 | 57.3 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

differ considerably from men (only one fifth of women, compared to a third of men, believe that education is more important for boys than it is for girls). Among previously emigrated women, the arguments principally contributing to a reduction of discrimination turn out to be those which concern couple roles and work.

As regards currently migrated Egyptians, the attitude of discrimination against women is considerably reduced in both genders. In this case, the fall is due to a greater willingness to accept both women's employment ( $30.2 \%$ of men and $12 \%$ of women are opposed to this) and the emigration of single women (58.4\% of men and $12 \%$ of women are against) and also to a more egalitarian conception of couple roles. In general, it would seem that migrant Egyptians discriminate less against women compared to at home, perhaps due to a kind of "justification" of the decision to emigrate, given that the main contribution in this sense derives principally from arguments related to life as a migrant, or perhaps due to adaptation to the host society, given that the discrimination returns, especially among men who return home.

As far as the Ghanaians are concerned, there are fewer discriminatory trends in gender relations and smaller contrasts between the two sexes. While it is once again the non-migrant contingent who register the least egalitarian attitudes towards women, these constitute less than a fifth of the population. The elements which in this case weigh most heavily in favour of discrimination concern roles in the couple. Moreover, as in the case of the Egyptians, the factor for which the gender difference appears to be most evident is that of education, an area for which the women of this nationality also appear to have developed a certain degree of awareness ( $30.9 \%$ of men regard education as being more important for boys, compared to $22.5 \%$ of women).

There are more egalitarian opinions on gender relations among those Ghanaians who have experienced or are currently undergoing migration: a more detailed analysis of the variables used to construct the indicator for disparity of roles shows that among those who have returned home, it is mainly in the areas of work or financial management that there has been the greatest change in opinion, with an increase in the participation of the female contingent in this direction. For example, while for former male migrants the distinctive element is a more egalitarian idea of power relations within the couple, women are more affected by the more concrete spheres, such as management of financial decisions within the couple (with a decrease in those who would leave it to the male from $37 \%$ of non-migrant women to $20.5 \%$ of returning migrants) or the possibility of single women's working outside the home (disapproval falls from $37.8 \%$ to $24.1 \%$ ), or equal education for the two sexes.

In the case of currently migrated Ghanaians, the spheres most closely related to this experience have a very great effect, such as the migration and employment of young and single women (e.g. only $18.5 \%$ of men and $9.7 \%$ of women disapprove of a single woman's working outside the home). This may be, as
in the case of the Egyptians, a kind of "defence" of women's condition as a migrant, a condition which does not receive unanimous consent at home.

In simultaneously describing the variables which interpret the cultural dimension, gender, nationality and migration type, the MCA divides individuals sharply according to one dimension of the level of relational equilibrium between the genders. In this case, active attitudes towards life, associated with egalitarian and non-discriminatory opinions with regard to gender, contrast with a non-egalitarian view of relations and relationships between the two sexes and with passive attitudes in tackling the experiences of life. On the other hand, the second dimension is essentially explained by gender and migration type.

Two distinct groups may thus be identified synthetically from this analysis. The first associates individuals, male or female, of Ghanaian nationality, who are currently migrated and display an egalitarian propensity in gender relations and a life-view which does not tend much towards fatalism. This is further confirmation of the existence, among individuals of this nationality, of a more egalitarian gender system, which is reinforced when an experience of migration is underway.

The second group represents subjects characterized by gender contracts which are certainly discriminatory and passive attitudes in the face of life's problems. These characteristics appear to be above all associated with Egyptian women who have never migrated, evidently pointing to the existence of strongly asymmetrical gender contracts among Egyptians which are, nonetheless, accepted by women.

### 4.4 Social Integration

The ability to relate to the outside world in general is more developed among the Ghanaians than among the Egyptians, but the experience of migration gives rise to certain particular features (Tab. 9.9).

There is relatively little ability or desire to participate in activities outside one's own family sphere among Egyptians of either sex, in contrast to Ghanaians, who show a great tendency to participate in activities of this type.

Among non-migrant Egyptians, although this is the sphere in which such participation is virtually absent (generally equal to $4.6 \%$ ), it is men who differ from the corresponding female contingent in their adherence to organizations of a recreational type, albeit in small numbers. However, if there has been an experience of migration in the past, this slight asymmetry is balanced further thanks to the increase in female participation in recreational activities.

Egyptians present in Italy differ substantially in their behaviour from their compatriots at home, with the priority given to religious activity in the case of both genders, although it is precisely in this context that the level of differentiation between men and women becomes more acute, in favour of the former. In this
sphere, currently migrated Egyptian men make a choice which tends to accentuate their bond with the values and specific traits of their own culture, through religious activity, which is characterized by these prerogatives ${ }^{18}$.

The social participation of the Ghanaians surveyed in their country (i.e. those who have never emigrated or who have returned home) is very high both among men and among women (the levels are generally around $90 \%$ ). What distinguishes the two genders in such contexts is the choice of type of activity: women participate in religious initiatives, while men tend towards a greater variety of organizations. In contrast to what has emerged in the case of Egyptians, there is a fall in the level of participation among currently migrated Ghanaians, especially among the men, and they tend to opt for religious activities. So in the case of Ghanaians too, greater participation in functions of a religious type is also indicative of a need among those who are far from their country of origin to reinforce their own cultural identity and keep it alive and, perhaps, to provide a surrogate for the absence of the points of recreational aggregation which are otherwise widespread in their home country.

Neither of the nationalities display any of the female propensity towards contacts with structured associations otherwise indicated in several other sources (see introduction). This may be for two different reasons. The nationalities examined here may not be representative from this point of view of the behaviour of immigrant women as a whole. A more simple explanation may be that the case history proposed in the questionnaire indicates neither services (health, education, etc.) nor free associations, i.e. those forms of relating with the outside world which are actually the most common among foreign women.

When it comes to financial assistance, the gender difference is sharper. Women tend mainly to go to their "immediate" family, especially if they are Egyptian, and this trend on the part of women is accentuated further still among currently migrated Egyptian women, while in the case of Ghanaian women in Italy there is a drastic reduction in the corresponding proportion, even though it is always higher than the proportion of males. The difference in behaviour of currently emigrated women may be explained most probably by the different migration project: Egyptian women migrate mainly for family reasons, they are mainly housewives and they have fewer contacts with the outside world compared to Ghanaian women, who also emigrate for reasons of employment and have both a greater range of potential acquaintances and greater economic responsibilities.

Among men, especially Ghanaian men, the number of subjects turning to family members in case of financial need falls when they are in Italy. This may be explained not so much by a change in mentality as by their separation from their families. Indeed, in the case of both nationalities, men's only alternative to asking their often absent family for money is to ask other relations: assistance from
Table 9.9. Main Features Related to "Social Integration" (Percentages)

|  | Men |  |  | Women |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Residents | Migrants | Repatriates | Residents | Migrants | Repatriates |
|  | Egyptian |  |  |  |  |  |
| Activities |  |  |  |  |  |  |
| Any participation | 91.1 | 67.7 | 88.7 | 98.2 | 82.5 | 90.8 |
| Religious offices | 0.7 | 19.4 | 1.0 | 0.5 | 15.3 | 0.7 |
| Other or more activities | 8.2 | 12.9 | 10.3 | 1.3 | 2.2 | 8.5 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Asking for a loan |  |  |  |  |  |  |
| To close family members | 64.2 | 32.2 | 54.1 | 73.4 | 81.8 | 81.7 |
| To other relatives or friends | 30.2 | 52.0 | 38.2 | 24.9 | 12.4 | 15.4 |
| To banks or institutions | 5.6 | 15.8 | 7.7 | 1.7 | 5.8 | 2.9 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Contacts |  |  |  |  |  |  |
| Only with compatriots | - | 36.3 | - | - | 59.4 | - |
| Compatriots and natives | - | 44.3 | - | - | 28.0 | - |
| Other contacts | - | 17.4 | - | - | 9.1 | - |
| Any contact | - | 2.0 | - | - | 3.5 | - |
| Total | - | 100.0 | - | - | 100.0 | - |
|  |  |  |  |  |  | (cont.) |

Table 9.9. (Continued)

|  | Men |  |  | Women |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Residents | Migrants | Repatriates | Residents | Migrants | Repatriates |
|  | Ghanaians |  |  |  |  |  |
| Activities |  |  |  |  |  |  |
| Any participation | 12.7 | 48.7 | 11.0 | 13.8 | 40.8 | 10.6 |
| Religious offices | 22.9 | 34.8 | 20.8 | 35.3 | 50.7 | 41.5 |
| Other or more activities | 64.4 | 16.5 | 68.2 | 50.9 | 8.5 | 47.9 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Asking for a loan |  |  |  |  |  |  |
| To close family members | 50.4 | 15.4 | 43.8 | 61.9 | 33.5 | 65.0 |
| To other relatives or friends | 26.3 | 63.9 | 25.2 | 22.6 | 48.1 | 13.7 |
| To banks or institutions | 23.3 | 20.7 | 31.0 | 15.5 | 18.4 | 21.3 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Contacts |  |  |  |  |  |  |
| Only with compatriots | - | 61.1 | - | - | 55.3 | - |
| Compatriots and natives | - | 31.7 | - | - | 32.7 | - |
| Other contacts | - | 6.9 | - | - | 9.7 | - |
| Any contact | - | 0.3 | - | - | 2.3 | - |
| Total | - | 100.0 | - | - | 100.0 | - |

formal organisations such as banks or similar institutions is always a limited option, especially for Egyptians.

Finally, if we examine the social network created as migrants (Tab. 9.9), which is highly developed for both nationalities, the most interesting element is the kind of contacts effectively established. Relations only with compatriots, as opposed to more variegated relations, are more frequent among Ghanaian men and among women of both nationalities. As a result, there is an accentuated gender difference among Egyptians, caused on one hand by the female preference for relations with compatriots and on the other by the multiethnic nature of relations in the male sphere, while among the Ghanaians there is substantial homogeneity between the genders.

The descriptive multivariate analysis highlights two dimensions: one which is representative of the level of openness in interpersonal relations ("relational openness") and another which is centred on the propensity for contacts with formal or informal institutions. In this case, we may identify four profiles, characterized by different levels of "openness" towards the outside world. In particular, the first group may be identified with total closure: the absence of relations other than those internal to the family among currently migrated individuals is associated in this case with an equally low propensity to turn to subjects other than the components of one's own family nucleus in the case of financial need, and the presence of women is predominant in this type. In contrast, we have the group which may be defined as "open" and consisting of individuals more inclined to turn to subjects other than family members in the case of economic difficulties and to participate in various activities relating to the outside world, excluding religious functions. It is men, on the other hand, who predominate in this subgroup.

The other two profiles may be located in intermediate positions and are to be distinguished mainly by their different nationalities. Associated with the Egyptians are not only contacts with their compatriots but also with Italians, even though they show little propensity to practise any kind of outside activity; Ghanaians seem more closed towards the local population and more inclined to participate in activities, such as religious observance, which reinforce their ties with the homeland.

## 5 THE DETERMINANTS OF THE ASYMMETRIES

The descriptive analysis has highlighted concrete differences between the nationalities and the migration types, corresponding to characters of a different nature, ranging from attitudes to life to participation in the labour market, from the level of family wellbeing to social life. With the introduction into the
analysis of the dimension of gender, the picture becomes more complex, because in some cases the differences are accentuated and in others they are attenuated.

The varying impact of the gender dimension may be assessed through the opportune use of the variable "asymmetry", as defined in section 2, as it captures the relational aspect of the subjects involved, assuming values which grow as gender differences decrease ${ }^{19}$.

Table 9.10 confirms what already emerged in the description of the cultural dimension. Overall, Egyptians display a greater tendency towards gender asymmetries compared to Ghanaians. On the other hand, the distances between men and women in each nationality and for all the migration types reveal differences which are not casual ${ }^{20}$. In particular, women exhibit a more egalitarian attitude (especially among the Ghanaians), and the experience of migration is revealed to have a positive influence in determining a more balanced level of relations between men and women, independently of nationality and of gender itself.

The existence of differences which may not be attributed to chance legitimizes the assessment of the effect of some variables which jointly determine the differences. To this end, we made use of the model of logistic regression, which makes it possible to estimate the effect of some of the independent variables, suitably chosen, on the "asymmetry" variable. The independent variables were selected on the basis of the results of the descriptive analysis and taking account of the empirical evidence in the existing literature. The following specific variables were observed: structural variables (generation, marital status, educational qualifications, sex), a context variable (nationality) and a variable for migration type.

The results, illustrated in Tab. 9.11, confirm the hypotheses already formulated. Indeed, the fact of being Egyptian or Ghanaian is the most important element of explanation in the analysis. This may be attributed to the fact that the Egyptian cultural context is strongly marked by gender asymmetries, due to a system of values and behaviour which makes a fundamental distinction between female and male roles, with few possibilities of exchange, even if only partial ${ }^{21}$.

Table 9.10. Medians of the Variable "Asymmetry" ${ }^{\text {a }}$, According to Nationality and Migratory Typology

|  | Egyptians |  |  | Ghanaians |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Men | Women |  | Men | Women |
| Residents | 3.08 | 3.46 |  | 5.05 | 5.52 |
| Migrants | 4.17 | 4.85 |  | 5.42 | 6.46 |
| Repatriates | 3.34 | 4.44 |  | 5.07 | 5.80 |

Note: ${ }^{\mathrm{a}}$ The variable may range between 0 and 7 .

Table 9.11. Logistic Regression: Determinants of Gender Asymmetries

| Variables | $\beta$ | $\operatorname{Exp}(\beta)$ |
| :--- | :---: | :---: |
| Nationality (Egypt vs. Ghana) | -2.281 | $0.102^{* *}$ |
| Migrant typology (NM vs. IM) | -0.329 | $0.719^{* *}$ |
| Migrant typology (MR vs. IM) | -0.921 | $0.398^{* *}$ |
| Socioeconomical status (low vs. high) | -0.394 | $0.675^{* *}$ |
| Education (low vs. high) | -0.892 | $0.410^{* *}$ |
| Education (medium vs. high) | -1.609 | $0.200^{* *}$ |
| Age (30-39 vs. <30) | -0.031 | 0.970 |
| Age (40+ vs. <30) | 0.108 | 1.114 |
| Marital status (with partner vs. single) | -0.160 | $0.852^{*}$ |
| Sex (M vs. W) | -0.795 | $0.451^{* *}$ |

Note: $\alpha<0.001^{* *} . \alpha<0.01^{*} .-2 \log =7878.287 . \mathrm{R}^{2}($ Nagelkerke $)=0.38$.

Education is one of the factors which influence emancipation, and it may change gender relations in the direction of a more balanced situation. In effect, this study also confirms the preponderant effect of this variable. In particular, we may note that as educational qualifications increase, discrimination decreases, probably precisely as a result of the greater autonomy deriving both from the wider availability of intellectual instruments and from the presumed ability to procure an income and hence to exercise bargaining power within the couple or the family.

The experience of migration appears to be another significantly important predictor. The ability to induce a change in the gender system may, however, be principally ascribed to the case in which the subjects are currently undergoing the experience. The change may be produced by different causes, which may be identified both in separation from the cultural environment of origin, which tends to be less egalitarian, and - above all - in the changes caused by forced and incidental situations which lead both men and women to face completely new situations and tasks. For example, these include the economic needs which force a woman to work outside the home, an option which they themselves would have rejected at home, or which other people would have judged undesirable. Furthermore, the role of cultural mediator assigned to currently emigrated women - in relations with educational authorities, the health service, etc. - may have a double effect: it may increase women's perception of their own usefulness and value, and it may uncover potential abilities otherwise limited to the family environment.

These dynamics, common to both cultures, are enriched in the case of the Ghanaians by a further aspect, which concerns the cases of women who have emigrated on their own, with their own career plans, and who reinforce their autonomy in experiencing the adventure of migration as protagonists. On the other
hand, the condition of currently migrated men - with no family and co-residing with other men, and therefore obliged to look after themselves and undertake tasks normally delegated to women - may contribute to the alteration of consolidated roles, or at least to the formulation of less traditional opinions as regards women's world. These changes seem, however, to be of a transitional nature, as those who have returned home, while still displaying attitudes which are less discriminatory than those of non-migrants, nonetheless appear to partially "forget" their experiences, with a return to more traditional patterns of behaviour. The intensity of the dynamics described is correlated with the economic status of individuals and their families. Generally speaking, socio-economic status has an effect, though not a strong one, on the gender system in the sense that the balance between men and women increases as wellbeing improves.

Structural variables such as marital status and generation do not appear to have a significant effect on gender asymmetries. On the other hand, the variable "sex" does, in its differentiation of a discriminatory value system. Even though its explanatory capacity is weaker than that of other variables, its significance nonetheless confirms that the division of roles and the associated asymmetries are, at least in part, also accepted among the female population.

## 6 CONCLUDING REMARKS

This contribution confirms the effect of the migration event on relations between men and women as encouraging the attenuation of the asymmetries present in their cultures of origin.

The results were obtained by observing three distinct groups, each characterized by a different experience as regards migration. The first includes persons who have migrated abroad in the past but returned to home country; the second consists of foreigners currently living in Italy; the third group is identified by subjects who have never migrated. This subdivision is effective as it has made it possible to isolate the "never emigrated" group which, as such, is a good expression of the characteristics deriving from the socio-cultural context of origin. If we accept the hypothesis that the latter is a patrimony shared by the populations observed, then the comparison between the three types makes it possible to measure the effect of migration on the active gender system.

The subdivision effectively highlights the capacity of the experience of migration to attenuate role asymmetries between men and women and to increase women's autonomy. This result is evident if we observe the positions of men and women within the dimensions of status, migration dynamics, social integration and the value system. In particular, currently migrated women are more often the protagonists as regards their own life choices - they have a more positive conception of work outside the family home, as a means of personal fulfilment as well as
of supporting the family, they are more inclined to regard education as a benefit, also for themselves and their daughters, and they are more likely to be playing a leading role in any plan to migrate. Moreover, these features appear to alter precisely in the direction of more egalitarian relationships according to the type of experience. Indeed, the greatest distances are to be found between those who have never emigrated and those who are currently abroad, while women and men who have returned home (especially the latter) are in an intermediate position, apparently partially "forgetting" the balancing effects of the experience of migration. This may derive from the fact that upon re-entry to the home country, men fit back more easily into an environment advantageous to them, an expression of substantially shared values, which has been partially abandoned during migration in order to adapt to the change in material and psychological circumstances. This process can be conditioned by a selection effect, namely the returned migrants considered the cultural environment of the host country far from their values and this moved them back. In any case, this potential selection effect seems to act more lightly between women. In fact, they also follow the same pattern, partly forgetting the experience of migration. Nonetheless, this process takes place in a decidedly attenuated form, due probably to the objective disadvantage associated with adherence to the value system prevailing in their home country.

Independently of migration type, gender differences are very evident and are all the more marked when they refer to material conditions. For example, this is clear in participation in the labour market, or in the sending of remittances, but differences also persist when men and women are asked to define their own position or perception of themselves with respect to the other person, and also in the disparity of roles and in the general attitude to life. This circumstance holds above all for Egyptian women, who are more likely to share and approve of a value system which assigns them a position which is certainly subordinate.

In general, asymmetries are to the advantage of the male population; in spite of this, they are approved by women, with the exception of anything regarding material stability and social relations in the host country. These exceptions are the result of the different model of settlement of migrant women (especially if Egyptian), who have often reached Italy at a later stage than their "pioneering" menfolk.

In the last analysis, what emerges from the results is the importance of the experience of migration in undermining traditional gender roles and relations, and all the more so if the original contexts are very discriminatory. Indeed, this study seems to indicate that the effects of migration are more significant when the differences between original and host environments are more marked.

## NOTES

1. The literature is copious: among others, cf. G. Favaro, M. Tognetti Bordogna 1991; G. Vicarelli, 1994; C. Sweetman, 1996; F. Balsamo, 1997; M. Tognetti Bordogna, 2001; M. Castiglioni, 2001.
2. The authors are grateful to Paola Redaelli and Daniela Negrini for having partially prepared the data utilized.
3. The study was co-ordinated in Italy by the IRP-CNR (National Research Council's Institute of Population Studies). We would like to take this occasion to thank both the staff of the NIDI for having conceded the use of data concerning surveys conducted in Ghana and Egypt and Giuseppe Gesano for having permitted the use of data regarding interviews conducted in Italy and for having passed on the request to the NIDI.
4. The samples are representative, even though different sampling techniques have been used. The Italian sampling design is a two-stage. In the first level the provinces have been sampled on the basis of available data and the ex-ante knowledge. At the second level Egyptian and Ghanaian migrants have been sampled through the Center Sampling method. For further informations see VV.AA, 2000. In the sending countries, teams were advised to purposively identify four regions by using a combination of the following criteria: 1) High versus a low level economic development, 2) an established versus a recent migration history. The focus in sending countries was on the sampling of migrants to any international destination as well as non-migrants and in each of the four types of regions that were deduced from this criterion, independent multistage stratified disproportionate probability sampling took place to sample this target population for the survey. More details in VV.AA., 2000.
5. On the other hand, it should be remembered that the different stages of mobility (nonmigrants, currently migrated, return migrants) do not refer to the same individuals surveyed at different points in time, but to different groups. This evidently constitutes a limit deriving from the design of the survey, as the subjects with experience of migration may be selected. However, the results which will be illustrated further on clearly show that there are differences not only between those who have never moved and current or previous migrants, but also between the latter two, thus confirming the legitimacy of the analysis.
6. The questionnaires were filled out by interviewers. If not all respondents could be reached, some household members ended up answering not only for themselves but also as proxy, on behalf of other household members.
7. The SPSS programme was used for this procedure, as it was for the multivariate analysis.
8. This choice was also affected by the lack of information on the couple and/or the family in the groups of non-migrants and return migrants, which made it impossible to include information on family histories in the analysis.
9. The questions considered are: "Do you believe that education is more important for boys than for girls?" $(0=$ yes; $1=$ no $)$; "Do you think that a young married woman may be allowed to work outside her house?" $(0=$ no; $1=$ yes $)$; "Do you think that it is the husband's responsibility to take decisions concerning the family budget?" ( $0=$ yes; $1=$ no); "Do you think that important decisions are always to be taken by the husband
and wife together?" $(0=$ no; $1=$ yes $)$; "Do you think that a wife should obey his husband even if she thinks he's wrong?" ( $0=$ yes; $1=$ no).
10. Modality zero for all cases in which the value assumed by the variable "gender" is lower than the average value, modality 1 in all other cases.
11. The comparison is naturally between countries of the poor world. In this context, there may be a very broad gap from country to country in terms of women's status, but a direct relation is not always established between economic-financial status and conditions of equality and emancipation.
12. The Egyptian community present in Italy is one of the earliest to have settled, and many of its characteristics are known, for example the tendency to settle in metropolitan areas and the tendency to set up business or trade in the catering sector.
13. The reference is to the case of Italy, and it is confirmed by the statistics on sojourn permits which are issued and classified by purpose of sojourn. Of course, such a purpose may also be declared by women desiring to leave their country for more than one reason.
14. Multiple correspondence analysis (MCA) is a technique of factor analysis which makes it possible to illustrate the relations between the categories of a set of nominal variables in terms of association among them.
15. Over two experiences of international migration was defined as being high in number, two as being average and a single experience of migration as being low. Non-migrants are obviously excluded.
16. The questionnaire also includes the question "On the whole, the financial status of your family is more than sufficient, sufficient, only just sufficient or insufficient?" On the basis of the answer, a variable of measured consistency was constructed, by comparing it with objective material conditions. Ghanaian men and women, especially if currently emigrated, tend to underestimate their objective status.
17. In the pages which follow, we shall give the percentages of some of the modalities of the variables used for the construction of the indicators "attitudes", "discrimination" and "roles in the couple".
18. It is possible that the decision to frequent religious organizations is affected by the scarcity, in the host country, of centres of any other nature.
19. See note 54 .
20. The Mann-Whitney statistical test was used for this purpose.
21. The system of values in both countries is affected by religion. Unfortunately, this information was not available in the case of the Ghanaians sampled at home and therefore could not be used.

