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What future for Europe?

New perspectives in post-industrial fertility issues
What future for Europe? New perspectives in post-industrial fertility issues

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Abstract

Europe has undergone profound changes in fertility behaviour in the last decades. After years of falling fertility, it seems that we have now reached a phase of stabilisation in most countries of the European Union. However, stabilisation has occurred at very different levels in different part of Europe. Looking for explanations for these differences should help us to understand the underlying factors behind fertility behaviour in post-industrial societies. Limited time being one of the most fundamental constraints in post-industrial societies, we focus on the opportunity cost of childbearing as the main fertility-inhibiting factor. Therefore, particular attention is devoted to the relationship between female paid employment and fertility and to the gender division of work within households. The division of work between men and women seems to be the result of a bargaining process between partners where relative bargaining positions are defined by social norms and relative earnings. Eventually, we argue that the relative distribution of the opportunity cost of childbearing between genders affects fertility levels across Europe.
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Introduction

European countries have undergone profound changes in fertility behaviour during the last decades (Appendix I and II). The fertility levels started to drop significantly from around the mid-1960s in the North and the West of Europe. Southern Europe joined the ranks with a time lag of about one decade. While the number of births was still decreasing in the South during the eighties, it came to a halt in the rest of Europe. By the end of the 1980s, Scandinavian countries started to show a recovery in their fertility levels, the Mediterranean countries on the other hand, recorded lower levels than ever. The 1990s are characterised by a phase of stabilisation. However, while all European countries today show fertility levels below replacement, clear differences remain between countries and regions; stabilisation occurs at very different levels in different parts of Europe. Looking for explanations behind these differences should provide us with some useful information about the underlying factors influencing fertility behaviour in post-industrialised societies today.

Theoretically, in order to remain stable, a population has to “produce” on average 2.1 children per woman. Below that level, the population is likely to decrease and its age structure is likely to be affected. Fertility rates below replacement all over Europe have therefore raised serious concern about the long-term “survival” of its population. An ageing population also raises economic problems and calls for structural adaptations. A significant unbalance in the dependency ratio (the proportion of non-active population to the active population) may lead for instance, to unsustainable social expenses, especially for generous welfare states.

The paper adopts a broad comparative perspective and focuses on EU countries and Norway except UK and Ireland, whose fertility patterns differ from the rest of Europe in several aspects. For instance, the relatively high levels of teenage pregnancies in these two countries, raises reliability concerns for the use of extra-marital birth statistics in a comparative perspective. While extra-marital births often refer to births to single mothers in UK and Ireland, they usually refer to births within consensual unions in the rest of Europe. The study compares recent fertility developments and therefore uses national average TFR data for the period from 1990 to 1999 (Appendix II). According to these data, three main groups of countries can be identified. On the one side, Sweden, Denmark, Finland, Norway and France all show an average TFR above 1.7. On the other side, Germany, Austria, Italy, Spain, Portugal and Greece have an average TFR ranking from 1.21 (Italy) to 1.48 (Portugal), that is, all below 1.5. Benelux countries are situated in between the two groups.

The aim of this paper is to gain insight in post-industrial fertility issues through an examination of cross-national differences. I start by presenting the economic theory of reproduction (Becker 1981, revised in 1991 and Cigno 1991). Then, I focus on the relationship between fertility and women’s labour force participation; I look on the nature of this relationship in Europe and relate it to the opportunity cost of having children in various countries. I then try to map out the opportunity cost both on the labour market and within households. I eventually argue that the European fertility context indicates societal changes...

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1 Except for Sweden that have experienced large variations in period fertility during the 1990s (Appendix II).
2 The simple arithmetical mean of the Total Fertility Rates for each country. TFR is the average number of children per woman for a hypothetical birth cohort, which would be subject at each age to current fertility levels.
3 As we will see, Portugal is an interesting case, with much higher TFR than its Mediterranean neighbors.
that modify the underlying assumptions of the economic theory of reproduction. The third part aims at unravelling the mechanisms behind the distribution of the opportunity cost between genders. For that purpose, I compare the gender division of work depending on the presence, of children in the household. In the following section I examine how norms about fatherhood and motherhood change over time and what this might imply for fertility levels. Finally, the last part of the paper is devoted to family policy. Through cross-national comparisons, I try to investigate the effect of family policy on fertility levels.