## CHAPTER 10

# GENDER AND SUPPORT OF OLDER UNMARRIED PEOPLE IN ITALY AND BRITAIN 

CECILIA TOMASSINI AND KAREN GLASER

## 1 INTRODUCTION

Research on gender has traditionally focused on how gender divisions in work and family life contribute to the disadvantages faced by women, neglecting the existence of gender differences in old age. Recently the balance has been redressed, with studies on gender differences in later life in relation to retirement and poverty [Arber, Ginn, 1995b; Ginn, Arber, 1996]; health [Arber, Cooper, 1999; Kinsella, Gist, 1998]; social networks [Scott, Wenger, 1995]; and receipt and provision of care [Arber et al., 1988; Spitze, Ward, 2000; Velkoff, Lawson, 1998].

This chapter focuses on older people without a spouse, examining their receipt of help (including care) from informal networks and from formal services. This is an important issue since this group lacks the usual primary source of help and support in later life: a husband or wife. This group is also important because it comprises a large proportion of the older population in both Britain and Italy. Thus, among those aged sixty-five and over, in 1998 in Italy 60 per cent of women and 21 per cent of men, and in Britain 57 per cent of women and 28 per cent of men in 2001, were without a spouse. The higher proportion of men in Britain without a spouse is due to the combined effects of greater age gaps between spouses among Italian couples (that is men in Italy are less likely to be widowed) and higher divorce rates in Britain. Although the proportion of older people without a spouse is currently declining slightly in both countries it is projected to rise again in Britain within the next twenty years largely because of increases in divorce [Shaw, 1999].

Several theoretical reasons can be proposed to help explain gender differences in the flows of care between family members in different societies: 1) demographic characteristics, affecting opportunities for different kinds of behaviour; individual physical or mental health, and financial or economic
well-being; 2) the characteristics of family relationships and networks; 3) the nature of the social institutions of housing, social welfare and education in different societies and; 4) cultural factors, particularly beliefs and norms about family behaviour. Each of these will be described more fully.

### 1.1 Demographic Characteristics, Health and Financial Resources

What type of help older people receive depends on key demographic variables which affect people's opportunities for receiving help from family members: namely marital status, and the existence of children, siblings or other relatives. Health is also a key factor in the likelihood of receipt of help. This suggests that there may be differences between older men and women, since women have higher levels of disability in late old age, and are therefore more likely to need (or to be seen to need) help [Arber, Cooper, 1999]. For example, women report a greater use of health services and receipt of home help than men, which may be due to the higher prevalence of poor health among women, or to their possible greater awareness of community or public service provision. Gender differences may also reflect the greater financial resources available to older men which may increase the likelihood that they will live independently or purchase care.

### 1.2 Characteristics of Family Relationships and Networks

There are well documented gender differences in the structure of families and social networks, and exchanges within each of these spheres. Women are consistently reported to have larger and more multifaceted networks than men - they report more friends, and provide and receive more support from members of their network than men. Men tend to maintain close, intimate relationships with only a few people, primarily their spouse. These gender differences in patterns of social exchange appear to be fairly consistent across the adult life span [Shye et al., 1995].

Intergenerational exchanges should also be considered. Help may be provided to older members as reciprocity for past care or material support or in anticipation of future benefit (such as a bequest). Therefore it may be that older people with more resources receive more help from kin [Henretta et al., 1997], or that those who have invested more in their children (usually thought to be women) receive more help [Spitze, Logan, 1990]. Studies that have considered adult children's motivations in helping their mother or father have shown no significant differences in provision of care dependent on the gender of the parent [Silverstein, 1995]. Nonetheless, they have found that
widowed mothers receive more instrumental help from adult children than widowed fathers. Studies also suggest that affection is a stronger predictor when mothers are recipients of support and that support for fathers is more likely to be influenced by instrumental or obligatory concerns [Lawton et al., 1994].

### 1.3 Nature of Societal Institutions

A very different, but key element in the receipt of assistance, are the characteristics of relevant social institutions within different societies. An important institution which will have an impact on older people's independence is the welfare state system. The use of public services differs among European countries, ranging from a maximum of 24 per cent of elderly people receiving public help in Finland to only one per cent in Southern European countries [Kinsella, Velkhoff 2001]. Home care for elderly people is still very rare in Italy, as are support services for caregivers, and there is great regional variability in the general provision of health and social services [Lamura et al. 1999], though recent legislation has been enacted to promote home services. In contrast to Italy and most southern European countries, Britain has a more developed system of social provision for older people in both personal social services and health services [Hugman 1994]. There are few studies on the receipt of private paid help, though it is an increasing source of domestic, personal or nursing help for older people who can afford it [Pickard et al. 2002]. The recent increase in immigration over the last decade in Italy has increased the potential labour pool of inexpensive care providers from the migrant community [Socci et al., (2003).]

### 1.4 Cultural Factors

The culture of the community is also a possible influence on gender, regional and societal differences in the receipt of help among older people [Pampel, 1992; Wolf, 1995]. The notion of the familistic culture has been used in the past to explain the strong family ties existing in southern Europe [Banfield, 1958; Reher, 1998; Glaser et al., 2004]. In a familistic society, personal utility and family utility are seen as the same: the structure of the family and the relationships among family members are influenced by the strong ties that link them together. In Britain there is a stronger individualistic culture, involving looser and less geographically close family ties, more emphasis on voluntaristic relationships (for example recent research has shown that friends are becoming more important in older people's 'personal communities', [Phillipson et al., 2001], and greater preference for independent living.

These four sets of theoretical explanations may be useful in helping to explain gender differences and similarities in the sources of help received by older people without a spouse in Britain and Italy. They have informed the research aim outlined below. This chapter compares Britain and Italy because of the demographic and socio-economic differences (outlined above) between the two countries, and in particular because of the desire to examine whether a society with a strong familistic culture shows less difference between older men and women without a spouse than a culture in which relations between kin are primarily influenced by individualistic values and in which older people may therefore have to 'earn' their support from kin rather than receive it as of right.

## 2 RESEARCH AIMS

The aim of this chapter is to analyse gender differences in the sources of care received by older people without a spouse in Italy and Britain. At its simplest we are comparing whether men or women fare better when they are unpartnered in later life. If unpartnered individuals need assistance are there gender differences in who has higher odds of receiving it?

Our aim is to examine gender differences in the patterns of receipt of help from different sources among unmarried older people. Family members, friends, private helpers and public providers constitute the caregiving network of older people who need assistance. The way older people negotiate their caregivers is the result of a complex process that takes into account the availability, desirability and willingness of each member as a provider of help. International studies have shown that family members continue to be the primary sources of care for older people in need: in the European Union family members provide two-thirds of the care received compared to 13 per cent provided by the public sector and 11 per cent by the private sector [Walker, 1993].

## 3 DATA AND METHODS

A key issue in cross-national research is to assess to what extent datasets and measures are comparable across countries. This study employs the following datasets: i) the 1998 Italian Multipurpose Survey on Family and Childhood Conditions (IMF); and ii) the British 2001 General Household Survey (GHS).

Italy. The IMF survey is based on a nationally representative sample of private households: the 1998 IMF has a sample size of 59,050 respondents, with 3,285 unmarried people aged 65 and over.

Britain. The GHS is used to analyse gender differences in the receipt of help among older unmarried people in Britain. The GHS is a continuous household survey which started in 1971 [Bridgwood, 2000]. This chapter focuses on the 2001 GHS which included a module of questions asked to people aged 65 and over concerning their living circumstances, health, ability to manage various self-care and domestic tasks, as well as their use of health and personal social services. The 2001 GHS has a total sample size of 21,180 people, with 1,420 unmarried older people.

### 3.1 Dependent Variable

The dependent variable, receipt of help, is difficult to operationalise because of differences between the surveys. For Italy the choice of the dependent variable for help received was constrained by the nature of available data. As the Italian survey did not ask respondents about any help received from household members it was necessary to focus exclusively on help received from outside the household. The Italian question on help received was asked at the household rather than the individual level. Respondents were asked if help was provided to all household members, and if not, which specific members were the major recipients. The questions on help received referred to i) health assistance (injections, medications, and so on); ii) help with Activities of Daily Living (ADL) and Instrumental Activities of Daily Living (IADL); and ii) domestic help. For the type of help that the respondents considered the most important, they were asked who provided that form of help. It is therefore important to keep in mind that the amount of help received in Italy may be underestimated as the question focused only on what the respondent considered the most important type of help.

Based on information concerning who from outside the household provided the most important type of help received, the following four dependent dichotomous variables were created: help from family members; help from formal sources (excluding private help); help from friends/neighbours and private paid help. Private help was measured at the household rather than the individual level as respondents were asked about domestic help provided to all family members. Help from formal sources was also measured by an additional question concerning the receipt of public services (i.e. meals on wheels, home cleaning, nurse help, physiotherapist) by the family (or by the main recipient) in the 12 months before the interview.

For Britain the 2001 GHS asked a set of questions of all adults aged 65 and over, concerning their ability to manage a series of activities and tasks. To retain comparability with the Italian survey the measures created only included those receiving help from outside the household, namely whether older people
received assistance from someone outside the household for each ADL and IADL. Four dichotomous measures were created indicating whether individuals had received help with any ADL or IADL activity from family members living outside the household; friends/neighbours; social and/or health services; or from paid help. Those who reported that in the last month they had used either a district nurse or health visitor, meals-on-wheels, or a day centre for older people were also considered to have received help from social or health services. Those respondents who used private domestic help were also included in the category receiving paid help regardless of whether they received paid help with ADL or IADL activities.

### 3.2 Independent Variables

The aim of this chapter is to examine gender differences within Italy and Britain rather than to compare gender differences between the two countries. Therefore the variables used in our study are not necessarily similar in their scale, time reference or definition. However, we have tried to make them as comparable as possible.

The independent variables used our analysis of older men and women without a spouse were gender, age, marital status, living arrangement, education, housing tenure, and health. Age was coded as 65-74, 75-84, and 85 and over, with the youngest group used as the reference category. Marital status and number of children (the latter for Italy only) were included because of the positive association between widowhood, number of children, and coresidence among unmarried elderly people [Tomassini, Wolf, 2000; Wolf, 1994]. Marital status was coded into two groups: the divorced, separated or widowed versus the never-married. A binary variable indicated whether or not the older person had any living children in the Italian model.

Housing tenure was included in the model because of its strong association with coresidence in Britain and Italy, as owner-occupiers in both countries are less likely to live alone than those in other housing tenures [Warnes, Ford, 1995; Glaser, Tomassini, 2000; Tomassini, Wolf, 2000]. In the two countries a dichotomy was created which distinguished owner-occupiers from those in other tenures (largely social sector tenants in Britain and private renters in Italy). Health status was included in the models as those who are in need of help have a higher probability of living with others and of receiving help [Glaser, Tomassini, 2000]. Both the British and Italian surveys contained questions on whether the respondent's health limited their daily activities. Living arrangements was captured by a binary variable $(0=$ living alone $v s .1=$ living with others $)$. As socio-economic indicators we used education for Italy and social class for Great Britain. A dichotomous variable in Italy has been created for those with
less than a high school diploma or no educational qualification. For Britain, the National Statistics Socio-economic Classification (NS-SEC) categories based on the head of household's current occupation or, for those who were not in paid work, the last job held [Bridgwood et al., 2000]. Respondents were divided into intermediate/routine and manual occupations versus managerial and professional occupations as the reference group.

## 4 RESULTS

Table 10.1 presents the sources of help received from outside the household for people aged 65 and over. In Italy 29 per cent of unmarried older men and 27 per cent of unmarried older women received help from outside the household, whereas the percentages were 47 and 58 per cent respectively in Britain. Italian women received slightly more help than men from all the sources considered, except for private help. There is little difference between the percentage who received help from family members ( 14 per cent) and from private providers ( 13 per cent), however, women were slightly more likely to receive help from the former whereas men were more likely to receive help from the latter.

Table 10.1 shows also the proportion of older unmarried men and women receiving help in Britain. In contrast to Italy, British respondents were more likely to report receiving help from the public sector ( 16 per cent). There were high levels of help from family members reported by 30 per cent of women and 21 per cent of men. Gender differences appear to be more accentuated in Britain, especially with regard to help provided by family members, but also women received more help from friends and from public services. However, differences between men and women in the sources of help received shown in Table 10.1 may be confounded by other demographic or socio-economic characteristics which vary between the two groups, such as age, marital status and health.

We now analyse factors that may influence the receipt of help from the family and private paid help in both countries, in addition to public help in Britain, in order to try to explain gender differences in the receipt of help observed in Table 10.1. Table 10.2 shows the results of the logistic model for receiving help from family members or from private paid help in Italy. The relationships between receiving help from family members and the explanatory variables were as expected: being older than 75 and especially older than 85 , increased the odds of receiving help, as did being less educated and having health problems that limited daily activities. As expected living alone increased the odds of receiving help from kin living outside the household. In Italy, gender

Table 10.1. Percentage Receiving Different Sources of Care from Outside the Household, Unmarried Men and Women Aged 65 and Over, Italy and Britain

|  | Men | Women | Total |
| :--- | ---: | :---: | ---: |
|  |  | Italy |  |
| Help from family members | 14 | 14 | 14 |
| Help from friends | 4 | 4 | 4 |
| Public help | 1 | 2 | 2 |
| Private help | 15 | 12 | 13 |
| Any help | 29 | 27 | 27 |
| Number | 709 | 2576 | 3285 |
|  |  | Britain |  |
| Help from family members | 21 | 30 | 28 |
| Help from friends | 8 | 12 | 11 |
| Public help | 14 | 17 | 16 |
| Private help | 21 | 21 | 21 |
| Any help | 47 | 58 | 55 |
| Number | 394 | 1026 | 1420 |

Note: all tables percentages weighted, Ns unweighted.
Sources: Italian Multipurpose Survey on Family and Childhood Conditions, 1998; General Household Survey, 2001.
did not significantly increase the odds of receiving help from family members outside the household.

The final column in Table 10.2 shows similar relationships between receiving private paid help and the explanatory variables, except for education. Lower levels of education (a good proxy for the respondent's social status and income) increased the odds of reporting private help, as people who are better off economically are more likely to be able to afford private domestic help. Also the odds or receiving private help are higher among home owners.

In Britain, Table 10.3 shows the results of the logistic model based on the GHS data. For help provided by family members, the explanatory variables have similar effects to those found in Italy, apart from gender and marital status. The odds of receiving help from family members are higher among widowed and divorced older people than among the never-married, but the odds of receiving public help are lower among widowed, separated/divorced individuals when compared with the never-married. Gender in Britain has a significant relationship with receipt of help from family members: the odds of receiving help from family members living outside of the household is higher among older unpartnered women than men $(\mathrm{OR}=1.6)$, even after controlling for age, social status, living

Table 10.2. Logistic Regression Model of Receiving Family and Private Paid Help from Outside the Household, Unmarried People Aged 65 and Over: Italy, (Adjusted Odds Ratios)

| Variables | Family help | Private paid help |
| :--- | :---: | :---: |
| Women (vs. Men) | 1.01 | 0.90 |
| Widow and divorced (vs. single) | 1.05 | 0.94 |
| $75-84$ (vs. 65-74) | $1.54^{* *}$ | $1.54^{* *}$ |
| $85+$ (vs. 65-74) | $2.10^{* *}$ | $2.14^{* *}$ |
| Low education (vs. high education) | $2.18^{* *}$ | $0.18^{* *}$ |
| Other tenures (vs. owner) | 1.23 | $0.77^{*}$ |
| Not living alone (vs. living alone) | $0.32^{* *}$ | $0.64^{* *}$ |
| Presence of limiting health problems (vs. no health | $3.39^{* *}$ | $2.92^{* *}$ |
| problems) |  |  |

Notes: Significance: ${ }^{*} \mathrm{p}<.05 .^{* *} \mathrm{p}<.01 . \mathrm{N}=3285$.
Source: Italian Multipurpose Survey on Family and Childhood Conditions, 1998.

Table 10.3. Logistic Regression Model of Receiving Family, Public and Private Help From Outside the Household, Unmarried People Aged 65 and Over: Britain, (Adjusted Odds Ratios)

| Variables | Family help | Private paid help | Public help |
| :---: | :---: | :---: | :---: |
| Women (vs. men) | $1.54 * *$ | 1.00 | 1.14 |
| Widowed (vs. single) | 3.44** | 1.03 | 0.61* |
| Separated/Divorced (vs. single) | 2.82** | 0.64 | 0.35** |
| 75-84 (vs. 65-74) | 1.22 | 2.13 ** | 2.98** |
| 85+ (vs. 65-74) | 1.70** | 5.50** | 6.75** |
| Intermediate/ routine \& manual (vs. professional-managerial) | $1.84 * *$ | 0.30** | 1.16 |
| Unclassified (vs. professional-managerial) | 5.27** | 0.51* | 1.54 |
| Other tenures (vs. owner) | 1.96** | 0.55* | 1.53** |
| Not living alone (vs. living alone) | 0.16** | 0.31** | 0.90 |
| Presence of limiting health problems (vs no health problems) | 3.33** | 2.73** | $3.08 * *$ |
| Constant (-2LL) | 1679.05 | 1461.75 | 1244.68 |
| Model | 273.07** | 219.55 | 168.36** |
| Df | 10 | 10 | 10 |

Notes: Significance: ${ }^{*} \mathrm{p}<.05 .{ }^{* *} \mathrm{p}<.01 . \mathrm{N}=1420$.
Source: General Household Survey, 2001.
arrangements and health. Earlier work found that there were no significant gender differences among older unmarried individuals in the likelihood of having living children once age and marital status were controlled for, thus the fact that unmarried older women were more likely to receive family help than men was not due gender differences in having living children [Tomassini et al., 2003]. For the other two types of help, the results were as expected, and gender was not a significant determinant of either private or public help.

## 5 DISCUSSION AND CONCLUSIONS

There were no gender differences in receipt of help from any sources from outside the household in Italy. Older Italian men and women were equally likely to receive help from family members. On the other hand, in Britain, the odds of receiving help from family members outside the household are higher among women when compared with men. There were no statistically significant gender differences in the receipt of private or public help in Britain. Receiving private help in both countries does not appear to be gender driven, even though studies have suggested that financial resources are unevenly distributed between older men and women.

Our findings showed no gender differences in the receipt of help from sources outside the household in Italy, whereas in Britain, the odds of receiving family help are higher among women than men. In Italy, the family may be performing the helper role regardless of the sex of the older person receiving the assistance. These results are in line with the familism perspective which hypothesises that family members consider their own well-being and their family's well-being to be the same, so that help is provided to each member of the network regardless of the individual characteristics of the person receiving the help [Dalla Zuanna, 2001]. In Italy, parents and adult children continue to have a strong relationship, even when the latter move away in order to form their own families. The 1998 IMF shows that 95 per cent of elderly people with children have at least weekly contact with them, and the percentages are almost identical for men and women. The same picture emerges when contacts with siblings are considered. Since children are more likely to be their parents' carers, a family system that provides strong connections between generations is less likely to create privileged dyads between carer and cared for.

Gender differences in the receipt of family help in Britain may reflect men's decreased involvement in family life, which reduces the likelihood of receiving help in old age. Several studies show that, for example, divorced and widowed men have significantly less contact with their children than their female counterparts [Goldscheider, 1994; Goldscheider, Lawton, 1998; Silverstein, 1995; Tomassini et al., 2004]. Other hypotheses could include the fact
that older unmarried women may be more likely to ask for help or their larger social networks may enable greater exchanges of assistance [Shye et al., 1995]. Therefore, a family system largely based on individual relations may encourage interaction between particular dyads, e.g. the mother-daughter dyad. It is well known that among family carers, daughters are most likely to provide help. Furthermore older women are more likely to have contacts with children and siblings than men [Jarvis 1993], even if recent studies report a consistent geographic variation [Tomassini et al., 2004]. British older unmarried women are more likely to receive help perhaps because they are more involved in help exchanges within the family. Also, in our sources of data, the questions on help focused on problems with ADL/IADL, where relatives are often the privileged helpers: it is possible that for other types of help, gender differences may be weaker. The evidence of no gender differences in the receipt of public help shows that men and women are equally likely to receive help from the public system. This suggests that women are not more likely to use public services than men because they have greater knowledge of the services offered.

In summary, only in Britain did we find a gender difference in receiving help from family members living outside the household, which may reflect women's (in comparison with men's) greater and earlier investment in family life. It may be that in an individualistic cultural context those who invest more in family life may be more likely to receive care in later life. By contrast, in a familistic society older people generally benefit from cultural traditions emphasizing family solidarity. If gender differences in help received by older people continue, and if individualism - as opposed to familism - develops further in northern Europe (or indeed in Southern Europe), then the care of older men without a spouse may become an increasingly problematic issue as the willingness of relatives to provide assistance may decrease.

## CHAPTER 11

# MALE EXCESS MORTALITY BETWEEN BIOLOGY AND CULTURE 

ANNUNZIATA NOBILE

## 1 INTRODUCTION

One important characteristic of the $20^{\text {th }}$ century decline in mortality in industrial societies is the divergence of the average life spans of men and women, which has long been on the increase. At the beginning of the nineteen hundreds the differences were limited to $2-3$ years in women's favour, but they rose in all areas to values generally between 5 and 8 years at the beginning of the 1980s, with an exceptionally high difference in Russia, of almost 12 years. However, this well established trend was halted in the final decades of the century in many countries, where the difference has started to fall, slowly but regularly, albeit in a context of increased life expectancy for both sexes.

On the whole, women still live longer than men on average. There is a vast amount of scientific literature on the reasons for this difference, but it does not provide the same kinds of answers. Indeed, there are many different explanations of male excess mortality, even though these may substantially be reduced to two strands: one, which is mainly genetic-biological [Madigan, 1957; Potts, 1970] and one which is mainly socio-cultural [Lopez, 1983; Preston, 1970; Retherford, 1975; Vallin, 1999]. The difference between the two interpretations, which are not in contrast because the factors interact, thus lies in the importance attributed by scholars to one or the other of these strands.

As far as the first strand is concerned, there is almost unanimous consensus on the fact that women bear a genetic inheritance which potentially provides them with greater protection against certain pathologies, especially those related to the system of circulation, thanks to the effective covering provided by the secretion of folliculin, or more generally to the immunizing power of estrogens against cerebro-vascular disease [Waldron, 1985]. The scientific literature also points to other biological factors, such as the greater defence provided to the female body by the second X chromosome, which allows
for compensation in the case of damaged genes [Waldron, 1983]. However, the action of genetic factors may not have full effect if the status of women is one of social inferiority, as has happened in societies in the past and still happens in certain less developed areas. This social inferiority translates into a reduced attention on the part of the family towards girls, especially as regards their health, and it lies at the root of a female excess mortality in childhood and adolescence. This explains why gender differences in the average lifespan were of modest entity up to the mid 20th century in developed countries, and still are in poor countries. The biological advantage may therefore be attenuated or cancelled out by social norms which produce different roles for men and women.

This difference in roles has long been the explanation most frequently put forward for the interpretation of male excess mortality in the light of socio-cultural factors. Until a few decades ago, there was widespread acceptance of the hypothesis that this supermortality was essentially related to two aspects of men's social condition: their exposure to occupational hazards deriving from employment in industry (accidents in the workplace and pollution) and the tendency to adopt dangerous forms of behaviour or those damaging to health (frequent use of the car and fast driving, with the consequent risk of road accidents, excessive consumption of alcohol, smoking, competitiveness and aggressiveness). For women, on the other hand, mainly employed in household tasks, the four walls of the home are thought to have constituted a valid degree of protection from occupational hazards. Furthermore, the lesser degree of aggressiveness and competition inherent in their social role is supposed to have reduced to a minimum the damage wrought by stress.

The hypothesis of differing lifestyles, which may have counted during the transition from an agricultural economy to an industrial one, nonetheless betrays its limits once the social roles of men and women become more similar, from the second half of the 20th century, thanks to the spread of the process of women's liberation throughout all the developed countries, without there being any sign of the awaited reduction in differences in life expectancy. On the contrary, these continue to grow [Vallin, 1995; Waldron, 1993]. In order to explain this dynamic, attention is then placed not so much on the different social roles but on the different attention paid by men and women to their own health. In other words, there is a transition from an explanation based on so-called male "vices" to one based on female "virtues" [Vallin, 1993; 1995; 1997; 1999]. According to this hypothesis, women pay more attention to health, expressed in terms of frequent use of the health service, more regular visits to the doctor and greater concern for a proper diet, while men tend to ignore light symptoms of illness and do not seek treatment until it has got worse. The different attitude towards disease, and more in general towards physical wellbeing, has therefore made it possible for women to benefit more rapidly
from the great progress made in the field of healthcare, especially as regards the treatment of cardiovascular disease and the prevention and treatment of cancer. And it is precisely this transformation of the nosological picture, which goes by the name of epidemiological transition [Omran, 1971; Olshansky, Ault, 1986], characterized by the disappearance of infectious diseases and the consequent increase in the influence of degenerative and social disease, which allows for individual attitudes to play a fundamental role.

This latter explanation has however been undermined by the recent trend in gender differences in life expectancy: indeed, as we have previously mentioned, and as we shall see better in what follows, these have started to narrow in most developed countries. This new situation, determined by a slowing down of the growth of average female life expectancy as male life expectancy continues to increase, is of more complex interpretation. We may put forward several hypotheses (not necessarily exclusive of each other): women's average life expectancy is now close to its ceiling, with increasingly narrow margins of gain from improvements in systems of healthcare; alternatively, the male attitude towards health is becoming more "virtuous"; finally, the assimilation of the life styles of the two sexes is now exposing women too to those social diseases which used to be mainly male, and to certain serious pathologies the lethality of which cannot be limited by prevention.

As emerges from the synthetic picture drawn up to here, the interpretation of male excess mortality is a fairly complex subject, and it is difficult to measure the effect of the various factors, especially when only aggregate data are available. This, then, is not the object of our study: what we shall attempt to do in the sections which follow is rather to interpret the differences in level and trends in male excess mortality existing among developed countries in the light of the role played by male and female lifestyles in different socio-economic contexts and gender systems.

## 2 DATA AND METHODS

In order to interpret the evolution of gender differences in life expectancy and their geographical variability, it is indispensable to introduce an analysis of mortality by cause. We therefore downloaded the WHO Mortality Data Base from the internet [WHO, 2001], which provides data on deaths by sex, age and cause of death and age structure from 1950 onwards, for a large number of countries. This crude material was then rendered more user-friendly by transferring it onto Excel spreadsheets for subsequent processing. We were able to select almost all of the countries of the industrialized area, with the exception of those with interruptions in their time series, problems of comparability with the International Classification of Diseases (ICD) chapters or those
which were too small from a demographic point of view ${ }^{1}$. Twenty-three countries were included in the analysis, of which five were non-European (Australia, Canada, Japan, Israel and the United States) and 18 European, covering the geographical regions of the continent which differ in history, culture and social structures, but are similar as regard their economic systems and insofar as they are at an advanced stage of the demographic and epidemiological transition (northern Europe: Denmark, Finland, Ireland, Norway, UK, Sweden; western Europe: Austria, Belgium, France, Netherlands, Switzerland; southern Europe: Greece, Italy, Portugal, Spain; eastern Europe: Poland, Rumania and Hungary).

The analysis of deaths by cause presented considerable problems of comparability of data, due to the periodical revisions of the ICD operated by the $\mathrm{WHO}^{2}$. This revisions have led to the multiplication of the chapters over the course of time and, above all, have led to the shifting of some pathologies from one chapter to another. As the WHO database does not provide the necessary data to reconstruct comparable chapters - which is in any case a fairly laborious and complex task [Vallin, Meslé, 1998] - very broad groups of causes were used, in order to minimize the consequences of the changes in the chapters. For one part of the analysis we therefore adopted the 5 large groups of causes of death utilized by Vallin and Meslé [2001, p. 89], for which the details of aggregation have been listed in Tab. 11.1: a) infectious diseases and diseases of the respiratory system; b) malignant neoplasms; c) diseases of the circulatory system; d) other diseases and e) external causes. Certain specific causes of death for which behavioural aspects may play an important role were also used: lung cancer, ischaemic heart disease, cirrhosis of the liver, suicide and motor vehicle traffic accidents.

Finally, having effected the regroupings, it was necessary to redistribute the so-called "signs, symptoms and ill-defined condition" (including deaths for which the diagnosis is imprecise or completely absent), which vary greatly over time and space and therefore limit international comparability. A correct division should take account of the fact that certain causes are exposed to the risk of imprecise diagnosis more frequently than others [Ledermann, 1955]. However, the complexity of the calculations and the lack of necessary information prompted the use of the faster method of sharing out the deaths by these causes on a proportional basis among the groups observed.

The death rates by cause and age interact in a complex manner in determining the trends of gender differences in life expectancy. If our goal is to pinpoint causes and ages responsible for mortality differences by gender, then the analysis effected using the ratio between male and female rates only gives us a partial picture. For example, the highest values for male excess mortality in the developed countries are for accidental causes of death in the younger age groups; at this age, however, mortality is generally very low, and this
Table 11.1. Comparison of Cause of Death Codes According to the 7th, 8th, 9th and 10th Revisions of the International Classification of Diseases (ICD)

| Causes | ICD VII |  | ICD VIII A-List | ICD IX B-List | ICD X | ICD X G-List ${ }^{\text {b }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A-List | B-List ${ }^{\text {a }}$ |  |  |  |  |
| Infectious diseases and | 001-043, | 001-017, | 001-044, | 01-07, | A00-B99, | 001, |
| Diseases of the respiratory system | 087-097 | 030-032 | 089-096 | 31-32 | J00-J99 | 059-064 |
| Malignant neoplasms | 044-060 | 018-019 | 045-061 | 08-17 | C00-D48 | 018, 035 |
| lung cancer ${ }^{\text {c }}$ | 050 | n.a. | 051 | 101 | C33-C34 | 026 |
| Diseases of the circulatory system | 079-086 | 024-029 | 080-088 | 025-030 | I00-I99 | 047 |
| ischaemic heart disease | 081 | n.a. | 083 | 27 | I20-I25 | 051-052 |
| Cirrhosis of the liver ${ }^{\text {d }}$ | 105 | 037 | 102 | 347 | K70-K71, K74 | 068 |
| External causes | 138-150 | 047-050 | 138-150 | 47-56 | S00-Y98 | 089, 100-102 |
| suicide | 148 | 049 | 147 | 54 | X60-X84 | 100 |
| motor vehicle traffic | 138 | 047 | 138 | 471 | V02-V04, | 090 |
| accidents |  |  |  |  | $\begin{aligned} & \text { V09, V12-V14, } \\ & \text { V19-V79, } \\ & \text { V86-V89 } \end{aligned}$ |  |
| Signs, symptoms and ill-defined condition ${ }^{\text {e }}$ | 136-137 | 045 | 136-137 | 46 | R95-R99 | Part ${ }^{\text {f }}$ of 088 |

[^17]therefore has only a modest impact on the difference between the average life spans of men and women. The methodological approach which yields the best results for the goal in question is that of the decomposition of differences in life expectancy ${ }^{3}$ into the contributions of ages and causes of death. Of the several methodologies available ${ }^{4}$, which all provide very similar results, we chose the one suggested by E. Arriaga, which can be better adapted to the traditional life tables ${ }^{5}$.

In order to be able to follow the trend of the contributions of ages and groups of causes of death to gender differences in life expectancy, this decomposition was performed, for each of the 23 countries, at 5 different dates: $1960,1970,1980,1990$ and the end of the 1990s. As the application of the above described method required the availability of life tables for all the countries observed at these dates, and these were not always available, it was necessary to construct them. For this purpose we used the Liftb module of the Mortpak-Lite software ${ }^{6}$ [United Nations, 1988a].

## 3 EVOLUTION OF GENDER DIFFERENCES IN LIFE EXPECTANCY: AN OVERVIEW

The countries analysed do not form a homogeneous group from the point of view of survival, either as regards the levels or as regards gender differences and their evolution. A picture of the situation emerges clearly from Tab. 11.2, which contains the values for life expectancy at birth for men and women, the differences between them and the changing sex gap in survival ${ }^{7}$, at three successive dates. The first date (period 1) is the beginning of the interval of analysis, i.e. 1960 for all the countries with the exception of Rumania, for which the data needed for the construction of the life table was only available for 1963. The second date (period 2) is 1980, an intermediate year in the interval of time; for the countries where gender differences in survival are narrowing, period 2 is represented by the year in which they started to do so ${ }^{8}$ (1970 for the UK and the US, 1990 for France, Italy, Poland and Switzerland). Finally, the third date (period 3) is located between the years 1995 and 1999, and varies from country to country according to the availability of data. The countries were then divided into two groups, according to the evolution of gender differences in survival.

Although there has been a marked increase in life expectancy for women and men, a considerable number of countries (14 out of 23) have registered a decrease in sex gap in the last 20 years, which has fallen from an average of 7.17 in 1980 to just over 6 at the most recent date. This group (which we shall refer to as group 2) includes the countries of north-west Europe (excluding Ireland and Belgium), those from outside of Europe (with the exception of Japan and Israel) and finally Italy and Poland. If we exclude this latter country, where survival is
Table 11.2. Sex Differential in Life Expectancy and its Change Between 1960 and the End of 1990's

| Country | 1960 (period1) |  |  | 1980 (period 2) ${ }^{\text {a }}$ |  |  | 1995/99 (period 3) ${ }^{\text {b }}$ |  |  | Changing (\%) sex gap in survival $\Delta^{i}, \Delta^{i+1}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ${ }^{\mathrm{F}} \mathrm{e}_{0}$ | ${ }^{M} \mathrm{e}_{0}$ | ${ }^{\mathrm{F}} \mathrm{e}_{0}-{ }^{\mathrm{M}} \mathrm{e}_{0}\left(\Delta^{1}\right)$ | ${ }^{\mathrm{F}} \mathrm{e}_{0}$ | ${ }^{M} \mathrm{e}_{0}$ | ${ }^{\mathrm{F}} \mathrm{e}_{0}-{ }^{\mathrm{M}} \mathrm{e}_{0}\left(\Delta^{2}\right)$ | ${ }^{\mathrm{F}} \mathrm{e}_{0}$ | ${ }^{\mathrm{M}} \mathrm{e}_{0}$ | ${ }^{\mathrm{F}} \mathrm{e}_{0}-{ }^{\mathrm{M}} \mathrm{e}_{0}\left(\Delta^{3}\right)$ | $\Delta^{1}, \Delta^{2}$ | $\Delta^{2}, \Delta^{3}$ |
| Widening of the sex differential in survival |  |  |  |  |  |  |  |  |  |  |  |
| Ireland (1996) | 71.86 | 68.50 | 3.36 | 75.17 | 69.88 | 5.29 | 78.75 | 73.09 | 5.66 | 2.27 | 0.42 |
| Belgium (1995) | 72.73 | 66.78 | 5.95 | 76.51 | 69.77 | 6.74 | 80.30 | 73.48 | 6.82 | 0.62 | 0.08 |
| Greece (1998) | 74.17 | 70.52 | 3.65 | 77.56 | 73.07 | 4.49 | 80.37 | 75.36 | 5.01 | 1.04 | 0.61 |
| Portugal (1998) | 67.36 | 61.94 | 5.42 | 74.65 | 67.54 | 7.11 | 79.16 | 71.77 | 7.39 | 1.36 | 0.21 |
| Spain (1997) | 72.18 | 67.68 | 4.50 | 78.46 | 72.42 | 6.04 | 82.18 | 75.05 | 7.13 | 1.47 | 0.98 |
| Rumania (1999) [1] | 69.78 | 65.89 | 3.89 | 71.91 | 66.63 | 5.28 | 74.16 | 67.11 | 7.05 | 1.80 | 1.52 |
| Hungary (1999) | 70.27 | 66.09 | 4.18 | 72.77 | 65.51 | 7.26 | 75.25 | 66.39 | 8.86 | 2.76 | 1.05 |
| Japan (1997) | 70.36 | 65.52 | 4.84 | 78.97 | 73.57 | 5.40 | 84.00 | 77.36 | 6.64 | 0.55 | 1.22 |
| Israel (1996) | 73.71 | 71.02 | 2.69 | 75.71 | 72.11 | 3.60 | 79.95 | 76.27 | 3.68 | 1.46 | 0.14 |
| Arith. mean ( $\bar{X}$ ) | 71.38 | 67.10 | 4.28 | 75.75 | 70.06 | 5.69 | 79.35 | 72.88 | 6.47 |  |  |
| C.V.( $100 * \sigma / \bar{X})$ | 2.8 | 3.9 | 22.6 | 3.0 | 4.0 | 20.2 | 3.7 | 5.0 | 21.9 |  |  |
| Narrowing of the sex differential in survival |  |  |  |  |  |  |  |  |  |  |  |
| Denmark (1996) | 74.05 | 70.56 | 3.49 | 77.24 | 71.25 | 5.99 | 78.54 | 73.30 | 5.24 | 2.70 | -0.84 |
| Finland (1996) | 72.46 | 65.51 | 6.95 | 77.89 | 69.21 | 8.68 | 80.62 | 73.13 | 7.49 | 1.11 | -0.92 |
| Norway (1997) | 75.96 | 71.34 | 4.62 | 79.20 | 72.39 | 6.81 | 81.13 | 75.51 | 5.62 | 1.94 | -1.13 |
| United Kingdom (1998) [2] | 73.94 | 68.11 | 5.83 | 75.01 | 68.70 | 6.31 | 79.85 | 74.86 | 4.99 | 0.79 | -0.84 |
| Sweden (1996) | 74.96 | 71.29 | 3.67 | 78.88 | 72.82 | 6.06 | 81.74 | 76.63 | 5.11 | 2.51 | -1.07 |

Table 11.2. (Continued)

| Country | 1960 (period1) |  |  | 1980 (period 2) ${ }^{\text {a }}$ |  |  | 1995/99 (period 3) ${ }^{\text {b }}$ |  |  | Changing (\%) sex gap in survival $\Delta^{i}, \Delta^{i+1}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ${ }^{\mathrm{F}} \mathrm{e}_{0}$ | ${ }^{\mathrm{M}} \mathrm{e}_{0}$ | ${ }^{\mathrm{F}} \mathrm{e}_{0}-{ }^{\mathrm{M}} \mathrm{e}_{0}\left(\Delta^{1}\right)$ | ${ }^{\mathrm{F}} \mathrm{e}_{0}$ | ${ }^{M} \mathrm{e}_{0}$ | ${ }^{\mathrm{F}} \mathrm{e}_{0}-{ }^{\mathrm{M}} \mathrm{e}_{0}\left(\Delta^{2}\right)$ | ${ }^{\mathrm{F}} \mathrm{e}_{0}$ | ${ }^{\mathrm{M}} \mathrm{e}_{0}$ | ${ }^{\mathrm{F}} \mathrm{e}_{0}-{ }^{\mathrm{M}} \mathrm{e}_{0}\left(\Delta^{3}\right)$ | $\Delta^{1}, \Delta^{2}$ | $\Delta^{2}, \Delta^{3}$ |
| Austria (1999) | 72.03 | 65.51 | 6.52 | 76.06 | 68.99 | 7.07 | 81.05 | 75.14 | 5.91 | 0.40 | -0.94 |
| France (1997) [3] | 74.16 | 67.61 | 6.55 | 81.55 | 73.33 | 8.22 | 82.71 | 75.15 | 7.56 | 0.76 | -1.20 |
| Netherlands (1997) | 75.45 | 71.59 | 3.86 | 79.22 | 72.55 | 6.67 | 80.67 | 75.21 | 5.46 | 2.73 | -1.18 |
| Switzerland (1996) [3] | 74.17 | 68.72 | 5.45 | 80.94 | 74.09 | 6.85 | 82.19 | 76.06 | 6.13 | 0.76 | -1.85 |
| Italy (1997) [2] | 71.76 | 66.90 | 4.86 | 80.28 | 73.70 | 6.58 | 81.74 | 75.71 | 6.03 | 1.01 | -1.25 |
| Poland (1996) [3] | 70.68 | 65.13 | 5.55 | 75.52 | 66.53 | 8.99 | 76.57 | 68.14 | 8.43 | 1.61 | -1.07 |
| Australia (1997) | 74.04 | 67.99 | 6.05 | 78.28 | 71.04 | 7.24 | 81.55 | 76.05 | 5.50 | 0.90 | -1.62 |
| Canada (1997) | 74.17 | 68.46 | 5.71 | 78.78 | 71.47 | 7.31 | 81.47 | 75.81 | 5.66 | 1.24 | -1.50 |
| United States (1997) [2] | 73.21 | 66.68 | 6.53 | 74.79 | 67.22 | 7.57 | 79.61 | 73.68 | 5.93 | 1.48 | -0.90 |
| Arith. mean ( $\bar{X}$ ) | 73.65 | 68.24 | 5.40 | 78.12 | 70.95 | 7.17 | 80.67 | 74.60 | 6.08 |  |  |
| C.V.( $100 * \sigma / \bar{X})$ | 1.9 | 3.2 | 20.3 | 2.7 | 3.3 | 12.4 | 1.9 | 2.8 | 16.3 |  |  |

[^18]at lower levels than elsewhere, as it is throughout eastern Europe, due to a less favourable situation of healthcare, all the other countries are at advanced stages in the epidemiological transition, at the forefront of progress in healthcare and concerted individual prevention. The group is fairly homogeneous: at the end of the 1990s, excluding Poland, there were little more than 4 years between France (82.71) and Denmark (78.54) for women and three and a half between Sweden (76.63) and Finland (73.13) for men.

In the other 9 countries (group 1), on the other hand, gender differences continue to grow. This group is less homogeneous, both as regards levels of survival in the two sexes and the differences between them. Indeed, the variability of these indicators, expressed by the coefficient of variation, is constantly higher than that of the previous group, especially for male life expectancy at the most recent date ( 5 , compared to 2.8 ). This is due to the presence on the one hand of Hungary and Rumania, where values for male survival are relatively low ( 66.39 and 67.11 years), well below the average for the group, and Israel and Japan on the other ( 76.27 and 77.36 years), which are at the top of the world classification.

There are also considerable differences between the two groups in the average values for survival levels, which are constantly higher in group 2 throughout the interval. The greatest differences between the means appear at the first two dates in female life expectancy. In the most recent year, on the other hand, where life expectancy converges around values close to 80 years in both groups, there is a broadening of the gap between average levels of male survival ( 72.88 years in the first group and 74.6 in the second).

Over the course of the first twenty years, excluding eastern Europe, women's life expectancy increases virtually everywhere at brisk rates (Tab. 11.3), especially in countries starting off from relatively low levels (below the group average) such as Portugal, Japan, Finland and Italy, while men's survival increases more slowly and in any case at lower rates than women's. In the countries of eastern Europe the pattern of evolution is similar, but much slower. The rate of increase in women's survival is markedly more contained, and for men there is a stagnation or even a drop in life expectancy, as in Hungary. This is the result of the serious crisis in the health system which struck the former communist area in those years and which, besides deteriorating overall conditions of health, made it impossible to exploit the great progress made in the treatment of cardiovascular disease during the 1970s, which made it possible to achieve the so called "cardiovascular revolution" in the other developed countries [Meslé, 1991].