1. The economic theory of reproduction

The economic theory of reproduction is based on the economic way of looking at behaviour. In this perspective, fertility decisions are influenced by economic considerations and fertility levels are determined by the cost of the children. In the economic theory of reproduction (see Becker 1981), children are seen as consumption goods – or commodities - and potential parents as rational actors who seek to maximise their utility. If a couple can obtain greater utility from other commodities than children, that alternative will be chosen. An increase in the relative price of children reduces the demand for children and increases the demand for other commodities (under the condition that real income is held constant). Generally, relative prices of time and goods determine the proportion in which time and goods enter in the production of commodities. In the case of children, since they are not purchased but “selfproduced”, the “production” requires both a certain amount of goods and a lot of the father’s and the mother’s time during their upbringing. In that “child production” activity, it is possible to compare parents with a firm (Cigno 1991: 107). In order to produce children, the first step is generally for the parents to produce joint home-time, that is, joint home-production⁴. Joint home-time serves then as an input for the production of children. The ultimate goal is however not to produce children but to produce utility. The “parents-firm” final product is therefore utility and the production of children is one step to achieve it.

The utility function that parents seek to maximise is:

\[ U = U(C, n, q) \]

Where \( n \) and \( q \) denote the quantity and the quality of children respectively and \( C \) is the index of parental consumption where all the other goods are aggregated (Cigno 1991:98).

Becker explains the large decline in births in the developed countries during the last decades by the interaction between quantity and quality of children. Rather than investing in a large number of children who could, for instance, help at the farm, parents choose to have few, “high quality” children⁵. Educated children are more costly since they do not contribute to household income but they remain many years in school; they also require much more time investment. The price of the children has therefore been increasingly dependent on the value of parents’ time. Since women are the primary care givers, their time is the greatest part in the

⁴ Joint home-production refers to the logic according to which a multi-person household is better off than he or she would be in a separate one-person household (Cigno 1991).
⁵ In economic theory, the “quality” of a child is measured by the level of input (time and goods) spent on that child.
cost of the children and, because time is valued by forgone earnings, the growth in the earning power of women during the last hundred years is pointed out as the major cause of the large decline in fertility (Becker 1981: 103-112). “The growth in the earning power of married women raised the forgone value of their time spent at child care and other household activities, which in turn reduced the demand for children and encouraged a substitution away from parental, especially mother’s, time. Both of these changes raised the labor force participation of married women” (Becker 1991: 55).

As Becker notices himself, one difficulty with this explanation is that the growth in the earning power of women did not accelerate in developed countries after the 1950s while labour force participation of married women has risen far more rapidly precisely since that time. Becker therefore suggests an explanatory threshold effect of the increase in female earning power on labour force participation and fertility rates. “As the earning power of women continued to grow, fertility continues to fall until the time spent in child care was reduced enough so that married women could anticipate spending appreciable time in the labor force prior to the birth of their first child and subsequent to the birth of their last child. Women then had much greater incentive to invest in market-oriented human capital, which accelerated the increase in their earning power, participation, and divorce rates, and accelerated the reduction in fertility” (Becker 1991: 55-56).

According to Becker, the mother’s role as primary care giver explains why changes in the fathers’ earning power do not affect the demand for children in the same way. It is foremost the mother’s time, which is used for the “production” of children. Fathers contribute to the production mainly through their wages that allow the household to buy market goods necessary for the upbringing and the rearing of children. So a rise in the father’s wage level is likely to have a pure income effect towards more children while a rise in the mother’s wage level is likely to raise the opportunity cost of the child and to produce a substitution effect away from children towards increased market work participation. Both Becker and Cigno underline that the number of children is often positively related to the wage rate of fathers and Cigno refers to “an important asymmetry between the effects of the mother’s and the father’s net wage rate” (Cigno 1991: 89-90).

The time input used for the care and the upbringing of children is often referred to as the “opportunity cost of childbearing”. If we define the opportunity cost by “the amount you sacrifice by taking one course of action rather than another” (Krugman and Obstfeld 2000:366-367), mothers’ opportunity cost of childbearing represents the benefit mothers would derive by choosing to allocate their time to, for instance, paid employment rather than to rearing children. Thus, the opportunity cost of childbearing for women can be measured in terms of forgone earnings (provided that paid work and childbearing are not compatible activities). Clearly, according to the economic theory of reproduction, the opportunity cost of childbearing plays a central role as a determinant for fertility behaviour. An increase in the opportunity cost of having children raises the total cost of the child and lowers the demand for them. So, the higher the opportunity cost, the lower the fertility levels. Through the opportunity cost, female wage level variations influence the level of female labour force participation as well as the demand for children; the first one positively, the second one negatively. Therefore, both Becker and Cigno conclude a generally negative relationship between female labour force participation and fertility levels.
2. Women’s labour market participation and fertility today

2.1. Direction of the relationship in Europe today

While a negative relationship between female labour market participation and fertility was observable for Europe on the aggregate level in the 1970s (fig. 2), the direction of the relationship became somewhat blurred in the 1980s (fig. 3). By the 1990s, the relationship became clearly positive on the macro level (fig. 4). European countries with the highest female employment rates (Norway, Sweden, Denmark, Finland and France) experienced higher fertility than the others. Also, Portugal exhibits both higher period fertility level and much higher female activity rates than its Mediterranean neighbours.