The different pattern of survival for the two sexes is reflected in the evolution of gender differences. In 1980 these reached much higher values in the countries of group 2 ( 7.17 years on average compared to 5.69 in group 1 ), with

Table 11.3. Growth Rate (\%) of Male and Female Expectancy of Life at Birth, 1960 - the End of the 1990s

| Country | 1960-1980 ${ }^{\text {a }}$ |  | 1980 ${ }^{\text {a }}$-1995/99 ${ }^{\text {b }}$ |  |
| :---: | :---: | :---: | :---: | :---: |
|  | ${ }^{M} \Delta$ | ${ }^{\mathrm{F}} \Delta$ | ${ }^{\mathrm{M}} \Delta$ | ${ }^{\mathrm{F}} \Delta$ |
| Widening of the sex differential in survival |  |  |  |  |
| Ireland (1996) | 0.10 | 0.23 | 0.28 | 0.29 |
| Belgium (1995) | 0.22 | 0.25 | 0.35 | 0.32 |
| Greece (1998) | 0.18 | 0.22 | 0.17 | 0.20 |
| Portugal (1998) | 0.43 | 0.51 | 0.34 | 0.33 |
| Spain (1997) | 0.34 | 0.42 | 0.21 | 0.27 |
| Rumania (1999) [1] | 0.07 | 0.18 | 0.04 | 0.16 |
| Hungary (1999) | -0.04 | 0.17 | 0.07 | 0.18 |
| Japan (1997) | 0.58 | 0.58 | 0.30 | 0.36 |
| Israel (1996) | 0.08 | 0.13 | 0.35 | 0.34 |
| Narrowing of the sex differential in survival |  |  |  |  |
| Denmark (1996) | 0.05 | 0.21 | 0.18 | 0.10 |
| Finland (1996) | 0.27 | 0.36 | 0.34 | 0.22 |
| Norway (1997) | 0.07 | 0.21 | 0.25 | 0.14 |
| United Kingdom (1998) [2] | 0.09 | 0.14 | 0.31 | 0.22 |
| Sweden (1996) | 0.11 | 0.25 | 0.32 | 0.22 |
| Austria (1999) | 0.26 | 0.27 | 0.45 | 0.33 |
| France (1997) [3] | 0.27 | 0.32 | 0.35 | 0.20 |
| Netherlands (1997) | 0.07 | 0.24 | 0.21 | 0.11 |
| Switzerland (1996) [3] | 0.25 | 0.29 | 0.44 | 0.26 |
| Italy (1997) [2] | 0.32 | 0.37 | 0.38 | 0.26 |
| Poland (1996) [3] | 0.07 | 0.22 | 0.40 | 0.23 |
| Australia (1997) | 0.22 | 0.28 | 0.40 | 0.24 |
| Canada (1997) | 0.22 | 0.30 | 0.35 | 0.20 |
| United States (1997) [2] | 0.08 | 0.21 | 0.34 | 0.23 |

Notes: a 1970 for United Kingdom and United States; 1990 for France, Italy, Poland and Switzerland.
${ }^{\mathrm{b}}$ latest available year, shown in parentheses for each country.
[1] First period 1963; [2] narrowing beginning from 1970; [3] narrowing beginning from 1990.
Source: see Table 11.2.
maximums of over 8 years in Poland, Finland and France. The greatest increases, compared to 1960, are to be seen in Denmark, Sweden and the Netherlands, where differences in survival between women and men grow at an annual rate of over $2 \%$ (Tab. 11.2, penultimate column). In group 1, which is more heterogeneous, these differences hover around the 5-6 year mark, and only reach high values (of over 7 years) in Portugal and Hungary. The case of Israel is atypical: gender inequalities are generally very low at all the dates, well below those of all the other countries. This is due to the fact that although male life expectancy is very close to that of the leading countries in the field of survival at all the dates, for women the levels are markedly lower.

Over the next period the picture changes: in the countries in group 2 (excluding the UK, Austria and the US), there is a slowing down of the increase in women's survival, while that of men increases at much higher rates than in the previous interval (Tab. 11.3), so much so as to overtake the growth rate of women's life expectancy in all countries. This development, which may also be observed in other industrialized countries [Trovato, Lalu, 1996] consequently gives rise to a narrowing of the gender gap. This supports the broadly accepted hypothesis of the nearing of a ceiling for women's average lifespan, so that their progress is slowing down, while for men there are still greater margins for improvement; as a result, in a context of very high levels of female survival, there is a narrowing of differences between the sexes.

In group 1 , on the other hand, the rates of change in survival in the two intervals observed follow similar trends for men and women (on the increase for both sexes in Ireland, Belgium, Hungary and Israel, or falling slightly in the other countries), so that the increase in women's life expectancy in the most recent interval remains more intense than that of men, or very close to it (Tab. 11.3), thus broadening the differences between the sexes. However, these differences increase at a slower rate than in the previous twenty years (Tab. 11.2, last two columns), and this circumstance may constitute the prelude to a pattern similar to that registered in the second group of countries, over the coming years. The case of Japan is atypical in the context under examination: here, the rate of growth of the sex gap in survival continues to grow (from 0.55 in the first twenty years to 1.22 in the next 17 years). This pattern would appear to undermine the hypothesis of women's approaching a ceiling in their average life span, as Japan has long been the leading country in terms of survival, both female and male (current life expectancy is 84 and 77.36 years respectively). What scholars are debating, however, is not so much the existence of such a ceiling which cannot be doubted - as the possibility of identifying it [Barbi, Caselli, Vallin, 1999], given that it is constantly being shifted forward over the course of time ${ }^{9}$.

## 4 THE PROFILE OF MALE EXCESS MORTALITY BY AGE

The evolution of the gender gaps in survival and the dissimilarities registered between one country and another are the result of the different trends of male and female age-specific death rates. Indeed, the relationship between these rates, which systematically penalizes men in more developed countries, traces profiles of male excess mortality which vary both in time and in space. However, it is possible to identify three distinct types of male excess mortality curves ${ }^{10}$ within the group of countries observed, exemplified by those of Sweden, Spain and Hungary (Fig. 11.1, column A).

In the first country, the bimodal form of the curve for 1960 (which peaks most sharply between 20 and 25 years, the age of transition to adult life and greatest exposure of males to hazards of death by accidental causes, and then again between 50 and 55) alters notably over time. Indeed, in 1980 we observe a general increase in male excess mortality, which is especially pronounced in the age groups of over 40 years, with a shifting of the second peak towards the 55-60 group. At the most recent date, the curve drops (indeed, there was a fall in the gender differences in survival in Sweden during the 1980s and 1990s), especially below the age of 25 and, even more so, between 45 and 60, giving rise to a further shift of the second peak towards 65 years. This kind of male excess mortality curves may also be found in other countries where there is a fall in gender differences in survival, albeit with certain differences in levels and evolution over time ${ }^{11}$.

The second type of curve is exemplified by that of Spain, which maintains its bimodal form at all three dates. The first peak is once again registered at around 20 years, while the second appears at an earlier age (between 55 and 60) than that observed in Sweden: moreover, the levels of male excess mortality are growing over time, especially between 30 and 60 . The situation in Spain is also a good reflection of the other Mediterranean countries (Greece and Portugal) belonging to group 1 which, as we have said, displays an increase in survival differentials between the two sexes. In the other countries of this group, the picture is more detailed: in Ireland and Israel male excess mortality in the juvenile age groups is more marked and is growing over time (at the most recent date, the rate for young males between 20 and 25 is 5.2 and 3.5 times higher, respectively, than that of their female peers), and the increases are more contained in the subsequent age groups; for Belgium, the pattern of the three curves is similar to that of Sweden in the section beyond 50 years of age; in Japan, finally, male excess mortality is consistently lower than elsewhere at all dates, but grows considerably over time between the ages of 60 and 70 .

The last type of curve, represented by Hungary and shared by the other two countries of eastern Europe (Rumania and Poland), is marked by a sharp rise

Figure 11.1. Age-Specific Excess Male Mortality and Contributions of Age Groups to the Differences in Life Expectancy at 15 Between the Sexes in 1960, 1980 and the End of 90's in Sweden, Spain and Hungary


Notes: A: male excess mortality $\left(100^{* M} \mathrm{~m}_{\mathrm{x}} /{ }^{\mathrm{F}} \mathrm{m}_{\mathrm{x}}\right)$. B: contributions (in per cent) of age groups to the differences in life expectancy at 15 between the sexes.
in male excess mortality between the ages of 30 and 65 over the two intervals of time observed. Indeed, this increase, which is particularly substantial during the twenty-year period 1960-80 (the ratio between male and female rates in the $40-45$ age group rises from $125 \%$ to $223 \%$ ), continues during the next interval, so as to determine a higher peak than elsewhere for the 50-55 age group ( $273 \%$ ).

Male excess mortality exhibits minimum levels in the final ages of life. In the three typical countries, as in all the others in the group observed for that matter, the ratio between the rates in the over- 85 groups is between 15 and $30 \%$ at the end of the 1990s, only slightly higher than in 1960. It may be that there is a selection effect operating at this age, in the sense that it is those men who are better equipped to resist disease who arrive at the final threshold of existence.

The temporal variation in the profiles of male excess mortality is the product of the different trend of the age-specific male and female rates. Within the age groups, the mortality of one of the two sexes may, for example, remain stable over time, but the differential may increase or decrease as the rates for the other sex rise or fall; equally, the breadth of gender differences may remain unchanged in the presence of a parallel variation of male and female rates. In Sweden, as in virtually all countries marked by a recent contraction of gender differences in survival, the fall in male excess mortality below the age of 25 and between 40 and 75 over the last twenty years is accounted for by a sharper fall in male rates than in female ones (Fig. 11.2). In Spain, on the other hand, the increase in mortality differentials, which is particularly marked between the ages of 20 and 40 at the most recent date, has been caused by a sharp rise in male mortality (the rates rise to almost $40 \%$ between the ages of 20 and 25) and a simultaneous fall in female rates. In Hungary too, the growth over time of male excess mortality is linked to a large increase in male rates in both periods which is, however, limited to the 35-70 age groups in the most recent one.

As we have already pointed out, the interpretation of male excess mortality by age, using the ratios between age-specific male and female rates, provides us with indications which are certainly of interest, but it fails to take account of the high degree of variability among the rates, which are much higher in the older age groups. As a result, the importance of the peaks of male excess mortality observed in the young age groups is greatly diminished by the fact that mortality at these ages only has a slight impact anywhere on gender differences in life expectancy at age 15 . The decomposition of these differences according to the percentage contribution of the age groups (performed using the previously described method) thus makes it possible to gain a better idea of the different role played by age groups in the countries observed. The profiles of male excess mortality which emerge are obviously very different from those obtained using the ratio between the age-specific rates. In all three countries, and at all the dates, male excess mortality is concentrated in the upper age groups (Fig. 11.1,

Figure 11.2. Changes in Male and Female Age-Specific Death Rates from Period 1 to Period 2 and from Period 2 to Period 3 in Sweden, Spain and Hungary





Hungary


Table 11.4. Age Group Which Gives the Greatest Contribution to the Difference in Life Expectancy at Age 15 Between the Sexes and Weight (\%) of this Contribution in Total Difference (in Parentheses)

| Country | 1960 | 1970 | 1980 | 1990 | $1995 / 99^{\text {a }}$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Widening of the sex <br> differential in <br> survival |  |  |  |  |  |
| Ireland (1996) |  |  |  |  |  |
| Belgium (1995) | $60-64(18.6)$ | $65-69(17.8)$ | $65-69(15.8)$ | $65-69(17.1)$ | $65-69(15.1)$ |
| Greece (1998) | $60-64(15.3)$ | $60-64(16.3)$ | $60-64(15.7)$ | $65-69(15.0)$ | $70-74(14.3)$ |
| Portugal (1998) | $65-69(14.7)$ | $65-69(15.3)$ | $60-64(15.6)$ | $65-69(14.8)$ | $65-69(14.3)$ |
| Spain (1997) | $60-64(13.5)$ | $60-64(12.5)$ | $60-64(12.2)$ | $60-64(15.6)$ | $65-69(12.1)$ |
| Rumania (1999) [1] | $65-69(14.4)$ | $60-64(14.0)$ | $65-69(13.3)$ | $65-69(13.0)$ | $70-74(12.9)$ |
| Hungary (1999) | $60-64(14.4)$ | $60-64(14.7)$ | $60-64(12.7)$ | $55-59(13.0)$ | $55-59(13.6)$ |
| Japan (1997) | $55-59(15.5)$ | $65-69(14.5)$ | $55-59(12.7)$ | $55-59(13.8)$ | $60-64(13.6)$ |
| Israel (1996) | $65-69(14.4)$ | $65-69(15.2)$ | $70-74(14.0)$ | $70-74(13.6)$ | $75-79(13.8)$ |
|  | $60-64(18.7)$ | $60-64(12.4)$ | $70-74(12.6)$ | $65-69(16.7)$ | $65-69(14.5)$ |

$70-74(15.1)$
$65-69(13.6)$
$70-74(16.3)$
$70-74(14.7)$
$75-79(14.8)$
$65-69(15.3)$
$70-74(12.7)$
$70-74(18.1)$
$70-74(15.0)$
$70-74(14.8)$
$60-64(13.4)$
$70-74(14.4)$
$70-74(14.2)$
$70-74(11.6)$
$70-74(15.3)$
$60-64(13.0)$
$70-74(15.1)$
$65-69(15.3)$
$70-74(15.6)$
$60-64(14.0)$
$60-64(12.2)$
$70-74(18.0)$
$65-69(14.3)$
$65-69(14.5)$
$55-59(12.3)$
$65-69(13.5)$
$70-74(13.6)$
$70-74(11.1)$


[^19]column B). Moreover, there is a marked fall in the influence of the under-60 age groups in Sweden and Spain over the course of time, together with a considerable increase in that of the over- 75 groups, which is particularly noteworthy in Sweden where the contribution of the over-85 age groups increases fivefold during the 40 -year period observed ${ }^{12}$. In Hungary, on the other hand, as in the other countries of eastern Europe, a different picture emerges; the percentage contribution provided by the $40-70$ age groups increases decisively over the course of time, and that of the more elderly age groups remains stationary.

One feature shared by the vast majority of countries is the progressive shifting forward of the modal age. Indeed, the age providing the highest contribution to survival differences between the sexes tends to increase appreciably over time, especially where such differences have started to narrow (Tab. 11.4). Indeed, in this group of countries, the modal age, which currently lies between the ages of 70 and 79 (with the sole exceptions of Austria, Finland and Poland, for which the ages are slightly lower), has grown by about 10 years. In the other group, which is less homogeneous, the picture is more detailed: nonetheless, if we exclude Rumania, there is an analogous shift towards the older age groups, even though this is more contained.

## 5 THE ROLE OF CAUSES OF DEATH

In order to better understand the trend and the geographical differences of male excess mortality it is necessary, as we have repeatedly underlined, to extend the analysis to causes of death. For this purpose, the contribution of each age group to gender differences in life expectancy at age 15 was further decomposed, using the usual method, into the contribution of the 5 major groups of causes of death, previously indicated (1. infectious diseases and diseases of the respiratory system; 2. malignant neoplasms; 3. diseases of the circulatory system; 4. other diseases; 5. external causes).

The picture which emerges is very detailed and particularly difficult to synthesize; it is therefore opportune to proceed by steps. Firstly, we shall examine the overall contribution of individual groups of causes of death to gender differences in survival. The greatest difference, in almost all countries ${ }^{13}$, albeit at different levels (varying between 25 and $66 \%$ ) lies in the contribution of diseases of the circulatory system ${ }^{14}$ (Tab. 11.5). Indeed, the death rates for these pathologies are appreciably higher for men, who are more exposed than women to the factors of risk, among which an important role is played by certain patterns of behaviour ${ }^{15}$ such as smoking, competitive stress, a sedentary lifestyle and inappropriate diet, as emerges from the scientific literature [Waldron, 1976; Beaglehole, 1995; Koskinen, 1995]. The influence of diseases of the circulatory system, which grew over the first two decades, has however been gradually
Table 11.5. Group of Causes of Death Which Gives the Greatest Contribution to the Difference in Life Expectancy at 15 Between the sexes and Weight (\%) of This Contribution in Total Difference (in Parentheses)

| Country | 1960 | 1970 | 1980 | 1990 | 1995/99 ${ }^{\text {a }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Widening of the sex differential in survival |  |  |  |  |  |
| Ireland (1996) | CIR(54.7) | CIR(52.8) | CIR(55.0) | CIR (53.1) | CIR (45.5) |
| Belgium (1995) | CIR (33.7) | CIR(40.8) | CIR (37.1) | TUM(30.7) | TUM (30.3) |
| Greece (1998) | TUM(27.9) | TUM(27.7) | CIR (31.7) | $\operatorname{CIR}$ (32.6) | CIR (32.5) |
| Portugal (1998) | IRE(33.2) | EXT(30.4) | EXT(30.4) | EXT(30.0) | CIR (25.3) |
| Spain (1997) | IRE (25.1) | $\operatorname{CIR}(30.6)$ | $\operatorname{CIR}(31.0)$ | TUM(29.5) | TUM (34.0) |
| Rumania (1999) [1] | EXT(35.0) | EXT(33.5) | EXT(30.5) | CIR(32.9) | CIR (38.8) |
| Hungary (1999) | EXT(33.9) | $\operatorname{CIR}$ (37.0) | $\operatorname{CIR}(40.2)$ | $\operatorname{CIR}$ (36.2) | CIR (34.1) |
| Japan (1997) | OTH(32.7) | CIR(36.5) | CIR(33.2) | TUM(33.2) | TUM (35.7) |
| Israel (1996) | $\operatorname{CIR}$ (65.7) | $\operatorname{CIR}(42.4)$ | $\operatorname{CIR}(49.8)$ | $\operatorname{CIR}(46.0)$ | CIR (40.0) |
| Narrowing of the sex differential in survival |  |  |  |  |  |
| Denmark (1996) | CIR (56.7) | CIR(57.5) | CIR(53.5) | CIR (48.3) | CIR(44.5) |
| Finland (1996) | CIR(37.1) | $\operatorname{CIR}(46.1)$ | CIR(47.7) | CIR (43.3) | $\operatorname{CIR}(40.1)$ |

Table 11.5. Continued

| Country | 1960 | 1970 | 1980 | 1990 | 1995/99 ${ }^{\text {a }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Norway (1997) | $\operatorname{CIR}(46.2)$ | CIR(55.0) | CIR (51.9) | $\operatorname{CIR}$ (51.5) | $\operatorname{CIR}(47.2)$ |
| United Kingdom (1998) [2] | $\operatorname{CIR}(41.9)$ | $\operatorname{CIR}$ (51.4) | $\operatorname{CIR}$ (55.6) | $\operatorname{CIR}$ (50.4) | $\operatorname{CIR}(45.6)$ |
| Sweden (1996) | $\operatorname{CIR}$ (45.7) | $\operatorname{CIR}$ (52.2) | CIR(55.9) | $\operatorname{CIR}$ (52.5) | $\operatorname{CIR}(52.3)$ |
| Austria (1999) | EXT(32.6) | $\operatorname{CIR}$ (34.5) | $\operatorname{CIR}$ (37.3) | $\operatorname{CIR}$ (37.3) | $\operatorname{CIR}(37.7)$ |
| France (1997) [3] | EXT(24.9) | $\operatorname{CIR}$ (29.1) | TUM(29.4) | TUM(35.8) | TUM (37.1) |
| Netherlands (1997) | $\operatorname{CIR}$ (38.9) | CIR (48.4) | $\operatorname{CIR}$ (47.0) | $\operatorname{CIR}$ (44.1) | CIR (41.9) |
| Switzerland (1996) [3] | EXT(33.3) | $\operatorname{CIR}$ (32.4) | CIR (39.1) | CIR (35.2) | CIR (33.9) |
| Italy (1997) [2] | EXT(26.0) | $\operatorname{CIR}(30.3)$ | $\operatorname{CIR}$ (33.6) | TUM(32.4) | TUM (34.0) |
| Poland (1996) [3] | CIR (29.1) | $\operatorname{CIR}(32.0)$ | CIR (40.4) | CIR(42.4) | CIR (39.7) |
| Australia (1997) | $\operatorname{CIR}$ (50.0) | CIR(49.8) | $\operatorname{CIR}$ (46.3) | $\operatorname{CIR}$ (38.3) | CIR (35.0) |
| Canada (1997) | CIR(54.5) | CIR(51.0) | CIR(45.5) | CIR(37.6) | CIR (37.3) |
| United States (1997) [2] | $\operatorname{CIR}$ (50.6) | $\operatorname{CIR}(48.7)$ | $\operatorname{CIR}(44.3)$ | $\operatorname{CIR}(36.6)$ | CIR (37.2) |

[^20]decreasing over the past 20 years. This decrease took place earlier in the countries outside Europe: in Australia, Canada, Israel and the US the contribution was already falling appreciably in the 1960s and 1970s; in the next two decades it involved virtually all the countries except France and Rumania, where the increase was nonetheless very contained.

The fall in the percentage weight of this group of causes of death is accompanied by an increase in that of malignant neoplasms which, at the most recent date, rise to the position of first place among the factors of male excess mortality in a substantial number of countries (Belgium, Spain, Japan, France and Italy, where they account for about $30 \%$ of differences between the sexes in survival after the age of 15). Over time, the effect of malignant neoplasms has grown constantly everywhere ${ }^{16}$, especially in countries outside Europe, as well as France and Italy, where it was already higher than elsewhere from 1980 (around 35\%). The increase has been more contained in the countries of northern Europe, where diseases of the circulatory system are still the main reason for the differences between male and female survival.