Figure 2.

![Female activity rate and fertility 1975](chart)

Figure 3.
If we look at the evolution of labour force participation for different countries, we notice that countries that now have relatively high fertility also experienced relatively high female activity rates in the 1970s (Sweden, Denmark, Norway, Finland), but at that time it was combined with lower fertility than in other European countries. Those countries, because of high female labour force participation, have made structural adjustments over time to make work and family responsibilities more compatible and have thereby somewhat relieved the constraint that female paid employment put on childbearing. We can assume that the rebound in fertility experienced by these countries in the last 15 years is the result of these adjustments. From this perspective, an increase in the compatibility between female paid work and family responsibilities reduces the opportunity cost of childbearing for women and increases the demand for children. On the other hand, the extremely low fertility levels in those parts of Europe where the dual earner model is relatively new (Mediterranean Europe and Germany) would be the result of a mismatch between the institutional structure of society and the new aspirations of women (Esping-Andersen 1996, Vogel 2001).

2.2 The opportunity cost of childbearing

Labour market

On the labour market, the opportunity cost of childbearing includes - at least - three levels (Albrecht et al. 1996). First, it can be measured in terms of forgone earnings of the mother during the time she stays away from work to take care of the child. This notion of opportunity cost has often been used to explain why highly educated women would more often choose to do without children or reduce their number than others since they are able to allocate their time in working life activities in a more economically efficient way. This cost can however be addressed through generous maternal leave benefits.

Second, childbearing represents an opportunity cost for the mother by the loss of experience she would have acquired if she had remained working. This second characteristic of the childbearing cost may have a selection effect since it encourages women to rationally choose female-type occupations where skills deteriorate less rapidly (Sirianni and Negrey 2000: 64). This effect is labelled as depreciation of human capital or skill atrophy.

However, it has been observed that career interruptions impinge on subsequent earnings by more than the straightforward effect of forgone work experience (Albrecht et al. 1999). This third ingredient of the opportunity cost of childbearing is maybe the most questionable one. Sundström has shown evidence that this effect is not so much about the real loss of human capital that would be forgone during the time out of work as the way it is perceived on the employer side (Albrecht and al. 1999: 12). The authors argue that what really matters for subsequent earnings, is the signal the work interruption sends and how this is interpreted in terms of career commitment. Here it is possible to find national differences. While the authors have found no negative effect of parental leave (when taken by the mother) on subsequent wages in Sweden, they have observed it in the US because of the signal it sends as “lack of career commitment”. Possibly, it does have a similar effect in some part of Europe.

From a career perspective, becoming a parent usually has extremely different consequences for men and women. While fathers’ careers are – on average - positively related to a potential family, becoming a mother implies depreciated career opportunities (Bittman 1996). The negative effects of motherhood however vary much in intensity across Europe. Longitudinal data show that, while German and Dutch mothers, along with transition to motherhood, progress from full-time work to part-time work or to unpaid work at home on a full-time basis, the number of children are not significant for Swedish and Danish mothers for determining the women’s labour status (Blossfeld & al 2001, Hendrickx & al. 2001, Henz and Sundström 2001, Leth-Soerensen and Rohwer 2001). The between countries variation seems to indicate that the much higher cost for women than for men might be a result of different family policy orientations.

Mothers’ role as primary caregiver usually implies for her a much larger increase in home-production consecutive to the growth of the family than for the father. Given mother’s infamous “double day”, it becomes difficult for them to compete on the same ground as men and childless women on the labour market. So, even when childbearing and work are compatible, having children implies so tight time constraints for women that they usually have to choose between giving priority either to work or to family. Most women face that life determining choice in their early twenties. This dilemma is highly related to the concept of life strategy. Already at young ages, most women have to decide about whether to remain
childless or to have a very limited number of children and invest in their career or give priority to family life, knowing that it will have negative consequences for their career opportunities. Men face that choice to a much lesser extent.

Intra-household bargaining positions

Very often, when becoming a mother, women progress from full-time to part-time jobs. With part-time work only, it would usually not be possible for a woman to maintain economic independence of her partner. Therefore, along with childbirth, in many countries, women progress from economic independence to economic dependence on the child’s father. If we consider income as an “expression of control over resources, which enhances women’s choices and possibilities to decide over their own lives” (Nyberg 2002: 75), the relative decrease in income for women and increase in income for men has the potential to create a gender imbalance in the power to make a free choice about one’s own life. Hobson argues that an independent income gives the woman a “voice” to bargain within the household, and an “exit” option if the relationship becomes unsatisfactory (1990). Decision-making in the family is very often linked to earning power. We can therefore assume that childbearing generally has a strong negative effect on women’s intra-household bargaining position.

The extent of the effect of childbearing on relative bargaining powers depends on the initial bargaining positions of the respective partners, on the context (i.e. what signal childbearing sends to the employer in terms of work commitment) and on the number of children born. Moreover, resources are often unequally consumed in the family according to the economic contribution of its members. Such ‘concealed poverty dependence’ can appear at any income level (Hobson 1990: 236). Generally speaking, childbearing very often makes mothers economically and personally poorer as well as increasingly dependent on the child’s father. It is likely to create an imbalance in the personal access to resources within the couple and to make women more powerless in household decision-making. If we consider fertility decisions to be largely women’s decisions, it is not extravagant to suppose that many women do use that specific decision power very carefully and limit the number of children they have in order to preserve their bargaining position within the family.

The different components of the opportunity cost of childbearing are very much interrelated. In the short run, the decrease in income and in bargaining position and, in the long run, depreciation of future career opportunities are reinforcing each other. If childbearing were not a handicap on the labour market, it would not worsen the woman’s earning capacities and subsequently, her bargaining position within the family. Conversely, Hobson (1990) has shown how the economic dependence of married women is crucial to explain the perpetuation of their weak bargaining position on the labour market. The implicit assumption that women generally give priority to family life over working life can have very negative consequences for women on the labour market. If women are perceived as “unreliable” employees”, the hiring of young women in childbearing ages for high responsibilities jobs might be a problem. Bargaining positions in the family and in the labour market cannot be divorced from each other; they are interrelated and mutually reinforcing.

The opportunity cost of children is, of course, likely to increase with the number of children, however not in a linear way. We can assume that the shape of the cost is convex as long as a

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6 In fact, men’s life strategy option is generally the reverse one. If a man wants many children, he knows he has to invest very much in his career in order to support his large family.
The woman’s personal income allows her to be economically independent on the children’s father. When this is no longer possible, because the relative share of unpaid/paid work has grown, the shape of the opportunity cost of childbearing is likely to be concave. The cost of an additional child should indeed be much lower when the mother is not economically independent anymore because then it means that a choice has probably already been made between the woman’s career and the family, in favour of the latter.

### 2.3. The economic theory of reproduction applied to Europe

As we have seen in the first part, Becker’s and Cigno’s conclusion about the generally negative relationship between women’s labour force participation and fertility relied on two implicit assumptions:

1. **Men are socially considered as primary breadwinners, women as secondary ones.** Women’s demand for paid work is therefore more elastic to wage variations than that of men.

2. **Mothers are socially considered as primary care givers, the cost of their time accounts for the overwhelming part of the opportunity cost of childbearing.**

Therefore, Becker and Cigno conclude, female wage level variations influence the level of female labour force participation as well as the demand for children; the first one positively, the second one negatively.

However, in the past 15 years, changes might have occurred on the societal level that make the premises on which the theory of reproduction was based, outdated. Below, I examine systematically the two assumptions of the theory and for each of them I try to identify the changes in the society that would undermine the conclusion of the theory.

**Breadwinner, a male specialisation**

First, I examine the role of men as primary breadwinners. According to Becker and Cigno, because men usually devote their time to market activities and women to the care of children, the variations in the value of the fathers’ and mothers’ time impinge in different ways on the opportunity cost of children. A rise in the earning power of women raises the opportunity cost of having children and lowers the demand for them while a rise in the father’s earning power has the reverse effect (the income effect is larger than the substitution effect).

While men still generally are the primary breadwinners in families in Europe today, one feature of European societies is the relatively high proportion of women in paid employment. After decades of male breadwinner/female homemaker specialisation, it seems as if the dual earner model has spread across Europe according to a North to South path and is nowadays the predominant one in most European countries. Still, some between-countries differences remain, with generally higher rates of female employment in the North of Europe.

Several elements contribute to the central position of women’s paid-employment in today’s societies. First, the high frequency of union disruption transforms the homemaker status to a rather unstable position. Second, the relative decrease in earnings capacities makes it often
difficult to support a family with one salary only. Third, unemployment risks put the family that would rely exclusively on one source of income in a potentially precarious situation. Additional to these factors, we find the self-fulfilling aspect of a career on her own that gives women economic independence of her husband, and increases her bargaining power within the couple. If we define intra-household bargaining power as the partners’ relative fall-back positions, that is, the outside options which determine how well off she/he would be if cooperation failed (Blau and Ferber 1986, Agarwal 1997, Dugan 1999), it is obvious that female financial autonomy helps to make the couple’s relationship more symmetrical since it increases women’s access to income in case the partnership ends. For all these reasons we might assume that most couples do not consider the male breadwinner/female homemaker model as a relevant model anymore.

Table 2.