Finally, the evolution of the influence of causes of death of an accidental nature (external causes) is of significant interest. These are responsible for a substantial proportion of male excess mortality, especially, as we shall see better further on, among the juvenile age groups and more in general below the age of 50 . Deceases due to this broad group of causes, which includes so-called violent deaths (accidents, poisoning, suicide and homicide), are more strongly linked to social and individual behaviour, the product of differing roles, than other forms of decease. As far as road accidents are concerned, for example, the fact that men drive less carefully and their frequent abuse of alcohol represent the main factors of risk. Over time, the role of this group of causes has been gradually diminishing. At the beginning of the 1960s it accounted for a considerable proportion of the gender gap in survival, in several countries, representing about a third of the total difference in Rumania, Hungary, Sweden, Switzerland and Austria. There was a sharp decline in the period 1960-80, which continued into the next twenty-year period, albeit more slowly and with the odd exception ${ }^{17}$. However, although this is falling, the "external causes" group still exercises a considerable influence on differences between male and female survival, being equal to about a fifth of the total in over half the countries observed.

The situation which emerges from the decomposition of gender differences in the average life span at the age of 15 according to contribution of causes of death is partially consistent with the nosological picture which characterizes the countries observed. The groups of causes "diseases of the circulatory system" and "malignant neoplasms", which together account for most of the differences in survival (between 60 and $70 \%$ at the end of the 1990s) ${ }^{18}$, are also those
which have the greatest effect on overall mortality, both of women and of men. Indeed, mortality by the first group of causes (measured by standardized rates ${ }^{19}$, Tab. 11.6) represents a considerable proportion of mortality after the age of 15 in most countries and for both sexes, mainly between 40 and $50 \%$, with peaks of over $60 \%$ in Rumania and Poland at the most recent date. On the other hand, the incidence of diseases of the circulatory system is lower, especially in 1960 and in the countries where this group of causes provided a modest contribution to gender differences in survival (countries of southern Europe, Japan and France).

Mortality from cancer also accounts for a significant proportion of overall mortality over the age of 15 . At the end of the 1990s, the incidence of this group of causes lies mostly between 20 and $30 \%$ for both men and women, with slightly higher peaks in countries where malignant neoplasms are the most important cause of male excess mortality (Belgium, Spain, Japan, France and Italy, Tab. 11.5). However, only in Japan and France (and solely for the male population) do malignant neoplasms represent the main cause of death.

The group of accidental causes of death (external causes), on the other hand, plays a secondary role in overall mortality over the age of 15 , even though it has grown over the course of the 40 -year period examined - for both sexes and with varying intensity in the geographical areas observed. In most of the countries, mortality from external causes accounts a proportion varying between 8 and $10 \%$ in the male population, and between 4 and $6 \%$ in the female population, at the most recent date ${ }^{20}$.

Finally, important elements for the analysis of male excess mortality may be derived from the joint examination of the contributions of age groups and causes of death to the differences between the survival of the two sexes. The decomposition of the differences was performed within each five-year group (a total of 15 groups) for each of the 5 groups of causes observed, giving rise to a considerable mass of data which provides a very detailed picture, especially for the purposes of examining evolution over time. A detailed analysis of the results would exceed the limits of this study; however, we may identify certain meaningful patterns, in great synthesis: the group "diseases of the circulatory system" provides higher contributions in the over-50 age groups in all places and at all dates; moreover, these contributions fall most sharply in this broad age group, in most of the countries.
a) The influence of malignant neoplasms is on the increase in all countries, as we have said. As a whole, the group of causes only accounts for very high, general increases in the over-70 age groups, especially from 80 onwards. This result is consistent with the hypothesis of Olshansky and Ault [1986], who identify a growing importance of mortality in the older age groups in the fourth stage of the epidemiological transition. Degenerative diseases, typical of advanced age, strike mainly at men, who are less resistant to strain on

Table 11.6. Weight (\%) of Standardized Death Rates by the Groups of Causes "Diseases of the Circulatory System", "Malignant Neoplasms" and "External Causes" in Total Mortality in 1960 and the End of the 1990s (Age 15 Years and Over)

| Country | 1960 |  |  | 1995/99 ${ }^{\text {a }}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | CIR | TUM | EXT | CIR | TUM | EXT |
|  | Men |  |  |  |  |  |
| Widening of the sex differential in survival |  |  |  |  |  |  |
| Ireland (1996) | 46.2 | 16.5 | 4.1 | 43.6 | 24.3 | 6.9 |
| Belgium (1995) | 39.7 | 20.2 | 8.4 | 33.5 | 31.4 | 9.9 |
| Greece (1998) | 23.0 | 21.7 | 6.9 | 48.5 | 28.1 | 9.3 |
| Portugal (1998) | 26.0 | 12.7 | 6.7 | 38.9 | 24.6 | 9.2 |
| Spain (1997) | 27.7 | 16.8 | 6.2 | 31.9 | 31.3 | 8.1 |
| Rumania (1999) [1] | 32.2 | 15.5 | 7.4 | 58.5 | 15.8 | 7.9 |
| Hungary (1999) | 35.3 | 17.0 | 8.0 | 45.6 | 25.4 | 9.6 |
| Japan (1997) | 16.7 | 14.8 | 8.2 | 29.0 | 33.8 | 9.9 |
| Israel (1996) | 44.1 | 19.1 | 6.5 | 39.0 | 27.8 | 9.0 |
| Narrowing of the sex differential in survival |  |  |  |  |  |  |
| Denmark (1996) | 40.9 | 22.0 | 8.5 | 38.9 | 29.5 | 8.7 |
| Finland (1996) | 39.3 | 18.2 | 9.4 | 42.3 | 22.2 | 12.9 |
| Norway (1997) | 37.3 | 19.6 | 8.3 | 42.2 | 27.7 | 8.2 |
| United Kingdom (1998) [2] | 40.1 | 19.5 | 5.2 | 40.8 | 27.8 | 5.6 |
| Sweden (1996) | 41.2 | 18.4 | 8.8 | 46.8 | 24.8 | 7.9 |
| Austria (1999) | 31.2 | 20.4 | 10.9 | 46.9 | 27.4 | 9.6 |
| France (1997) [3] | 26.4 | 20.8 | 9.9 | 28.4 | 35.2 | 12.5 |
| Netherlands (1997) | 35.7 | 24.6 | 6.8 | 37.5 | 32.4 | 5.3 |
| Switzerland (1996) [3] | 36.1 | 20.1 | 10.7 | 36.9 | 29.3 | 9.3 |
| Italy (1997) [2] | 34.3 | 12.7 | 7.1 | 37.6 | 32.8 | 7.8 |
| Poland (1996) [3] | 42.0 | 16.4 | 7.3 | 52.3 | 23.6 | 10.6 |
| Australia (1997) | 45.9 | 15.0 | 8.5 | 37.9 | 29.3 | 8.8 |
| Canada (1997) | 46.6 | 17.0 | 8.7 | 36.4 | 29.8 | 9.0 |
| United States (1997) [2] | 47.9 | 15.7 | 9.0 | 38.7 | 25.5 | 10.5 |
|  | Women |  |  |  |  |  |
| Widening of the sex differential in survival |  |  |  |  |  |  |
| Ireland (1996) | 43.1 | 17.6 | 2.4 | 42.2 | 27.2 | 3.3 |
| Belgium (1995) | 41.8 | 22.2 | 5.1 | 37.8 | 29.7 | 6.8 |
| Greece (1998) | 28.5 | 17.5 | 3.8 | 58.6 | 23.1 | 3.9 |
| Portugal (1998) | 30.8 | 14.4 | 3.1 | 48.7 | 22.7 | 4.3 |
| Spain (1997) | 32.6 | 16.6 | 2.5 | 39.9 | 26.7 | 4.1 |
|  |  |  |  |  |  | cont.) |

Table 11.6. (Continued)

| Country | 1960 |  |  | 1995/99 ${ }^{\text {a }}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | CIR | TUM | EXT | CIR | TUM | EXT |
| Rumania (1999) [1] | 40.2 | 14.9 | 2.8 | 68.4 | 14.9 | 3.3 |
| Hungary (1999) | 39.6 | 18.1 | 4.3 | 53.2 | 24.4 | 5.9 |
| Japan (1997) | 18.4 | 15.3 | 4.7 | 33.5 | 31.7 | 7.3 |
| Israel (1996) | 40.2 | 23.4 | 4.9 | 38.2 | 31.1 | 4.6 |
| Narrowing of the sex differential in survival |  |  |  |  |  |  |
| Denmark (1996) | 36.5 | 24.8 | 6.0 | 34.9 | 34.2 | 5.9 |
| Finland (1996) | 38.8 | 16.9 | 4.9 | 43.2 | 23.5 | 7.2 |
| Norway (1997) | 33.3 | 21.5 | 3.7 | 38.5 | 32.1 | 5.2 |
| United Kingdom (1998) [2] | 39.5 | 19.9 | 4.1 | 38.4 | 30.0 | 3.1 |
| Sweden (1996) | 39.6 | 20.5 | 5.0 | 42.9 | 30.2 | 5.3 |
| Austria (1999) | 34.1 | 21.8 | 5.9 | 52.0 | 28.1 | 5.4 |
| France (1997) [3] | 27.7 | 22.1 | 6.4 | 31.5 | 31.8 | 9.5 |
| Netherlands (1997) | 34.6 | 24.3 | 4.1 | 35.1 | 32.2 | 4.1 |
| Switzerland (1996) [3] | 39.4 | 20.4 | 5.5 | 37.9 | 29.3 | 6.1 |
| Italy (1997) [2] | 39.7 | 17.8 | 3.1 | 42.8 | 30.2 | 5.0 |
| Poland (1996) [3] | 45.7 | 19.0 | 2.7 | 60.0 | 22.8 | 4.8 |
| Australia (1997) | 42.3 | 17.0 | 5.1 | 39.1 | 30.4 | 5.0 |
| Canada (1997) | 42.0 | 20.6 | 4.4 | 35.3 | 32.8 | 5.4 |
| United States (1997) [2] | 45.0 | 18.8 | 4.9 | 38.6 | 27.9 | 5.5 |

Notes: ${ }^{\text {a }}$ latest available year, shown in parentheses for each country.
[1] First period 1963. [2] narrowing beginning from 1970. [3] narrowing beginning from 1990.
CIR: diseases of the circulatory system; TUM: Malignant neoplasms; EXT: external causes.
Source: see Tab. 11.2.
the organism. Other hypotheses of interpretation have been formulated in this regard, to the effect that elderly men are also weaker because they have adopted lifestyles more noxious to their health during the course of their existence [Vallin, 1999].
b) The group "external causes" plays an important role in the 15-50 age groups; the previously mentioned decrease observed in the last twenty years regards this broad age group in almost all the countries.
c) From a geographical point of view the situation is very detailed. As far as diseases of the circulatory system are concerned, what emerges clearly is the preponderant influence of the over-50 age groups, especially in the countries of northern Europe (these account for over $40 \%$ of gender differences in survival at both dates); between the ages of 15 and 49 , on the other hand, the effects are very scarce (the highest value, of a little over $10 \%$, is recorded in Hungary in 1980). The contribution of this latter age group diminishes in all places in the 20 years in question, but the decrease never exceeds 4 percentage points; in the older age group, on the other hand, there are substantial decreases (about 7 points in Denmark, the US and Japan), but not in all countries (the percentages increase in Austria and still more in Rumania).

As far as malignant neoplasms are concerned, the contribution increases to a considerable extent in the over-70 age group, especially in the countries of northern Europe and in those outside of Europe (it virtually doubles), where it was already high in 1980. In the three countries of eastern Europe, on the other hand, it remains stationary and at low levels. The opposite picture emerges if we look at the contributions in the 15-69 age group: these remain stationary or increase appreciably in the countries of eastern and southern Europe, and decrease in the others.

There is also a clear contrast between age groups as regards the contributions made to the differences in survival between the sexes by the "external causes" group. Below the age of 50, these contributions take on considerably higher values than those observed in the over- 50 age groups at both dates and in all areas. There is also a contrast between the temporal variations: in the first age group there is a decrease in most of the countries, which is very marked in Rumania and Hungary, while in the second group the values tend to remain stationary or increase.

## 6 THE HYPOTHESIS OF "THE DARK SIDE OF EQUALITY"

In conclusion of our analysis, it would be interesting to add some comments on the interpretations of the reduction in differences between male and female survival rates which has taken place in many of the more industrialized countries over the past twenty years. The fact that this reduction could be the consequence of a slowing down of the rate at which women's life expectancy is growing, with a parallel increase of that of men, and that this has occurred in countries in which the process of women's liberation has reached a mature stage, has led the authors of a recent UN paper [1991] to put forward the hypothesis that there might be a direct relationship between the improvement of women's condition and their level of mortality. As the paper itself states, "..with
women adopting life styles more like men's, they have become increasingly susceptible to some of the same major causes of death" [p. 56]. The exit of women from the domestic sphere in order to enter the world of work and public life may thus have led them to adopt lifestyles similar to those of their male counterparts, exposing them to an increase in the risks of death by those causes regarded as mainly male (in particular ischemic heart disease and lung cancer). The changing of the female social role would thus represent, according to the UN, the "dark side of equality". This assertion, which is more of a prophecy in the absence of any empirical testing, has stimulated several studies aimed at identifying possible negative consequences on the levels of female mortality produced by women's changing status in society. However, most of the studies in question provide very weak support of this affirmation; others actually yield precisely the opposite result, i.e. that movement towards gender equality produces an increase in women's advantage over men in terms of survival [Nathanson, 1995].

An analysis of the links between women's condition and mortality goes beyond the goals of this study, but an indirect assessment can be derived from the data available by comparing the recent evolution of male and female mortality by certain selected causes, for which the main risk factors are more connected to lifestyles than others. In particular, we refer to cirrhosis of the liver, suicide and road accidents, in addition to the aforementioned ischemic heart disease and lung cancer ${ }^{21}$.

Smoking is an important risk factor for the first two pathologies, especially for lung cancer, as repeatedly highlighted in epidemiological studies [Doll, Peto, 1981; US Dept. Health and Human Services, 1990; World Health Organization, 1992]. No clear direct relationship has been identified between women's condition and the consumption of tobacco, but many studies have highlighted the fact that there is a greater prevalence of female smokers in those areas where the process of women's economic and social liberation is more advanced (northern Europe and other English-speaking countries) and where there are no longer strong sanctions against this practice; smoking would therefore appear to take on a symbolic value of detachment from the traditional female role [Nathanson, 1995].

One increase in hitherto typically male risk factors may derive from the entry of women into the world of work; in particular, competition and conflicts generated by the multiplication of social roles (career vs. family) translate into stress, with the resulting increase in the risks of arterial hypertension and mortality from ischemic heart disease. This multiplication of roles could also have an impact on mortality from suicide, due to the pressures and tensions that it produces, which some women may be incapable of tackling. Finally, there are forms of behaviour of little "virtue" from the point of view of
health, also connected to the change in women's position, such as the possible abuse of alcohol and dangerous driving, which contribute to the increase of other risks of death: the former raises the risks of cirrhosis of the liver, while the latter makes women more exposed than in the past to the danger of road accidents.

In order to identify the possible existence of any development unfavourable to women of mortality by the causes in question, we performed separate analyses for the two sexes of the ratios between the standardized death rates calculated at the end of the 1990s (period 3) and in 1980 (period 2).

Over the twenty years observed, mortality by lung cancer among women has increased in all places (with the sole exception of Israel, where the variation of the rates is equal to 0.89). In particular, the sharp increase in female rates in certain countries of northern Europe and those outside Europe is accompanied by a reduction in the rates for men (in the Netherlands, Denmark and Canada, the respective variations for women and men are 2.33 and $0.75 ; 1.96$ and 0.98 ; and 1.83 and 0.91 ); in those places where the rates have increased for both sexes (Hungary, Norway and the US), those of women have increased much more substantially (more than doubling). The evolution of mortality by this cause has been more in women's favour, on the other hand, in Japan, Spain and Portugal; although the rates have increased for both sexes, those for women have grown more slowly than those for men (the respective variations for women and men amounting to 1.20 and $1.31 ; 1.07$ and 1.42 ; and 1.36 and 1.52 ). It cannot be a coincidence that the incidence of smoking is lower than elsewhere in the female population in these countries, even though an increase has been recorded among young women in recent years [World Health Organization, 1992]. The variations of the rates of mortality for the residual group of tumours, on the other hand, illustrate a different situation: with the exception of France and Italy (where the evolution of male and female rates is anyway very similar), those for women are all located above the diagonal, i.e. in the area denoting a picture of evolution in their favour.

The hypothesis that women might have a more disadvantageous trend of mortality by ischemic heart disease than men is not confirmed by the comparison of the changes of the rates. Almost all the countries are located around the diagonal of the section marking a decrease for both sexes, and this implies that the fall in rates has been of more or less of the same proportion; even in those cases where an increase has been recorded (Rumania and Hungary), the intensity for the two sexes has not been very different. The evolution of the other diseases of the circulatory system, the rates for which are falling everywhere, is slightly to women's advantage. Neither does the variation of mortality by cirrhosis of the liver and suicide ${ }^{22}$ yield a picture which is significantly differentiated by sex. For the first cause, only Finland and Ireland display a situation which is
somewhat to women's disadvantage, while the evolution over time of the second cause is much more to women's advantage. The variation in mortality by motor vehicle traffic accidents, on the other hand, delineates a picture which is slightly to women's disadvantage. Albeit in a context of rates which are generally falling

Table 11.7. Weight (\%) of Standardized Death Rates by Selected Causes in Total Mortality (Age 15 Years and Over); Women, End of the 1990s

| Country | 1995/99 ${ }^{\text {a }}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | LUC | IHD | CIL | SUI | TRA |
| Widening of the sex differential in survival |  |  |  |  |  |
| Ireland (1996) | 4.0 | 20.3 | 0.5 | 0.7 | 1.0 |
| Belgium (1995) | 2.7 | 10.4 | 1.5 | 2.3 | 1.6 |
| Greece (1998) | 2.3 | 10.5 | 0.4 | 0.3 | 2.1 |
| Portugal (1998) | 1.3 | 9.0 | 1.7 | 0.4 | 1.4 |
| Spain (1997) | 1.4 | 9.8 | 1.7 | 0.9 | 1.5 |
| Rumania (1999) [1] | 1.2 | 22.4 | 3.5 | 0.5 | 0.6 |
| Hungary (1999) | 3.6 | 21.3 | 4.1 | 1.6 | 0.8 |
| Japan (1997) | 3.6 | 7.4 | 1.2 | 3.0 | 1.4 |
| Israel (1996) | 2.2 | 16.0 | 0.7 | 0.6 | 1.2 |
| Narrowing of the sex differential in survival |  |  |  |  |  |
| Denmark (1996) | 6.5 | 15.7 | 1.3 | 1.6 | 0.8 |
| Finland (1996) | 2.0 | 22.9 | 1.1 | 2.3 | 0.8 |
| Norway (1997) | 4.7 | 16.2 | 0.7 | 1.6 | 0.8 |
| United Kingdom (1998) [2] | 5.3 | 18.5 | 1.1 | 0.7 | 0.6 |
| Sweden (1996) | 3.9 | 19.5 | 0.6 | 1.9 | 0.7 |
| Austria (1999) | 3.2 | 19.4 | 2.0 | 1.9 | 1.3 |
| France (1997) [3] | 2.3 | 7.4 | 2.3 | 2.7 | 1.8 |
| Netherlands (1997) | 4.1 | 12.0 | 0.7 | 1.5 | 0.8 |
| Switzerland (1996) [3] | 2.8 | 14.7 | 1.2 | 2.7 | 0.9 |
| Italy (1997) [2] | 2.6 | 11.7 | 2.4 | 0.8 | 1.3 |
| Poland (1996) [3] | 2.3 | 8.6 | 1.0 | 0.7 | 1.1 |
| Australia (1997) | 4.3 | 19.8 | 0.7 | 1.5 | 1.4 |
| Canada (1997) | 7.2 | 17.7 | 0.9 | 1.3 | 1.5 |
| United States (1997) [2] | 6.9 | 17.5 | 1.1 | 0.9 | 2.1 |

Notes: ${ }^{\text {a }}$ latest available year, shown in parentheses for each country.
[1] First period 1963. [2] narrowing beginning from 1970. [3] narrowing beginning from 1990.
LUC: lung cancer. IHD: ischaemic heart disease. CIL: cirrhosis of the liver. SUI: suicide. TRA: motor vehicle traffic accidents.
Source: see Tab 11.2.
for this cause, the rates for women are falling more slowly, in contrast to the trend for death rates by the other "external causes".

The hypothesis of the "dark side of equality" would therefore appear to find confirmation only in the unfavourable trend, nonetheless weak, of mortality by lung cancer and road accidents. However, these two causes currently exercise a very limited influence on overall female mortality (see tab. 11.7). The influence of mortality by motor vehicle traffic accidents reaches a maximum of $2 \%$, with minimum points of below $1 \%$ in a substantial number of countries; that of mortality by lung cancer is slightly higher, but still remains under $8 \%^{23}$, even though it is increasing appreciably compared to twenty years $\mathrm{ago}^{24}$. So the affirmation of the UN still remains a rather obscure prophecy in the light of these data.

## 7 CONCLUSIONS

Although the picture of male excess mortality which emerges from the analysis hitherto conducted is fragmentary due to the variety of the situations and limited by the cross-sectional perspective adopted, it does provide a few interesting opportunities for reflection. Gender differences in survival are now narrowing in most of the countries observed, due to the fact that male life expectancy is increasing faster than that of women, and they are increasing more slowly than in the past in the other countries. This suggests that a process of convergence is underway, in which the countries in the first group are the precursors. In the light of this pattern, behavioural aspects seem to take on a greater explanatory potential, as maintained in the thesis put forward by Rogers and Hackenberg [1991], according to which - in the industrialized countries male and female models of morbidity and mortality are now largely a function of individual behaviour and lifestyles. Models of behaviour as regards health are therefore converging, even though we cannot neglect the influence on reductions in differences in survival exercised by the "rectangularization" of survival curves. Indeed, the margins for improvement now concern only the very oldest age groups, and women are approaching the upper limit in countries with a high standard of survival. However, this limit appears increasingly hard to determine, and important answers may be found in the many studies on longevity launched in recent years.

There is support for the hypothesis of a converging of men's and women's social context in some of the results of our analysis. Indeed, we have seen that most of the gender differences in survival depend on male excess mortality in the older age groups, and that the age group providing the greatest contribution to these differences is moving continually forward over time (in a growing number of countries it now exceeds 70 years), while differences are
narrowing in the central age groups, which are more affected by the changes in lifestyle which have taken place over the last few decades. The fact that it is currently the older age groups which are producing the greatest differences would therefore appear to be the result of a more "virtuous" behaviour as regards health on the part of women during the course of their lives.

However, the behavioural explanation is ambiguous: the reduction of the influence of the central age groups may depend on an improvement in male life styles and/or on the simultaneous deterioration of women's. In this respect, the analysis of the variations in both male and female mortality by those causes which are particularly linked to individual behaviour, commented in the previous paragraph, illustrates a detailed situation: there are only important differences in men's favour in the case of the evolution of mortality by lung cancer and, to a lesser extent, by road accidents; in the case of the other causes, on the other hand, the picture of evolution for the two sexes is very similar. The fact that female mortality by lung cancer is growing appreciably in many countries (often alongside a decrease in the male rate) points to the sharp increase in the consumption of tobacco by women during the 1970s and 1980s. This cause of death has a still modest impact on overall female mortality, but the fact that its importance has grown notably in recent years nonetheless represents a sign which should not be underestimated; if current trends were to continue over time, smoking could become a negative counterweight in behavioural differences. However, the limit inherent in the cross-sectional data used here means that we cannot conclude that there is no trace of an improvement in male lifestyles in the comparative evolution of the mortality of the two sexes. Such an improvement, which may plausibly be already underway, could lead to improvements in the older age groups and could be measured using a longitudinal approach.

If men manage to improve their behaviour as regards health, then it will be possible to achieve a significant reduction of gender differences in survival, which will thenceforth be determined almost exclusively by biology. This scenario means that attempts to measure women's biological advantage, the influence of environmental factors excluded, are once again of contemporary interest. A pioneer in this field is the classic study by F. Madigan [1957], in which the author analyses mortality in two US religious communities, one male and the other female, following the same strict monastic rule and thus similar in behaviour, from which derived a difference of a little over 2 years between life expectancies at the age of 15 of nuns and monks. A similar calculation, obtained with very different methods, was made a few years earlier by Bourgeois-Pichat [1952], and later on by Pressat [1973]. Madigan's basic idea has been taken up again very recently by Luy [2002], who has extended to study to about 12 thousand nuns and monks in 11 German monasteries, once again obtaining an analogous difference in survival between the sexes. All these results, obtained
with different approaches and to a certain extent imprecise, given that environmental effects cannot be completely isolated, nonetheless agree on the modest size of the natural gap. The rebalancing of the picture of survival thus depends on cultural and behavioural changes.

## NOTES

1. As far as Europe is concerned, Albania, Iceland and Luxembourg were excluded from the analysis due to their small demographic size; the former Czechoslovakia, Germany and the former Yugoslavia were excluded due to the interruption in their time series caused by geographical variations; the former Soviet Union was excluded due to problems of comparability of data (in addition to territorial variations), and Bulgaria was also excluded as not enough data was available.
2. Since 1950 the ICD has been revised on four occasions: the seventh (1955), the eighth (1965), the ninth (1975) and the tenth (1989). Comparability has also been rendered difficult by the fact that these revisions came into force at different dates in the individual countries.
3. Life expectancy expresses the number of years that an individual might live, starting from birth or from a later age, given the persistence of the conditions of mortality observed in a given year or interval of years.
4. In the case of discrete data, the formulations most used were those proposed by E. Andreev [1982], J. Pollard [1982, 1988], E. Arriaga [1984, 1989] and R. Pressat [1985].
5. According to this procedure, the contribution of a given age group $x, x+n$ to the differences between two life expectancies at birth - for example that of men and that of women $\left(e_{0}^{F}-e_{0}^{M}\right)$ is equal to: ${ }_{n} \Delta_{x}=\frac{(M) l_{x}}{(M) l_{0}} \cdot\left(\frac{(F){ }_{n} L_{x}}{\left({ }^{(H)} l_{x}\right.}-\frac{(M){ }_{n} L_{x}}{(M) l_{x}}\right)+\frac{{ }^{(F)} T_{x+n}}{(M) l_{0}}$. $\left(\frac{(M) l_{x}}{\left({ }^{(F)} l_{x}\right.}-\frac{(M) l_{x+n}}{\left({ }^{(f)} l_{x+n}\right.}\right)$; for the open-ended age interval it is: ${ }_{\omega} \Delta_{x}=\frac{{ }^{(M)} l_{x}}{\left({ }^{(F)} l_{0}\right.} \cdot\left(\frac{{ }^{(\digamma)} T_{x}}{\left({ }^{(F)} l_{x}\right.}-\frac{{ }^{(M)} T_{x}}{\left({ }^{(M)} l_{x}\right.}\right)$ where $l_{x}, L_{x} \mathrm{e} T_{x}$ are the conventional functions of the life tables. The same equations can be used for decomposing the variations in life expectancy at an age a, replacing $l_{0}$ by $l_{a}$. The contribution of each age group to differences in life expectancy can be decomposed further into the contribution of the i causes (or groups of causes) of death. According to Arriaga's approach [1989], if we assume that the distribution of deaths by cause is constant within each age group, then the contribution is equal to:
 of deaths by cause $i$ over the total of deaths in the age group $x, x+n$ and ${ }_{n} m_{x}$ is the all-cause death rate between ages $x, x+n$. The method is additive and so, by summing all the contributions, we obtain a total difference between the two life expectancies, i.e. ${ }^{(F)} e_{0}-^{(M)} e_{0}=\sum_{x} \Delta_{x}=\sum_{x} \sum_{i}{ }_{n} \Delta_{x}^{i}$.
6. Age-specific mortality rates were used as input. As the WHO database provides deaths by five-year age groups, it was only possible to construct abridged tables. The values of these tables for life expectancy at birth match those of the tables found in other sources. The use of abridged tables in the procedure of decomposing differences in the length of life doesn't provide as good an approximation as that
which would be obtained by working with complete life tables [Caselli, Vallin, 2001, p. 420], but we believe that the picture which emerges is certainly indicative.
7. The changing sex gap in survival was calculated with the following formula for the instantaneous rate of growth $\left(r=100^{*} \ln \frac{\Delta^{i+1}}{\Delta^{i}} / t\right.$, where $i$ represents the period (year) to which the gap refers and $t$ is the distance in years between the period $i$ and the period $i+1$ ).
8. The analysis is based on the comparison of life tables calculated at 5 dates (1960, 1970, 1980, 1990, end of the '90s). As a result, identification of the year in which male and female life expectancy differences started to fall is merely approximate.
9. The most recently proposed limit has been set at 85 years [Olshansky et al., 1990].
10. From now on the analysis of male excess mortality will concern adult and old age (over 15 years), so that comparisons between the countries are not affected by the variability in infant and juvenile levels of mortality. Such differences are particularly high in the first year of life, both from a geographical point of view and from that of gender differences: in 1960 the infant mortality rate ranged between $18 \%$ in the Netherlands to $83 \%$ in Portugal for males, and $14 \%$ and $71 \%$ or females in the same countries. Over the next decades, the range gradually shrank, but at the end of the ' 90 s there are still appreciable differences between the countries of eastern Europe (between 13 and $20 \%$ of boys and 11 and $17 \%$ of girls) and the rest of the group ( $4-7 \%$ and $3-6 \%$ respectively).
11. The clearest differences are to be seen in France, where the indicator of male excess mortality is higher than in Sweden at all dates and at all ages, especially in the 25-60 interval. Certain differences in evolution may also be observed in Denmark and Finland, where there is no fall in excess mortality at around 25 years at the most recent date, and in the UK, where there has been an increase in male excess mortality between 25 and 40 .
12. An analogous situation may also be observed in the countries outside of Europe, with the exception of Israel. In the other European countries marked by a fall in gender differences in survival, the increase in the influence of the over- 85 age groups is less strong, but still significant (the percentage observed at the most recent date is $2-3$ times higher than that for 1960).
13. Exceptions in 1960 are Rumania, Hungary, Austria, France, Switzerland and Italy, where the influence of external causes is prevalent, although this generally decreases over the next decade, and also Portugal and Spain, which at the time lagged behind in the epidemiological transition, with a prevalence of infectious and respiratory disease.
14. Within this group of causes of death, a proponderant role in determining gender differences in survival in adult age is played by ischaemic heart disease, which we shall deal with in greater detail in the following section.
15. Certain factors of risk are also of a biological nature: indeed, several studies have highlighted the protective effects of female endogenous hormones against diseases of the circulatory system, for example [Waldron, 1983].
16. One notable exception was Israel in 1960, where mortality from cancer was higher for women and provided a negative contribution to the gender differences in survival (-7.9\%).
17. The exceptions are the UK, where the influence of this group of causes has always been lower (around 10\%), Ireland, Denmark, Greece, Israel and Finland.
18. Lower values are to be observed in Portugal (48\%), Rumania (54\%), the US and Israel (56\%), Spain and Hungary (57\%).
19. The standardized death rates by cause ( $m_{c}^{s}=\sum_{x=15}^{85+} m_{x, c}{ }^{*} p_{x} / \sum_{x=15}^{85+} p_{x}$ ) were calculated using the European population proposed by the WHO as a standard.
20. There are lower values for the male population in Ireland, the UK and the Netherlands, while the percentage is appreciably higher in Finland and France; the picture is more homogeneous for women, for whom only in France is there a significantly higher incidence $(9.5 \%)$.
21. We use the term lung cancer as defined by the International Disease Classification category "Malignant neoplasm of trachea, bronchus and lung". The details of the categories with the various ICD revisions, for all the causes of death used here, are indicated in Tab. 11.1.
22. The data on decease by suicide features problems of comparability. The phenomenon is underestimated, but the degree to which this is so varies from country to country, due to the different legal requisites and administrative procedures needed to obtain a diagnosis of suicide [Ruzicka, 1995].
23. As far as men are concerned, lung cancer has a more substantial effect on overall mortality; at the end of the ' 90 s, the standardized rates of mortality by this cause accounted for over $8 \%$ in 8 countries (Belgium, Greece, Spain, France, the Netherlands, Italy, Canada and the US).
24. The incidence of mortality by lung cancer on overall female mortality has doubled in the span of the last twenty years in almost half the countries observed. The increase has been particularly substantial in certain countries of north-western Europe (Norway, from $1.5 \%$ to $4.7 \%$; the Netherlands, from $1.6 \%$ to $4.1 \%$ ) and in the countries of North America (Canada, from $3.2 \%$ to $7.2 \%$; the US, from $1.7 \%$ to $6.9 \%)$.

## APPENDIX

# GENDER STUDIES IN DEMOGRAPHY: DATA, METHODS AND LINES OF RESEARCH 

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This appendix aims at sharing some knowledge and considerations on data, methods and research issues, developed throughout this study, with researchers interested in the development of gender studies in demography. Firstly, we will deal with the recent production of statistical data on the issue, showing contents of the most important databases created by countries and international organisations, and proposing the more adequate indicators to be used in order to introduce the gender perspective in demographic studies. Secondly, we will comment on the methodological strategies to be adopted to carry gender studies in demography. Lastly we will suggest some research topics regarding the traditional fields of demographic studies: sexuality and contraception, family and fertility, the elderly, migration, health and survival.

## 1 DATA

### 1.1 The Development of Gender Statistics

At the World Population Conference which took place in Mexico City in 1984, great emphasis was placed on the importance of understanding and transforming the gender system, and even more so at the 1994 Cairo Conference on Population and Development and at the 1995 Beijing Conference on Women.

As a result, countries have been prompted by the resolutions of these conferences to pay attention to the problem and follow the recommendations for the creation of gender statistics. A data base is therefore being constructed, integrating various sources of data, and there is a strong interest in creating fresh
information through specially designed surveys. This represents a solid point of departure for the development of gender research in demography.

The Beijing Conference on Women and the special session of the UN General Assembly organized in 2000 in order to monitor the progress made in the implementation of the Beijing plan of action provided a series of recommendations for the development of gender statistics and indicators of gender equality. The recommendations concern the collection and circulation of data, with particular attention to the subjects of poverty, economic autonomy, violence, health, education and vulnerable groups. At the same time, and with particular emphasis on the developed countries, the Joint ECE/UNPD workshop for policy monitoring and benchmarking organized as part of the Conference of European Statisticians (Orvieto 9-10 October 2000), underlined the difficulties of assistance and training, and reaffirmed their urgency and necessity, with the presentation of a new project entitled "Gender statistics website for monitoring change".

Publications such as The world's women: Trends and statistics (UN); Women and men in Europe and in North America (UN/ECE) (various years) bear witness to the efforts made at an international level in order to develop a system of statistical indicators suited to assessing the gender system in the different countries.

In the following sections we shall review the statistics which are being produced in this field at international, national and sub-national levels, and at macro and micro levels; we shall develop some considerations on the most suitable research design for the introduction of the gender perspective into demographic studies, we shall suggest some points of interest for research on gender and demography and we shall conclude with a list of available resources (texts or websites) for data, indicators and methods for gender studies in demography.

### 1.2 The Content of the International Data Bases

A chief objective in the field of the development of gender studies is the setting up of data bases collected using common methods for the explicit purpose of comparing the various countries from a gender perspective.

One of the greatest difficulties in comparing data relative to different countries is the less than perfect standardization of definitions, techniques of data collection and data circulation, whether the source be registers or surveys. In particular, the indicators should be a) conceptually meaningful so as to be fit to analyse the relative situation of men and women in the countries, b) comparable, in the sense that they must be collected in the same way and measure the same thing in the various countries, c) valid, i.e. they must measure what they are intended to measure and not other correlated aspects, d) accurate and widespread, i.e. available in accurately collected data bases in many countries
[United Nations, 1984a]. The content of the publications produced by the UN since the mid 1980 documents the effort to develop and follow such recommendations. The first publications in the form of practical guides for the development of sensible and correct gender indicators [United Nations 1984a; 1984b; 1988; 1989; 1997], sometimes with a special economic focus [United Nations, 1990a; 1993], were followed by publications directly implementing the proposed guidelines.

The first one, published in 1988, contains data for 178 countries or areas concerning: population, family, marital status, fertility, participation in economic activity and population not economically active, national and family income, expenditure on education and the health service, disability, housing conditions, participation in public life and politics, crime and justice [United Nations, 1988c].

The world's women 2000: Trends and statistics [United Nations, 2000b, data available on line at http://unstats.un.org/unsd/demographic/products/ indwm/wwpub.htm] is the third issue of The world's women, a publication edited by the UN; the two previous issues were published in 1990 and 1995 [United Nations, 1990b; 1995b]. The world's women is a collection of statistics on women's status compared to that of men in the various countries in the world, both developing and developed, for which data are available in the UN statistics system. The indicators collected (summarized in Tab. A.1), derive from different areas, including the family, health, education, employment, human rights and politics and are presented in a way that is comprehensible also to non-specialist users.

Women and men in Europe and North America was first published in 1995 on the recommendation of the group of experts of the Conference of European Statisticians, a body of the UN/ECE. The second issue, of 2000, was prepared by the UN/ECE's statistical division, with the financial support of the United States Census Bureau, and includes a greater number of indicators. The first part of the volume provides a gender profile for each ECE country, while the second part analyses eight arguments from a gender perspective: population and ageing; family and fertility; education; employment; income; power; health and survival; and crime and justice. Tables and graphs are provided for the countries for which indicators are available (Tab. A.2). The publication includes both the most recent data for each indicator and - where possible - a reconstruction of the historical series.

The availability of these indicators varies greatly from country to country, and only in the case of a few of them is it possible to trace their development over time: nonetheless, there is a clear emergence of the direction in which the developed countries are moving from the point of view of the subjects dealt with.

The distinction trait between these previous two publications, The world's women 2000: trends and statistics and Women and men in Europe and North America, is that the former contains indicators and data on the

Table A.1. Main Indicators in "The World's Women 2000: Trends and Statistics"
Family and health
\% women aged 15-19 ever married
Mean age at marriage
$\%$ women aged $60+$ widowed
\% women-headed households
Contraceptive use for married women
Total fertility rates
\% births for women aged 15-19
\% women among people with Hiv/Aids
\% pregnant women who received prenatal care
\% deliveries attended by skilled attendants
Maternal mortality rate
Education
Women's share of secondary level education enrolement
Women's share of tertiary level education enrolement
\% women among illiterates
$\%$ teachers who are women at $2^{\text {nd }}$ level
$\%$ teachers who are women at $3^{\text {rd }}$ level
Work and economic life
Unemployment rates
\% women's share of part-time employment
Length of maternity leave
\% of wages paid in parental leave period
Provider of leave coverage
$\%$ women in the labour force
$\%$ of wage and salaried workers, self-employed workers and contributing family workers
\% women among administrative and managerial workers
Women's wage relative to men's
Women in public life
\% parliamentary seats occupied by women
\% women at ministerial and sub-ministerial level
Human rights
Year of ratification of Cedaw ${ }^{\text {a }}$
\% of adult women who have been phisically assaulted by an intimate partner in the last 12 months and in any relationship

Note: ${ }^{\text {a }}$ Convention on the elimination of all forms of discrimination against women.
whole set of countries in the world, i.e. without any particular attention to the conceptual differences existing between gender indicators as regards developing and developed countries, while the latter concentrates on countries belonging to the ECE.

Table A.2. Gender Indicators in "Women and Men in Europe and North America"
Part I-Gender profile for each country
\% women
among population aged 65+ among graduates
among engineering graduates
among law graduates
among workers
among employees
among managers
among sales and craft workers
among adult smokers
among parliament members
among convicted criminals
about both women and men
mean age at marriage
age-specific activity rates
life expectancy at birth deaths for cardiovascular, circulatory system, cancer, external causes
age distribution
\% out of wedlock births
\% births from women under 20
years of age
women's income as percentage of men's

Part II - Relevant issues

## Population and ageing

\% widows by age
Family and fertility
\% one parent families, by sex of parent
\% one person household by sex and age
\% cohabiting couples
age-specific fertility
abortions
\% singles
divorciality
remarriages
Education
\% women in different fields of study at the tertiary level
\% women among teachers at different educational levels
Work
\% time spent in paid and unpaid work
activity rates, according to the presence of
children of preschool age
\% part time employment and main reasons for it
reasons for not being in the labour force

Table A.2. (Continued)

```
Income
women's income compared to men's,
    educational level and occupation being equal
Power
% women among heads of state or
    government, ambassadors, consuls,
    servicemen, judges, lawyers, prison
    personnel
Health
Alcohol consumption
Hiv/Aids prevalence rate
Admissions to hospitals and request for
    medical advices
Crime and justice
% women among convicted criminals
% women among convicted for assaults, thefts
    and drug crimes
% men convicted for rapes
```

The WISTAT Series (Women's indicators and statistics database) is one of the most complete data banks containing gender indicators [United Nations, 1992, 1995a, 2000a], whose crucial characteristic is the possibility to have time series information. It is updated in each edition and contains data concerning gender, population and development for 206 countries or areas and indicatively from 1970 to 1997. Special attention is paid in the technical notes to the available data and their interpretation.

The Gender statistics website for Europe and North America (online at http://www.unece.org/stats/gender/web/welcome1.htm) also includes statistics. Indeed, it is a most valuable working tool, containing definitions, guidelines, methods of calculation of indicators, discussion of problems of measurement and suggestions for the presentation of data, policies and programmes in relation to eight areas of interest: population and environment, family, economic participation, social protection, education and communication, public life and decisionmaking processes, health and violence against women. The main goals are not only to facilitate the circulation of data and create an awareness of the importance of access to gender statistics for the implementation of policies, but also to encourage the circulation and adoption of international standards and the utilization of guidelines for the construction of internationally comparable
indicators. The website includes general information and links to sources of data. In addition, the sites of the individual countries belonging to the ECE are connected to the main site.

The link http://www.un.org/womenwatch/asp/user/list.asp?ParentID=20 provides an updated and comprehensive list of United Nations on line resources dealing with the gender topic. Anyway, things are rapidly changing and evolving in this field, and the main scientific and political organization are developing a gender mainstreaming section, as we shall see in the following of the chapter.

### 1.3 The Contribution of the Individual Developed Countries

A Work session on gender statistics was held in Orvieto, Italy, from 11 to 13 October 2000 as part of the Conference of European Statisticians, organized by the Statistical Commission and Economic Commission for Europe. The projects and achievements of the ECE countries were presented as part of this Work session.

Women and men in Sweden 2000 may serve as a good example in order to see in what direction the list of indicators is being extended. These concern population, health, education, time use, childcare, looking after the elderly, paid work, wages, income, violence/crime and power/influence. The following is a list of indicators which are new compared to those of the data bases presented in the previous section:

- sterilization
- smoking and drug abuse among adolescents
- obesity and physical exercise
- time use
- childcare by age
- financial incentives for parents with children
- pensioners requiring and receiving help
- full-time and part-time work by age of children
- occupational segregation
- poor working conditions
- absenteeism
- man-woman wage differentials by different conditions and by "female" and "male" occupations
- women in regional and local government
- women managers

In 1998 Norway published a study in English entitled Women and men in Norway, with a richer Norwegian version. The goal is to provide indicators
for the promotion of equality between the genders, not only in working life and politics (as established in the Gender equality act passed in the 1970s), but also in those areas which are traditionally part of the private sphere. There is therefore particular attention not only to wage differences between men and women performing work of equal value and to the protection of women as workers, but also to the problem of violence against women and to the transformation and development of the paternal role. The study begins by tracing the story of the historical gains of women in Norway over the last 150 years in legal rights, politics, the family, education and employment. Then there is a presentation of indicators regarding population, families, family or social contacts/participation in associations, childcare/care of the elderly, health, education, time use, employment, working environment, income, power/political influence and violence/crime. Norway also conducted a new investigation into the time use in 2000.

In Canada the indicators are in relation to government policy, which aims to increase women's economic autonomy, improve their physical and psychological wellbeing and increase their participation in central and local government and in all aspects of social and cultural life. The surveys on Time use, Social and community support, Family and friends, Education, work and retirement, Personal risk and health, provide indicators of economic autonomy, physical and psychological wellbeing and other gender-related subjects. It should be pointed out that the indicators of physical and psychological wellbeing include those concerning violence, maltreatment and safety.

France is seeking to set up a system of indicators suited to monitoring the implementation of policies promoting gender equality. The greatest attention is paid to: education, as a precondition for optimal integration into the labour market, career, participation in power, wages, the possibility of reconciling family and work, reproductive health, single mothers, poverty, pensions, the health and living arrangements of the elderly, violence (with a national survey) and divorce (including custody of children and economic consequences).