Proportion of women with university education compared to men
for different age groups

100 = proportion of men with university degree

<table>
<thead>
<tr>
<th>Country</th>
<th>50-59 years</th>
<th>35-49 years</th>
<th>25-34 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>41</td>
<td>69</td>
<td>101</td>
</tr>
<tr>
<td>Germany</td>
<td>48</td>
<td>69</td>
<td>87</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>59</td>
<td>76</td>
<td>93</td>
</tr>
<tr>
<td>Netherlands</td>
<td>57</td>
<td>78</td>
<td>104</td>
</tr>
<tr>
<td>Average</td>
<td>51</td>
<td>73</td>
<td>96</td>
</tr>
<tr>
<td>Belgium</td>
<td>84</td>
<td>103</td>
<td>119</td>
</tr>
<tr>
<td>France</td>
<td>87</td>
<td>106</td>
<td>117</td>
</tr>
<tr>
<td>Average</td>
<td>86</td>
<td>104</td>
<td>118</td>
</tr>
<tr>
<td>Denmark</td>
<td>81</td>
<td>131</td>
<td>117</td>
</tr>
<tr>
<td>Finland</td>
<td>94</td>
<td>106</td>
<td>155</td>
</tr>
<tr>
<td>Norway</td>
<td>90</td>
<td>101</td>
<td>132</td>
</tr>
<tr>
<td>Sweden</td>
<td>115</td>
<td>121</td>
<td>118</td>
</tr>
<tr>
<td>Average</td>
<td>95</td>
<td>115</td>
<td>131</td>
</tr>
<tr>
<td>Greece</td>
<td>51</td>
<td>73</td>
<td>121</td>
</tr>
<tr>
<td>Italy</td>
<td>77</td>
<td>91</td>
<td>126</td>
</tr>
<tr>
<td>Spain</td>
<td>52</td>
<td>121</td>
<td>121</td>
</tr>
<tr>
<td>Average</td>
<td>60</td>
<td>95</td>
<td>123</td>
</tr>
<tr>
<td>Portugal</td>
<td>138</td>
<td>132</td>
<td>152</td>
</tr>
</tbody>
</table>

Source: Labour Force Survey 2000 (European Commission 2001). We have chosen not to include Portugal in the Mediterranean regional average because of its exceptionally high rates.
Long-standing wage differences have confined women to the role of secondary breadwinner and therefore as the one who has to substitute unpaid work for paid work in the first hand if the household experiences an increase in household tasks. Differences in educational level between men and women have for long accounted for the wage differences. At the same time, the role of women as secondary breadwinners has discouraged women from investing in human capital because of the poor return they could expect from it.

This picture is however increasingly changing, the decreasing specialisation of women in home-production (accelerated by the fertility decline), has substantially increased the possible returns of human capital investments for women. Over just two generations, female educational levels as compared to men’s have markedly increased (Table 2). After the first waves of female wage rises that eventually allowed women to achieve economic independence to an extent comparable to men, women’s labour force participation has become an essential part of both macro and household’s economies. Women’s paid work is today seldom seen as optional anymore. It is therefore not likely that the extent to which women participate in the labour force depends more on wage variations than that of men.

Caregiver, a female specialisation

The second assumption that underlined the negative link between women’s participation in the labour force and fertility, referred to the mother’s role as primary care giver. The process described by Becker is one where an increase in female wage relative to male causes a reduction in the female contribution to home production and, because it cannot be substituted by men’s home production in an efficient way, it causes an overall decrease in home production and family activities.

The process by which men’s home production can be substituted for women’s home production deserves particular attention. It is important to underline firstly that a couple is not made of one actor, but of two actors that might have different interests although not opposite ones. Any decision made by a couple is therefore not the result of a rational actor weighing the pro and the contra but rather, it is the result of a bargaining process where the interests of each actor as well as those of the couple as such is taken into account and where the outcome is dependent of each actor’s relative bargaining position.

Secondly, decisions are not made instantaneously but in the long term as a component of a life strategies perspective. The theoretical concept of life strategy refers to the tactics people use to balance their needs and wants within the macro- and micro-level opportunities and constraints in order to achieve the best possible level of life satisfaction (Bosvelt 1999). What seems most rational and advantageous at one moment is maybe not the most advantageous for the future. In conclusion, I argue that it is today not so much the increase in female wage rates that directly causes the decrease in home production as it is the increase in the relative intra-household bargaining power of women consequent to the improvement of her earning opportunities. The increase in the women’s wage level as compared to men’s allows women to preserve their interests in the long run, that is, staying as much as possible in paid work in order not to jeopardise future career and earning perspectives.
3. Time: the main constraint for fertility

3.1. Couples’ allocation of time strategy

In economic theory, time is usually valued through hourly wage; in the traditional theory of family, the opportunity cost of childbearing is therefore measured through the product of the number of hours spent at home production by the level of hourly forgone wages. In this section we try to make the case for a more subtle approach to the opportunity cost of childbearing. Through a comparison of a couple’s time allocation strategies before and after the arrival of a child(ren), we argue that it is not so much the cost of having children as such but rather, its more or less even distribution between the parents that accounts for the greatest part of the cost. That is, the opportunity cost of childbearing is to be assessed in relative rather than absolute terms.

Through the lens of the allocation of time theory (Becker 1965), we aim to examine how the arrival of the first and subsequent child(ren) usually affects gender relations embodied in the division of paid and unpaid work within the couple and to see if the general outcome on societal level can possibly act as a disincentive for including childbearing into individual life strategy plans. The assumption underlying this approach is that time is the most fundamental constraint in post-industrial fertility decisions. Post-industrial societies are characterised by wealth and goods profusion. Becker argues that: “while the growing abundance of goods may reduce the value of additional goods, time becomes more valuable as goods become more abundant” (1993:388).

According to the traditional consumer theory, the rational actor decides to allocate his time between labour and leisure. Paid labour allows him to buy consumption goods that together with leisure help him to attain a certain level of utility. Becker transposes the utility maximisation of a single actor to the family level, simply by assuming that the family constitutes an altruistic whole. Many authors have criticised this assumption and have shown that several forces compete within this unit (Agarwal 1997:3, Bergmann 1995, Hobson 1990). The present paper builds on Becker’s allocation of time theory but adopts the perspective of competing forces and takes as basic unit of analysis a family model of two heterosexual adults.

When households consist of two adults in working ages that are bound to each other sentimentally, the process of utility maximisation becomes a complex mix that encompasses the utility of two different actors whose utilities are dependent of each other and from the couple as such. Each actor of the household faces a trade-off between safeguarding his own interests and pooling resources into the couple. In the utility maximisation process, each actor tries to find a compromise between his own life strategy and the couple’s time use strategies, between short term and long term, between present and future earning power of the two members of the household; actually, a difficult balance between altruism, money, personal time and love. In other words, “individuals maximize welfare as they conceive it” (Becker 1992: 385, italics in the text)

If we do not consider physiological time (like eating, sleeping…), a couple can allocate its time between paid work, unpaid work and leisure. The total amount of time a couple has at its disposal ($T_c$) consists of the man’s time ($T_m$) and the woman’s time ($T_w$).

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7 I look at heterosexual couples only, because here gender matters.
\[ T_c \equiv T_m + T_w \]

The couple can then allocate its time between the man’s market work \((M_m)\), the man’s home production \((H_m)\), the man’s leisure \((L_m)\) and the woman’s market work \((M_w)\), the woman’s home production \((H_w)\) and the woman’s leisure \((L_w)\). The couple’s allocation of time is then:

\[ T_c \equiv M_m + H_m + L_m + M_w + H_w + L_w \]

The total amount of market work \((M=M_m+M_w)\) and household production \((H=H_m+H_w)\) varies from couple to couple according to the couple’s preferences, number of children, level of education etc… the remaining time is leisure time \((L=L_m+L_w)\).

### 3.2. The gender contract

The share of paid and unpaid work performed by each member of the couple, as well as the subsequent personal time remaining for leisure is a product of the gender contract (Tyrkkö 1999:158). By gender contract, I mean a contract between genders that regulates the gender distribution of work inside the couple in order to solve conflicts that can arise from the competing demands in home production and in paid work responsibilities. The terms of the contract have both an implicit and explicit component and are the result of every individual’s relative bargaining power. I consider two factors to be the main determinants of men’s and women’s relative bargaining positions:

- social values and norms that vary from culture to culture and that define gender roles in social relations; marriage, cohabitation, parenting,….
- relative earnings

A household member’s bargaining power is associated with the strength of the person’s fall-back position i.e., the outside option which determine how well-off she/he would be if cooperation failed. Since earnings are usually the main source of income in European societies, relative earnings are likely to play an important role in determining relative bargaining powers.

Clearly, the two determinants of bargaining positions are very much interrelated. The earning capacity of a person is not independent from its gender and from the role ascribed to this gender by the prevalent norms in society. Social norms can weaken women’s intra-household bargaining position by restricting their earnings possibilities in various ways (Agarwal 1997:16); for instance, by discouraging them from working outside the home or by assigning them the responsibility for the care of the house and the family in such a way that the workload in the private sphere prevents them to engage whole-heartedly in the labour market. The effect of social norms on bargaining position in Europe is likely to be more indirect than direct. Also, social norms and culture are not fixed but are in constant evolution. In other words, social norms can be an endogenous component of the gender contract; at an aggregate level, variations in relative earning capacities between genders can affect gender role definitions on the societal level.