In England an EOC (Equal Opportunity Commission) has been in existence since 1975, and is encouraging the producers of statistics to adopt a gender perspective. Publications such as Facts about women and men in Great Britain/Scotland/Wales, Women and men in Britain, Sectoral briefing on pay: undervaluing women, A brief guide to gender statistics and Social focus on women and men, bear witness to the effort to produce data and analyses in this direction. In 1998 the Gender statistics users' group was set up with the aim of improving the production and analysis of gender statistics, in order to understand the situation and develop and assess policies for the reduction of inequalities.

Finland is paying particular attention to the development of indicators of women's participation in decision-making processes.

The Netherlands publishes Emancipation monitor, which makes use of data on education (types, employment prospects); time use; paid and unpaid work (including segregation, use of benefits, working hours); income; participation in decision-making in politics, the civil service, social sectors and NGOs; violence; and the attitudes of persons in key positions towards women's emancipation.

The United States made plans to use information from the 2000 census to assess the progress of women in the following fields: education, employment, work, poverty, lone women, age at marriage and living arrangements. Obviously, this is a case of utilization of an existing census not oriented towards a gender perspective.

In Italy a law has been drafted for the regulation of gender statistics. ISTAT (the National Institute for Statistics) is committed to the systematic publication of statistics differentiated by sex, it has undertaken two surveys on the time use, and in 1997-98 it conducted its first survey on the safety of citizens, which also contains a module on sexual harassment and violence towards women aged 14-59. The good quality of the results obtained encouraged the continuation of the study, which was repeated in March 2002 and is to be repeated every five years, with a broadening of the module on sexual violence. An information system on violence against women, including domestic violence, is also to be set up in the near future. The idea of an Italian special survey on violence against women in its various expressions both in the family and outside of it was born as part of a joint study by ISTAT and the Ministry of Labour and Social Policies’ Department of Equal Opportunities, and the study was performed in 2002. Joint initiatives regarding these aspects have also been launched in concert with the UN organizations UNICRI and HEUNI, and with Statistics Canada, with a view of producing data comparable with other countries adhering to the International Violence Against Women Survey. ISTAT is not adhering fully to the project, which aimed to interview 2000 women, as it does not regard the sample as being sufficiently representative, but used a richer questionnaire on a sample of about 25,000 women aged $16-70$ in the 2006.

Many aspects concerning education, paid and unpaid work, health and roles may be deduced from the "Family and Social Subjects" surveys, in particular from the one on time budgets, which through the compilation of diaries on the part of the subjects interviewed provides the highest level of quality for this type of information and is the only survey able to ensure international comparability in the context of a project of European standardization. No specific survey on gender is planned as yet, but the enquiries currently underway could easily be used for a better knowledge of the gender system.

### 1.4 The Construction of Data Bases at Sub-national Level

Some countries are seeking to develop statistics at a local level, useful for the implementation of local policies. For example, Norway calculates nine indicators:

- percentage of children of pre-school age enrolled in state kindergarten
- percentage of women on local councils
- percentage of women with higher education
- women-men ratio in higher education
- women-men ratio in the population aged 20-39 (in order to highlight any imbalances due to migration)
- percentage of women in the workforce
- women-men ratio in participation in the workforce
- women's net average personal income
- women-men ratio for income.

The nine indicators have little correlation between them and are synthesized and grouped in quartiles. The local areas are classified accordingly. The single indicators which best express the gender situation of the local areas are participation in the workforce and women's personal income. The local areas responsibles have suggested the inclusion of indicators of general state of health, the elderly and the availability of services for the elderly. Surveys are planned to supply these indicators.

Sweden has also set itself the goal of measuring gender equality at a local level. The variables considered, by sex and two age groups (20-44 and 45-64) are:

- rates of employment
- percentage of persons with higher education
- income from work.

In addition, the following were considered:

- days of parental leave used for assistance and care of children
- distribution by sex of local councils.

In this case too, the variables are synthesized and the local areas are grouped into six classes. A more detailed data base is being planned, to be published as a website.

There is notable interest in the construction of data bases at a subnational level because their availability is a precondition for the realization of an important aspect of gender studies, i.e. that of taking account, in a multilevel research plan, of the influence of context on gender relations existing in the family and in the couple and on consequent patterns of demographic behaviour. These initial experiences are just the vanguard of initiatives which are destined to become more widespread. A project of construction of a macro data base at
national and sub-national level is, for example, one of the goals of the GGP (Gender and Generations Programme), the new comparative research project on developed countries launched by the PAU-UN/ECE in 2000.

### 1.5 Indicators to Assess the Gender System and its Influence on Demographic Behaviour

As may be seen from the content of the data bases which we have illustrated, many gender indicators concern demographic behaviour. The frequency of early marriage and age differences between the two genders at marriage give us an indirect idea of women's condition and bargaining power within the couple; the frequency of widowhood and female heads of household give us indirect information on exposure of women to conditions of deprivation; the use of birth control and abortion tells us something about the ability to control reproduction; total and teenage fertility tell us about the biological and cultural conditioning which binds women's destiny to reproduction; health and survival tell us about the protection of women and thus about the value attributed to women in society; and differences in causes of death or mortality by age and life expectancy tell us about the specific risks of the two genders related to lifestyle and to the different roles they play in the labour market. This system of demographic indicators of gender may be further developed if a gender perspective is adopted in demographic research. For example, we have found no indicators regarding migratory movements, which are a powerful means of changing women's condition and gender relations and are all the more important today, given that women are participating in migratory flows as protagonists and not just as members of the chief migrant's family.

The existing data bases, which contain both demographic and gender information, are a useful tool of information for introducing a gender perspective into demographic studies.

Indeed, adopting a gender perspective in demographic research involves both the development of a system of indicators of demographic behaviour which are sensitive to the gender system, and the identification of the covariates which make it possible to test hypotheses on the relations between gender system (at a macro level) and/or gender contract (at a micro level) and demographic behaviour. This means first of all developing theories and hypotheses, and then tailoring surveys to the new requirements in knowledge and introducing new variables.

International data banks have already started to accumulate useful indicators for the assessment of the gender system at a macro level, and their content is sufficiently clear. Less experience has been accumulated at a micro level. Only recently have the large demographic surveys started posing the problem and, even so, much more experience has been accumulated in developing
countries than in developed ones. The DHS (Demographic and Health Survey), a series of comparative surveys for developing countries on the family, fertility and birth control, health and mortality, has included a module on women's condition and gender relations in the case of some countries since 1995. The questions, in the most extended version of the questionnaire targeted at women (e.g. the Haiti survey), concern the subjects listed in Tab. A.3.

Gender relations in developed countries are generally much fairer than in developing countries, and women's condition is much better. The information

## Table A.3. Gender Indicators in the Dhs Questionnaire

## Education

Work
Money and property
decisional power on utilisation of own earnings
possession and free utilisation for a woman of her own money
possession of goods and possibility to sell them without asking for permission
control over money to purchase food, clothes, medicines, personal care items
knowledge and use of credit programmes
cooperatives membership
Health and decisional power regarding medical care (for a woman) for herself and her children
Decisional power
on purchases, meals, work, visiting relatives and friends, care, contraception, children's education, care of children in case of illness, way of obtaining obedience from children, having another child
opinions regarding: who has to take important decisions within the family; man's participation to household tasks; employment of married women; possibility of disagreeing with the partner; opportunity of standing husband's beating in order to keep the family together
participation to meetings for women to discuss about community matters, education, health, women's condition
agreement with partner about number of children to have

## Partner

age, education, work
who has chosen the partner and woman's approval
communication with partner about daily matters
communication with partner about contraception
quality and features of partnership (free time together, consulting with partner on various issues, showing love and affection, respect)
jealousy, control, lack of confidence

Violence
humiliations, abuse, physical violence, rapes
partner's drinking habits
physical assault by the woman against her partner
physical assaults by other persons
physical violence during pregnancy
possibility of asking for help to the family of origin
asking for help in case of physical assaults
physical violence by the father against the mother
opinions on and experience of child abuse.
Partner's opinions concerning (questionnaire for the male partner)
woman's work
last word on decisions
opinions on circumstances justifying phisical violence against the woman and personal
experience of physical assaults against the partner
justification of a woman refusing sexual intercourses in some circumstances
punishment of the woman if refusing sexual intercourses
opinion on who has the responsibility of household tasks, and caring and rearing children
physical violence by the father against the mother
opinions on and experience of physical violence against children
opinion on and decisional power to refuse sexual intercourses
necessary for assessing gender relations cannot therefore be the same. Indispensable information should concern those aspects of gender which have been identified by those scholars who have specialized in the subject as being the most important: access to and control of resources, autonomy, power, prestige and roles.

An indicative list of variables might therefore be the following:

- education, in terms of both level and type of studies: humanistic or technical-scientific, given that the latter is the most remunerative field in the labour market and tends to be chosen by boys;
- work: as status (prestigious or otherwise), career opportunities, responsibility for other personnel, segregation (occupations performed mainly by women, equal mix, performed mainly by men), working hours (part time/full time, flexible), job insecurity;
- decision-making power over important issues (political decision making, economic decision making, judiciary system ...);
- autonomy: of movement, of expenditure of one's own money and of selling what one possesses without having to ask the permission of others;
- division of roles: who does what in the family and outside, as regards important roles concerning the procurement of income, the provision of food, hygiene, health, the necessary items of everyday consumption, looking after dependent persons (children, the sick and the elderly), keeping in touch with friends and relations, and dealing with paperwork and tax forms;
- participation in associations and meetings: women who participate in the life of an association have a point of reference outside the family and enjoy greater autonomy;
- the presence of improper conduct or violence in relations between partners or between children and adults (this subject has been thoroughly developed in the DHS, since while physical violence in family relationships, especially that of men over women is very widespread in developing countries, it is by no means absent from developed countries which, as we saw in section 3, have started to address the statistical measurement of the phenomenon).
The FFS project was not designed to observe the relations between gender and family behaviour. As a result, it included information only on education and work, and on domestic roles and childcare, but nothing for example on autonomy and power, on the interaction between partners and on the quality of the relationship. Moreover, the information provided by the respondent on their partner referred to the current partner and their current characteristics. The chapters of this book in which such data have been used will reveal the limits both in content and method inherent in such choices.

Very recently, the UN/ECE launched a new project with the promising title Generations and Gender. The volume presenting the first draft of the project (Generations and Gender programme: exploring future research and data collection options, UN 2000) clearly demonstrates the difficulty of properly incorporating the gender dimension into demographic research. Out of a total of 166 pages, only 3 are devoted to gender. An important part of the project is currently undertaken by means of a new round of surveys targeted at similarly sized samples of men and women (from young adults to the elderly and old), and a questionnaire has been prepared by a working group. The questionnaire includes the information contained in Tab. A.4.

It is clear that GGP is still a long way from the strong, clear commitment of the DHS on the subject of gender system assessment. Naturally, the inequalities in developed countries are not of the same gravity as in developing countries, but they do exist, to a fairly differentiated extent, as the macro indicators demonstrate, and more could have been done to honour the title of the study.

Table A.4. Gender Indicators in the GGS Questionnaire

## Access to and control of resources

education; both level and field of study, the latter to evaluate educational segregation employment, kind of occupation, working times, flexibility, work-place, satisfaction, role of supervision, prevalence of male or female workmates, supply of childcare services, job's regularity, stability and security, earnings, use of parental leave and related benefits (similar questions have been asked about the partner, in order to make the comparison between man and woman within the couple possible).

Autonomy
employment
earnings
management of family budget
attitudes and opinions on the possibility for a woman to freely decide: what to do in her
daily life; how to spend her money without asking for permission to the partner.
Roles
employment
division between partner of different tasks (preparing the meals, cleaning, shopping for daily goods, house maintenance, filling in tax form, care of sick family members, planning for social life, care of children)
assistance and help received from other family members or external people, included paid assistance
use of child-care services
satisfaction with partner's cooperation
persons providing help regularly and frequency of help
consequences of a childbirth on parents' work
attitudes towards the role of wife and the family and work conflict
attitudes and opinions towards partnership's features (differences in age and earnings between partners, division of household tasks, contribution to family income, preference for man working in case of shortage of employment opportunities )

## Power

employment
economic condition
way of organizing the management of family budget
decisional power on purchases, social life, whether to work or not, having a child, how to rear a child
opinions concerning differences in age and earnings between partners
opinion towards men's and women's ability as political leaders.

# 2 METHODOLOGICAL STRATEGIES FOR GENDER STUDIES IN DEMOGRAPHY 

### 2.1 The (Men/Women) Comparison

Without discussing individual methods, we shall attempt to fix the bases for a methodological course of action tailored to the most common goals of gender studies (definition, description, assessment of the gender system, study of its determinants and relations with various types of demographic behaviour).

In a study on gender there is a recurrence of the concepts of similarity/difference which underline the need for the continual comparison of the characteristics and behaviour of men and women in order to answer the main scientific questions posed by research in the field. In particular, in the case of data deriving from a survey such as those widely utilized in this volume - i.e. related to family, reproductive and contraceptive behaviour and therefore always targeting the women and often the components of the couple - it might be worth regarding the two male and female groups separately as independent samples, and the two groups of husbands and wives, on the other hand, as an example of dependent samples or paired data.

The analysis of international literature on gender studies in demography very clearly displays that the preliminary use of basic statistical methods in order to ascertain the existence of gender differences is somewhat occasional and that the usual procedure is to directly perform multivariate analyses separately on males and females, and to compare the results a posteriori.

The comparison between genders may start from its most simple formulations and, in statistical terms, it may therefore be:

- graphical;
- comparisons of distribution;
- descriptive of frequencies or quantities relative to parts of a group or to entire groups;
- based on parameters of synthesis of the distributions relative to groups (means, variances etc.).
Given two variables, there are a lot of measures making it possible to assess whether there is any association between them, measure the extent of this association (i.e. assess its intensity) and establish its type (direct, indirect). Naturally, we must bear in mind the scale of measurement of the variables. In our case one of the variables in play will be nominal (sex).

These measures are divided into tests of independence and measures of association.

We can compare two independent samples or correlated samples (paired data), we can use parametric and non parametric tests. The parametric tests
are based on differences calculated between the characteristic values of the two samples. The non parametric tests make no assumptions regarding the analytic form of the distribution of data [Siegel and Castellan 1992]. Many of them serve for the study of the relationship of dependence of a variable Y on an independent variable X , and in some cases this is a non-parametric version of parametric tests.

### 2.2 Towards Multivariate Statistics in the Exploratory Approach: What Kind of Methods to Analyse Gender System?

In addition to survey micro data, which is mainly qualitative in nature, macro data from official statistics can be used which substantially refer to dimensions of a quantitative nature. We would suggest an ecological approach in order to obtain an effective description of the gender system at a macro level. There have been many recent studies in the socio-demographic sphere which have set themselves these aims. And a great deal of attention is above all being paid to the tools which make it possible to conduct an analysis and synthesis of the sets of variables or indicators at aggregate level, with a view of obtaining a description which in some cases may be a point of departure, as part of a course of action consisting of successive stages of interpretation of causal relations.

It is possible to use multiway or three-way analysis in order go beyond a simple description, in an exploratory approach which makes it possible to obtain an overall vision of a set of complex data, using techniques of synthesis, among other things [Law et al., 1984; Coppi, 1986; 1988; 1998; Coppi, Bolasco, 1989]. The "three ways" refer to three classical dimensions of statistical studies, i.e. units, variables and points in time: with respect to two-item matrices, there is a third dimension which, in the traditional approach of three-way methods, is of a temporal type and is relative to moments in time [for an example of application see Di Giulio and Pinnelli in this volume].

This approach aims to represent three-dimensional matrices over spaces of reduced size, on the basis of techniques of principal components analysis; the variables are usually quantitative indicators relative to macro units (e.g. geographical areas). Representation takes place on a factor plane of "compromise" in which variables (or units) are represented by oriented broken lines, with a number of vertices (nodes) equal to the number of occasions.

One possible way of adapting the method in gender studies lies in using a multiway scheme with two "parallel" matrices for men and women respectively, in which the third dimension therefore turns out to be that of "gender"; the units are the individuals, and in this case, given that the individual data is normally taken from surveys, we shall have mainly qualitative variables concerning patterns of behaviour. At this point it is easy to imagine how the
results might be represented on a single factor plane of compromise, in which the variables relative to men and women are effectively synthesized, offering an immediate visualization of the differences. Also from the point of view of quantification, the output of the method provides, among the others, "scores" which directly compare the two genders in general, on average and as regards each category.

### 2.3 Complex Models in the Multivariate Case: The Interpretative Approach

The main objective in the interpretative approach is the analysis of symmetrical or asymmetrical relations among the variables. The approach is therefore no longer exploratory and of synthesis with descriptive objectives, like the one illustrated in the previous section, but inductive-inferential, in which the study of relations between one or more variables of interest - relative to decisions, behaviour, attitudes, events - and some of their potential determinants is instrumental to interpretative models. We shall limit the discussion to event history analysis, which is the most suitable approach for analysing events and behaviour measured by longitudinal survey data.

The approach of analysis of the life course recurs as one of the basic approaches in gender studies, given that the dimension of gender is constructed during an individual's existence: the entity and meaning of gender differences change together with the different biological and social changes in the life of a man or woman. The individual and environmental variables and circumstances which define the system of gender relations and behaviour change during the life cycle. These arguments are followed up in this volume by Angeli and De Rose, Coppola, De Rose and Di Cesare, Impicciatore and Rettaroli.

Gender relations within the couple are the result of the phases of a negotiation which is explicit to varying degrees, with varying degrees of awareness, and they are therefore the result of an interaction. They are closely related to the two partners' event histories and to the way in which these interact. On the basis of these considerations it becomes necessary to reflect on what is the best methodological approach in the broad sense. Inference from samples of women only, in order to focus attention on women's condition? A man-woman comparison from independent samples, for an approach to gender as a study of differences? Use of samples of couples in order to highlight the relational dimension of gender? This is a crucial point which has been amply treated elsewhere [Dalla Zuanna, 2000] in order for the study of differences and the gender system at an individual level to be as complete and correct as possible.

EHA (event history analysis) techniques include methods for the analysis of interrelated event histories, methods for the estimation of nonobserved individual heterogeneity, mirror life tables and change point models,
mixture models ${ }^{1}$. But these are just some of the possible examples. The gradual recognition of the extreme complexity of the formalization of the relations between events in the biographical perspective of the life course - multiple transitions and transitions with several states of destination, synchronization of events, parallel event histories, interdependent event histories - has a direct effect on the growing complexity of tools, which are developing and becoming more complicated in the many-sided picture defined by whether or not we incorporate parameters and dependence on time, by the degree of sensitivity to truncations and by how composite are the relations of causality.

### 2.4 The Micro and Macro Dimensions of the Gender System: The Use of the Multilevel Approach.

One of the methodological challenge in gender studies is to move towards methods which bring together not only different sources of data but also different levels of analysis: the micro level, characterized by individual behaviour which defines gender differences, and the macro level, which may be represented by family, place of residence or by other types of aggregation pertinent to the object of research, in which the gender system is defined and affects the individual dimension. Multilevel models [Hox, 1994; Goldstein, 1995; Snijders, Bosker, 1999] represent an extension of traditional models in the case where observations are no longer regarded as independent (according to the basic assumption for the classical approach), but correlated within groups (higher level aggregations). This means having to process data organized in hierarchical structures in which the elementary statistical units (first level) are regrouped into the statistical units within which they turn out to be correlated (second level). This structure, if recognizable, is not casual and should not be ignored, because it could affect the estimates of the coefficients which synthesize the relationship between the variables ${ }^{2}$. In the studies on demographic behaviour, this means hypothesizing that individuals belonging to the same contextual units display more similar patterns of behaviour than those belonging to different units, because the former share the same macro characteristics which therefore directly or indirectly affect their behaviour. The hypothesis of a significant context therefore translates into a problem of correlation between units [Racioppi, Rampichini, Zaccarin 1997] and this finds a valid tool in the multilevel approach. Normally, the testing of the degree of significance of the variance component at macro level confirms the plausibility of the hypothesis of context of influence and of the impossibility of ignoring the clustered structure of the data, and usually constitutes the point of departure for the application of a more sophisticated multilevel model.

As already anticipated, gender does not exhaust its manifestations at a single level of analysis: if, as evidenced in the previous section, the individual and the couple represent the key elements in the definition of differences and gender relations at a micro level, at a macro level such differences and relations will be combined in a gender system which will characterize the aggregate, an aggregate which may be a socially defined group or a geographical-administrative unit, even a country ${ }^{3}$.

The importance of the macro dimension of the gender system has been widely recognized [Di Giulio, Pinnelli in this volume; Pinnelli, 1999; Pinnelli, Di Giulio, 1999]. The approach offers opportunities, on the one hand, to test the effect of the macro gender system (which is measured anyway) on individual behaviour [De Rose, Racioppi 20014], and on the other to understand whether there is any consistence between gender differences found at an individual level and the gender system produced at an aggregate level (in relation to an event the variability of which is to be explained).

It would therefore be appropriate to supplement any study on micro data, undertaken with a micro approach, with studies at an aggregate level, in order to assess the influence of the gender system in the context on gender differences in individual behaviour. The final step should naturally be that of assessing the interaction between the two levels.

The course of action traced by us has as its starting point the need to recover the phase of assessment of the one-dimensional datum, dwells on the desirability of placing attention on the bivariate comparison (suggested by the gendered goals of research) and proceeds with the possibility of taking account of different formalizations in a multivariate context (exploratory factor analysis, causal analysis, life course), with the final consideration that the complexity suggested by the gender perspective makes it necessary to use broad-ranging approaches such as that of micro-macro integration and that of the perspective of international comparison.

## 3 LINES OF RESEARCH

### 3.1 Research Plans

One fundamental aspect of demographic research from a gender perspective concerns the persons who are the object of the enquiry: obviously, it is not enough to interview men and women in order for the research to be regarded as being on gender, as gender is a relational concept and what is difficult is precisely the revealing of the characteristics of relations between genders and how the genders interact. In any case, we require information on the characteristics, preferences and behaviour of men, in addition to those of
women. This can be done by asking women for information on men (partners, fathers, sons, colleagues, bosses etc.) or by interviewing men and women, as was done in the FFS surveys, or by interviewing couples, as was done in the two national surveys on fertility and the family in Italy (De Sandre, 1982; De Sandre et al., 1999). In the surveys mentioned, however, the sample of men was usually smaller than that of women, and this causes problems in comparing the results. Moreover, the questions were aimed at assessing not gender relations, but principally the different characteristics, opinions and demographic behaviour of men and women, which is not the same thing.