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8 In the case of married couples, the legal structure governing marriage and divorce also comes into the picture.
3.3. Transition to parenthood or the renegotiation of the gender contract

Because of the equal level of education and increasing homogamy, relative earnings at the beginning of a partnership are less and less gender determined\(^9\). If we agree on the idea that relative earnings impinge on the relative bargaining position between genders in a partnership, we can conclude that at the beginning of a partnership women and men stand on much more equal ground than ever before and that the bargaining positions of both partners are rather equivalent. Sentimentally, one partner might be more or less dependent on the other partner; this dependence has, however, no gendered character. Economically, I would argue that dependence is also less and less gendered at the beginning of a union. This is something new and rather revolutionary. Initial intra-household bargaining positions, although not always exactly symmetrical, are today less and less gender predestined.

The increase in the amount of home production subsequent to childbirth gives rise to a renegotiation of the gender contract. The basis for bargaining positions are this time slightly different, the norms and values are now referring to individuals as parents that is, as mothers and fathers. Within households, the strategy adopted by couples for the division of work between genders differs depending on the presence – or not – of children. Generally, the roles ascribed to the individuals as parents are much more gender traditional than those ascribed to the individual as spouses or cohabitants only and what is expected from a mother is rather different from what is awaited from a female cohabitant. Becoming a parent has therefore very different meaning and social implications for men and women.

Empirical time use inquiries indicate that while men’s allocation of time strategy remains practically unchanged with transition to parenthood, mothers make most of the adjustments necessary to be able to combine work and family. Let us examine the case of Sweden. Sweden is often considered to rank high in trans-national comparisons of gender equality. As early as the 1960s, Swedish policy was remodelled with the explicit purpose of facilitating a new type of society where it would be possible for both women and men to combine gainful employment with parenting (Nyberg 2002, Björnberg 2002). However, numerous empirical studies show that Swedish women adapt working life to family life while men do not (Tyrkkö 1999: 159, Ahrne and Roman 1997\(^{10}\)). While transition to parenthood is hardly observable for men on the labour market, women absorb conflicts that arise from time constraints by reducing their proportion of time devoted to paid work. In order to face the increase in non-paid work caused by the arrival of the child, the couple proceed to a renegotiation of the gender contract and a redistribution of roles between genders. In Sweden, the practical aspect of parenthood, is a flexible and optional right for fathers; but for mothers, it is an obligation and normative rights and obligations around motherhood and fatherhood seem to be rather clearly differently formulated even today (Tyrkkö 1999). Similar observations can be made in France (Matisse 2000) and in the rest of Europe (Bittman 1999, Blossfeld & al 2001, Hendrickx & al. 2001, Leth-Soerensen and Rohwer 2001). The couple’s allocation of time and the distribution of paid and unpaid work between gender is almost always more traditional after the arrival of children to the family than before.

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\(^9\) Of course, men are often older than women in a partnership and they might therefore have had the time to reach a higher stage in their career than their female partners. In some countries, compulsory military service for men can mitigate somewhat the effect of age difference.

\(^{10}\) Swedish studies, one based on longitudinal data and encompassing 1969 gainfully employed parents (Tyrkkö 1999) and the other on individual interviews (Ahrne and Roman 1997).
In Sweden, couples often emphasise economic rationality as the primary factor behind the more traditional re-division of work between partners (Ahrne och Roman 1997: 73), especially in cases where the couple “would have liked to do otherwise because of gender equal orientation”. Indeed, at first glance, such economic rationality seems to determine the parent’s respective share of parental leave (parental leave can be taken either by the father or by the mother). Men with low earnings take much more of it than the other men and women with high earnings take shorter parental leave than the other women (ibid.). These observations would then support an opportunity cost approach to childbearing in its absolute sense. However, the relative approach is more useful. Comparing the relative share of fathers and mothers in the total number of parental leave days, we find that, although low earning men take more days than the others, they take a relatively smaller share of the total leave than higher earning men. The group of men who take the relative greatest share of parental leave is the one whose wife (or partner) has a high education level. Similarly, it is in households where men and women had relatively similar incomes that parental leave was most evenly shared (Tyrkkö 1999: 76). Swedish data also show on average a more gender equal division of work in families where the mothers are highly educated (Olah 2001). These empirical observations support the bargaining power assumption. Moreover, interviews on the individual level indicate that it is rather the female relatively equal bargaining position (through similar level of working status, education and income) within the couple that allows her to negotiate the terms of the gender contract in a way that is more satisfactory for her own self-interest (Ahrne and Roman 1997). Economic rationality only does not explain the couple’s reallocation of time after childbirth; rather, relative earnings differences between men and women on the individual level impinge on relative bargaining positions, which in turn influence the new terms of the gender contract and the re-distribution of paid and unpaid work between partners.