The research design should take account of the fact that gender relations evolve over time and change according to the phases of the life cycle, which is why we cannot explain the situation we see today in terms of current gender characteristics. This would lead us to prefer prospective longitudinal research designs, given that it is difficult to reconstruct the characteristics of relations in retrospect. Moreover, gender relations are strongly affected by countries' institutional framework: laws, services, help to families, the education system and the labour market are not gender neutral institutions, and they push individuals towards gender oriented models of behaviour. The systems of indicators at a local level mentioned in section 1.4 are one example of macro information that may be associated with micro information for a more correct vision of the influence which the gender system may have on demographic behaviour. A multilevel research design would therefore seem indispensable for introducing the gender perspective into research in a correct manner.

In order to give some concrete idea of how research on gender and demography can be developed, we chose five broad themes: sexuality and contraception, family and fertility, the elderly, migration and health and survival. In the sections which follow we shall make some observations on what research is possible and what could be done with new data, and on any related issues. In many cases these are therefore ideas for the future, which could help direct the surveys to come.

### 3.2 Sexuality and Contraception

An important role has been attributed to "sexual liberation" in theories on the second demographic transition. It has been regarded as a cause of the delaying of marriages and of the fall in nuptiality. It is both a cause and an effect of the change in gender relations. The decrease over time of women's age at first intercourse is the proof of this "liberation".

A difference in age between the two genders at first intercourse (younger for men) is an indicator of the existence of a double standard, which allows males to make an early start with older women (often sex workers)
and to gain an experience which gives them an advantage over their future girlfriends and wives, while the latter have to observe the obligation of chastity and conservation of virginity up until marriage, or at any rate longer than men. When this gap narrows it means that sexual relations are starting off in a more egalitarian fashion. As a result, the age difference at first intercourse between men and women is already an excellent indicator of the gender system. The bringing forward of sexual initiation for girls, which is at the origin of this phenomenon, is due to the change in women's status, but it itself also acts to change women's status, enabling them to wait longer before starting a family and to devote themselves to studies or work without the urgency of marriage. Future surveys should collect information on conditioning (social, peer group) and on awareness in making this decision.

Not much is known as to the modalities of first intercourse, but the case in which this has not taken place consensually, according the modalities chosen by the girl, but has been obtained by force seems to be fairly frequent, especially in the case of the youngest girls, and has yet to be studied at all.

Frequency and variability of intercourses, when different between men and women, is also an indicator of the existence of different moral standards. One aspect related to women's autonomy and to the delaying and decline in frequency of marriages is whether this new situation allows for a sex life of equivalent intensity to that of marriage, for either men or women.

Use of contraception and methods utilized make it possible to assess whether intercourse is protected and whether the form of contraception is suited to the stage in the woman's life cycle. For example, the absence of contraceptive protection when pregnancy is not desired is an indicator of a low degree of responsibility as regards the possible consequences. In the pre-AIDS era, the use of safe methods such as the IUD and the pill was an indicator of the maximum degree of women's control over the process of reproduction, but now the only guarantee of safe sex is the use of the condom outside stable relations or in situations at risk of sexual transmitted diseases. As a result, information on contraception, coordinated with that on the type of relationship and on the desire for fertility, gives us important indications about women's power and autonomy.

Finally, voluntary interruption of pregnancy is an acquired right which no woman ever wishes to have to exercise. It is probably for this reason that women prefer to forget about experiences of abortion, and the survey's data on the subject systematically underestimate the phenomenon. But what is usually ignored is the role of the partner and his participation in the decision.

Information on sexual behaviour should therefore include variables on forms of partnership (short-term relationship, stable affective bond, marriage or cohabitation) and on the length of the relationship, conditions which differentiate the possibility of having intercourse and the use of contraception and which may
therefore be regarded as intermediate variables. Other variables should concern the nature and frequency of intercourse: whether it is forced, episodic or regular; the number of sexual partners; lifestyle and social opportunities which might favour sexual activity or otherwise. As far as voluntary interruption of pregnancy is concerned, more information is required on motivation, on the partner's participation in the decision and on the network of family and social support.

The greatest problem for the study of these questions is the availability of sources. The information on sexual activity, contraception and voluntary interruption of pregnancy may only be derived from two sources: health services (family planning centres, medical records) or population surveys. These latter should pay more attention than usual to estimation of sampling error and non sample-related distortions, which are probably greater when questions touch upon the sexual sphere.

A subject apart is that of homosexual relationships, which are starting to be taken into consideration in population surveys. From the point of view of gender, it would be interesting to know both whether the change in gender roles has anything to do with the coming to light of homosexuality, and what roles and equilibriums are established within such relationships, i.e. whether, beyond the biological sex of the partner, there is any tendency for a gender contract to be re-established in such couples, similar in kind to that established between partners of different sex.

### 3.3 Family and Fertility

The family performs functions: there is housework which has to be done for the physical and psychological wellbeing of its members, decisions are made, income is procured and managed, there is consumption and expenditure, relationships are maintained with the network of friends and relatives, there may be protection or abuse and violence, agreement or disagreement, and equality or inequality. There is no doubt that the traditional family fulfilled certain functions and that there was a clear division or roles and power between the genders. The current informal unions, or those in which there are smaller differences in age, education and employment, or even an inversion of such differences, seem to be formed on different bases, with a greater element of sharing or exchange of roles. It may be, however, that in such theoretically more egalitarian families, certain tasks hitherto undertaken by women are simply reduced, abolished or delegated to someone outside the household, presumably with consequences on the family's wellbeing. The different attribution of functions or their disappearance would therefore be important subjects to study in order to understand whether the family is maintaining its role, albeit with a different gender contract.

While we have information on the time use, on the sharing of housework and childcare and on help received or given outside the family, subjects on
which information is still rare are those concerning affective relations, functions of protection and physical, verbal and psychological abuse between members, i.e. aspects concerning respect between members of the family and the affective bases of relationships.

The increase in the instability of unions is a consequence and at the same time a cause of women's greater autonomy. The risk of poverty, solitude and overwork for women depends both on economic aspects and on the presence and custody of children. Determinants and consequences of cohabitation and union dissolution are therefore subjects to be studied with the greatest attention, in order to calculate the costs/benefits of new forms of family life for women and children.

In the study of factors influencing the voluntary dissolution of a union, what is particularly evident is the need to analyse the "relationship" and therefore the two partners. Indeed, separation is by definition the result of a conflict between the two partners or, in other terms, of the failure of a relationship between two individuals. The unit of observation should be the union and not the individual partner, male or female, who separates. To be sure, the risk of a couple's failing depends to a varying extent on his or her individual characteristics and inclinations, on the events experienced by the couple itself and on the contracts which have been established between partners. For now, the data available, especially at a comparative international level, make it possible to draw only a minimal picture of the couple's events and of the events of its two components jointly, and the studies undertaken up to this point are confined to providing explanatory elements for individual inclinations to leave a union, at the most comparing results obtained separately on independent samples of men and women. An effort should be made both to clarify conceptually the construction of models which explain couples' behaviour and to provide suitable data for conducting this kind of study.

One little-explored field of research is that of the interrelations between gender and women's biological role. Underlining the importance of women's biological role has been regarded with diffidence, as it has traditionally justified discrimination against women, but now one has the impression that this role is in great danger and that emancipated women are not sufficiently able to defend women's unique characteristic of giving and sustaining life. The delaying of unions and fertility only penalizes the female gender in the sense of limiting biological opportunities. Women often underestimate the risk of infertility which increases with age, and they pay a high cost, both physically and psychologically, in terms of treatment for sterility and hypermedicalization of pregnancy, in the case of conception, for having put off reproductive plans for too long. The hypermedicalization of pregnancy, which my be assessed in an initial approximation as the percentage of births by Caesarean section, is in any case a subject
to be analysed as a form of medical abuse to women's cost, even though it is often done with the complicity and the "not entirely informed" consent of the women themselves. While, at an individual level, birth by Caesarean section always has a declared justification, even if this is not true, at a collective level it is evident that its prevalence so exceeds the level which recommended or considered physiological that it must necessarily be regarded as an abuse. In the same manner, breast feeding may be seen as a unique function of women which can be effectively discouraged for practical and commercial reasons by the health environment. Women are often unable to oppose this form of expropriation due to lack of information and support, but in the countries of northern Europe, a policy of relaunching maternal breast feeding has enabled new mothers to resume this function. These would appear to be "gender" themes, in the context of reproductive health issues, insofar as they are related to a wholly cultural split between the new social role of the woman and her biological role, and also to the extent of respect for women's specific difference on the part of society (political and health environments, the mass media).

### 3.4 The Elderly

If we consider the gender perspective in studies on the elderly, any differences in power relations within the couple, decisions regarding retirement or accommodation, poverty and health are the result of the different trajectories and decisions which men and women undertake during their adult life. There is vast consensus among gerontologists on the need for information on the entire life course for the studying of ageing. Longitudinal data on the fundamental events in the lives of the individuals under examination (whether these are collected by means of panel surveys or with retrospective questions) help to understand the causal mechanisms of social processes as they can take account of the order in which experiences have been undergone. In the case of the elderly, this kind of information is even more important, because the living conditions of senior citizens cannot be properly understood without having as a point of reference what happened during the entire course of life. Let us take for example an aspect to which we dealt with in the chapter on the elderly: the choice of living arrangements. Due to differential mortality between the sexes, the proportion of women living alone is greater than that of men, but is there any real difference in the capacity of women to live alone? Do they have enough economic resources? Are they better at managing domestic tasks? Do they nonetheless have an active social life and frequent contacts with members of the family and the social network?

Health and social assistance given and received may have strong gender connotations, determined by different life courses between men and women. Indeed,
various studies have shown that women make more use of the health service and receive more help from people outside the family: while this result may, on the one hand, be explained by the greater incidence of disabling illness among women, it may also lead us to suppose that women pay greater attention to prevention and have a better knowledge of the health service. Institutionalization, a phenomenon which concerns women in particular, is also the result of different life courses.

The indicators required for a study of senior citizens from the point of view of gender must therefore refer to the entire life course:

1) History of marriage and fertility in order to understand how widowhood or divorce might have different effects on male and female senior citizens, for example, or how the number and age of children (and the context of the couple into which they were born) influences intergenerational relations.
2) Contacts with social and family network.
3) Ability to live autonomously: the elderly normally experience a worse state of health, but this does not always translate into worse living conditions. Information on the "activities of daily living" (ADL) and the "instrumental activities of daily living" (IADL) provide a better measure of elderly men and women's effective ability to live autonomously.
4) Employment history: how many years of national insurance contribution do men and women normally have? To what extent does fertility influence women's entry and exit from the world of work and what effects are there on final pension entitlements? How does the age gap between spouses affect men and women's decision to retire?
5) Earnings and sources of income: poverty is a phenomenon of old age which affects women more than men. On the one hand, the phenomenon is affected by cohort (the elderly women of today have been less involved in the world of work, so it is more likely that they will depend exclusively on widow's pensions); on the other, women may be less able to obtain different sources of income in order to prepare for old age.
6) Assistance offered (careers and assistance): do women who frequently assist the sick have fewer possibilities of pursuing a working and reproductive career at the same time?
7) Informal assistance received (at an individual level).
8) Private assistance received (at an individual level).
9) Health and use of health and social services.
10) Institutionalization by sex and age.

There are already some surveys which include these aspects:

- in the United States, the Health and Retirement Survey (HRS) and Asset and Health Dynamics Among the Oldest Old (AHEAD);
- in the UK, the British Household Panel Survey (BHPS) and the very recent English Longitudinal Study on Ageing (ELSA);
- in Scandinavia, several surveys on the living conditions of the elderly;
- in Italy, the recent multi-purpose survey on the family and social subjects, which covers certain aspects which are important for our understanding of gender differences among senior citizens.


### 3.5 Migration

A gender perspective has only recently been adopted in studies on international mobility. Nonetheless, this has provoked some important reflection and has partially challenged consolidated frameworks.

In particular, two aspects would seem to be particularly important in revising both the profile of subjects involved and the reasons which might determine both the decision to migrate and the destination. The first is the recognition of the double direction of the relations between gender and the migration event: the latter may produce a re-ordering of the relations governing the gender contract itself; on the other hand, traditional roles may affect both the succession of the event and its nature. Certain relations constructed in a definite sphere (often that of the family) may favour emigration, sometimes setting off a virtuous cycle towards the attenuation of traditional asymmetrical relations between the individuals involved, and in other cases exacerbating them.

A second important aspect consists of the awareness that interaction between individuals is necessarily affected by the environment in which the individuals themselves live: while this obviously always holds true, it is complicated, in studies on mobility, by the coexistence in emigration of environments of different cultural background (that of the country of origin and that of the host country), the combination of which may reinforce or attenuate the asymmetries defined by the process of socialization undergone.

From this premise it follows that studies on migration conducted in a gender perspective are best expressed through surveys. Indeed, it is indispensable to construct the web of relations existing between each of the subjects involved in the different phases of the process, if we are to recognize that our goals are to define the relations and roles played by women and men within certain "containers" such as the family, for example, before, during and also after emigration - or also the roles assigned in the construction of the "container" itself. From this point of view, the simple distinction by sex - women and men is not particularly productive for the analysis by gender of the phenomenon of migration, even though the distinction is generically indicative of the undertaking of different courses. Let us take, for example, the information available in Italy regarding the Philippine and Senegalese nationalities. A simple glance at distribution "by sex" informs us of the predominance of women in the first group and of that of men in the second. To what extent may the proportion of men and
women, measured within each national group, be regarded as gender information or, to put it another way, how much does such information contribute to gender studies? In effect, this proportion is the result of precise strategies of migration, which are mediated by an active gender contract between men and women in each country, but this can only be known if surveys suited to identifying the nature and strength of these relations are undertaken in the field.

In any case, the statistical material available at an international level is frequently lacking even in distinction by sex, a distinction which is moreover always absent when the information no longer concerns the overall size of the migratory flow or of the population of foreigners present, but rather questions "of detail", such as purpose of stay, present length of stay, participation in employment and educational qualifications of the individuals concerned.

The lack of international information may be ascribed to various reasons. The most important are:

1) The patrimony of information on migration is affected by the diversity of the statistics from country to country. The lack of a common international system of classification on movements and even on how to define a migrant makes it an urgent, if not exclusive priority to standardize sources with a view of determining the intensity of the phenomena in a non-ambiguous and therefore comparable fashion, regardless of whether it involves women, men or both.
2) The studying of phenomena of mobility, especially international mobility, requires the greatest precision in the definition of the origin and destination of individuals, in addition to migration status. In this sense, it is right to emphasize individual citizenship, regarded as the most important variable of classification, upon which most of the material and intellectual resources also agree, as demonstrated by the recent UN publication which aims to define the migrant, classify their status and identify their origin.
3) The adoption of a gender perspective in the subject of migration would appear to be a luxury compared to what has been proposed in other fields of research such as the family, health etc., which also serve to assess the gender system. In effect, there has been a notable development of gender statistics in recent years, as a result of a clear political commitment towards monitoring women's status in the world. In other words, an objective based on demands for emancipation and aiming to reduce gender discrimination has also been of undoubted benefit in consideration of the indicators held to be most suitable for social and demographic surveys from a gender perspective. The subject of international migration has not benefited from this advantage, due both to lack of geographical reference to nation - so it is impossible to reconstruct an authoritative institutional arena of comparison - and due to the difficulty of measuring asymmetries between groups "net" of other specific
factors of international mobility (an emblematic case is that of participation in the labour market and/or segregation therein).

With these arguments we have attempted to explain the reasons for the scarcity of distinct statistical information by gender at an international level. The situation improves considerably if we look at the national sources for each country, which more often feature the distributions of many socio-economic aspects, also by gender. However, it should be said that this is mainly due to the making available of figures specifying the immigrant population's sex a feature well known to demographers, which has nothing to do with the gender perspective - rather than any gender-sensitive variables. The lack (or scarcity) of basic material for the construction of gender indicators has notably inhibited reflections on the construction of gender indicators in the context of the phenomenon of migration. Indeed, apart from recommendations and suggestions to those hazarding to construct a field study, we may say that most of the important differential aspects of international migration are still confined to the "literature of auspices", which is limited to precisely that: i.e. hoping that gender sensitive indicators will be constructed for each important aspect of migration: from push factors to pull factors, roles, types of migration, participation in the labour force, economic vulnerability and use of the community network.

### 3.6 Health and Survival

Demography has a long tradition of studying sex differentials in mortality by age and cause. However, this solid base of measurements requires other types of information for the finding of explanations of the differences and their geographical and temporal patterns. Explaining mortality differences between the two sexes is complicated by the interweaving of the biological aspect with the social one. The current narrowing of the gap in male/female life expectancy in various countries, for example, is raising a question which is hard to answer: whether this is due to the fact that men are becoming more similar to women and reducing their hazards, so as to approach the "biological" difference in mortality between the sexes, or whether this reduction depends on the fact that women are starting to pay for their liberation in terms of greater risk and therefore reduced progress in survival. In the same manner, it is hard to explain the differences existing between the countries. We must study causes of death, lifestyles (diet, alcohol, smoking, habits of driving motorized vehicles, type and pace of work), morbidity, health-care habits: we know that women pay more attention to their health because they look after other people and therefore also themselves, paying more attention to symptoms of lesser gravity, something which is made easier for them to do by the "weak woman" culture. They therefore go to the doctor more often for a check up, and pregnancies
necessarily involve a higher degree of medical surveillance, while men tend to neglect themselves, also as a result of cultural conditioning.

But if on the one hand women employed in the labour market might become less attentive towards their own health and that of their children and therefore determine a greater risk for themselves and for the family, on the other hand the success of the female gender could lead men to imitate women's patterns of care, as would appear to be suggested by the flourishing market for men's health magazines, and this could lead to the narrowing of gender differences in health and care. The question is related to changes in the gender system and has yet to be examined in any detail: longitudinal surveys on the lifestyles and health behaviour of men and women would appear to be indispensable for answering these questions.

As far as the biological component of difference in survival between the sexes is concerned, analyses are becoming available which are based on data from religious communities: cloistered monks and nuns have similar lifestyles, and this allows us to regard the mortality difference observed as due to mainly biological causes. A geographical and temporal extension of studies of this type will make it possible to provide a reliable answer to the question of the number of extra years biology assigns to the woman as opposed to the man.

## NOTES

1. The possibility offered by mixture models of analysing the causality of relations separately for quantum and timing of demographic processes, albeit with restrictive hypotheses in some cases, notably reinforces the methodologies for the analysis of event histories, fundamental for the reconstruction of individual life courses which go on to determine gender identities and thus gender differences.
2. Standard errors and tests based on least squares are suspect precisely because the assumption of independence among the observations is not valid. In these cases a classical model usually produces biased estimates and also lacks the advantages of multilevel models.
3. In this case, the "cross-country" perspective of international comparison reinforces the importance of the consideration not only of the macro dimension of the gender system, but also of the need to integrate micro and macro levels of analysis.
4. In this study, among the other results, it is highlighted how a greater fairness of the gender system favours a propensity for reproductive models which may almost be regarded as "traditional", expressed by the decision to have two or more children in place of the "maximum-one-child" model.

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[^5]:    Note: ${ }^{\text {a }}$ this variable is included where available.

[^6]:    * While the authors take joint responsibility for the whole paper, sections 1,2 and 4 are the work of L. Pasquini, and section 3 that of A. Samoggia.

[^7]:    Note: The significant values are in bold ( $\mathrm{p}<0.05$ ).

[^8]:    Note: The significant values are in bold ( $\mathrm{p}<0.05$ ).

[^9]:    Source: our elaboration on FFS data.

[^10]:    * Authors agree on the entire paper, however paragraphs 1, 2 and 6 are mainly due to Alessandra De Rose while paragraphs 3, 4 e 5 to Mariachiara Di Cesare.

[^11]:    Notes: Reference category shown in brackets; ${ }^{* * *} p<1 \% .{ }^{* *} p<5 \% .{ }^{*} p<10 \%$;
    Source: FFS Italy 1995/96.

[^12]:    Notes: Standardized for childhood family, age at first birth, first birth interval, first birth union order, marital status, current age of the youngest child, and age of the first child. p-value:* $=10 \% .{ }^{* *}=5 \% .{ }^{* * *}=1 \%$.
    Source: Swedish Survey of Family Working Life 1992/93.

[^13]:    A. Pinnelli et al. (eds.), Genders in the Life Course, 185-204.
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[^14]:    Note: Piecewise exponential model; significant results at the p-value $<=10 \%$ in bold.

[^15]:    Notes: Piecewise exponential model; significant results at the p-value $<=10 \%$ in bold.
    ${ }^{\text {a }}$ Transition not work-work for men is rare and thus not studied.

[^16]:    * While both in full agreement as to the content of this study, Patrizia Farina is responsible for sections 1, 3, 4.1 and 4.2 and Laura Terzera for sections 2, 4.3 and 4.4. Sections 5 and 6 have been written jointly.

[^17]:    Notes: n.a. = not available. ${ }^{\text {a }}$ Greece. ${ }^{\text {b }}$ Switzerland. ${ }^{\text {c }}$ malignant neoplasm of trachea, bronchus and lung. . Chronic liver disease and cirrhosis. ${ }^{\text {e }}$ Distributed among the causes and groups of causes adopted. ${ }^{\mathrm{f}} 88 \%$ for men, $52 \%$ for women.

[^18]:    Notes: ${ }^{\text {a }} 1970$ for United Kingdom and United States; 1990 for France, Italy, Poland and Switzerland. ${ }^{\mathrm{b}}$ latest available year, shown in parentheses for each country.
    [1] First period 1963; [2] narrowing beginning from 1970; [3] narrowing beginning from 1990.
    Source: own calculation based on data from WHO Mortality Data Base (MDB), electronically transmitted data, updated 30.1.2001, http://www.who.int/whosis.

[^19]:    Notes: ${ }^{\text {a }}$ latest available year, shown in parentheses for each country.
    [1] First period 1963; [2] narrowing beginning from 1970; [3] narrowing beginning from 1990. Source: see Tab. 11.2.

[^20]:    Notes: ${ }^{\text {a }}$ latest available year, shown in parentheses for each country.
    [1] First period 1963; [2] narrowing beginning from 1970; [3] narrowing beginning from 1990.
    TUM: Malignant neoplasms; CIR: diseases of the circulatory system; IRE: infectious diseases and diseases of the respiratory system; OTH: other diseases; EXT: external causes

    Source: see Tab. 11.2.