4. Changing norms

The above discussion underlines the importance of norms about the gender division of work. In the past, comparatively lower female educational levels can have been induced by the anticipation that the social expectation about women’s role would make it very difficult for her to get return for investment in higher education. Women’s role as primary caregivers often implies a discontinued working pattern that prevents them from investing fully in a career. Today, the educational sex ratio is in favour of women in almost all countries of the European Union (Table 1.). On the whole, higher education level for women than for men might suggest that most young women would think social norms about the gender division of work could be overcome and that it is worth investing in education since even women can now get substantial returns from it. Alternatively, it might suggest that women have to be much more educated than men in order to have a chance to counter balance economically the traditional division of work between genders. Empirical evidence show that accumulated human capital significantly reduces the risk for women to exit the labour market as well as raises the re-entry risks in Sweden and Denmark, but has no significant effect in Netherlands or Germany where labour force participation of women is mainly determined by their stage in the family cycle (Blossfeld & al 2001, Hendrickx & al. 2001, Henz and Sundström 2001, Leth-Soerensen and Rohwer 2001). These findings are consistent with the educational sex ratio differences for these countries. Anticipating that cultural norms about the gender division of work are stronger than economic rationality, many Dutch and German women do tend not to over-invest in education.
Social norms about women’s role differ greatly according to women’s status. Rules that apply to mothers are not the same as those applied to childless women. The very low fertility levels in some countries may, together with female educational levels above those of men, suggest that women anticipate gender equity to stop at the doorstep of parenthood. That is, women can get return from investment in human capital to the same extent as men as long as they remain childless. Transition to parenthood has very different implications for men and women. With the current educational gender ratio, the economical rationality behind the traditional gender division of work is vanishing. It becomes therefore much more difficult than in the past to argue for the efficiency of the specialisation model. The male breadwinner/female homemaker system, or the one and a half earner system with the woman working part-time, are not based on economic rationality anymore but on social constructions of fatherhood and motherhood. Social norms play an important role in defining the terms of the gender contract that in turn, determines the gender division of labour within the couple.

As we have seen, the gender contract stipulates, although often in a non-spoken way, the obligations and behaviours individuals are expected to fulfil according to gender, when becoming a parent. Such a contract evolves over time. Social norms both affect the outcomes of bargaining and can themselves be subject to bargaining (Argawal 1997: 7). The comments Folbre makes more broadly about the social family contract could apply also more specifically to the gender contract.

“The existence of such a contract does not eliminate the scope for individual decision making, even that of the neoclassical economic optimizing variety. Rather, it calls attention to the structure of constraints in which individuals decisions are made – constraints such as [...] social norms, and individuals preferences shaped by those norms. Individuals can simply refuse to honor the contract and pay whatever “penalty” is imposed. If enough do so, the terms of the contract are likely to change” (Folbre 1994, 2001:5).”

The “reproductive strike” translated into very low fertility levels in many parts of the post-industrial world, especially in Southern and Eastern Europe, might be a sign of women’s refusal to honour the terms of the gender contract as it is formulated today. More and more women may consider relatively unequal career opportunities of mothers as compared to fathers to be a too high a penalty for motherhood. The combination of work and family is considered to be a typically female problem. Institutionalised adjustment strategies like part-time employment, publicly funded childcare and parental leave are often available in Europe but the management itself of this combination is the responsibility of the woman solely. The prevailing view of women as the natural caregivers is preventing the internal conflicts which the practical care of the children give rise to, from becoming a collective problem and diminishes the likelihood of collaboration between individuals to challenge the terms of the gender contract.

The real cost of childbearing is not absolute but relative. Childbearing represents an inhibiting cost to the extent that it is very unevenly distributed between the parents. Including childbearing in her life course means a disadvantage in career opportunities for a mother only because she has to compete with men and childless women on the labour market. In the same

11 Termed as such by Esping-Andersen (1996).
way, childbearing affects women’s decision power negatively in the family, only relatively to that of the father. The relative aspect of the childbearing cost has major implications for the fertility level. It is not the cost of childbearing itself, which dissuades women from having children but rather, the implicit condition that only she will bear it. The very low fertility rates in post-industrialised societies reflect the woman’s refusal to endorse the burdens of childbearing alone. As Joshi puts it, “the emphasis on women’s employment as a determinant of low fertility has to be supplemented by an examination of the assumption that only women’s time use is affected by child-rearing” (1997:161).

In a context of equal level of education for both genders, traditional division of work between genders represent a cost for the society. In this context, it is not the dual earner model as such that is behind very low fertility levels in the post-industrial world but rather, the persistence of specialisation of men as primary breadwinner and women as primary care-giver within this new model. The cost of gender specialization for post-industrial Europe takes the form of a changing population structure partly induced by low fertility levels. In the long term, it gives rise to a severe unbalance in the dependency ratio and seriously challenges European welfare state systems.

5. Family Policies

5.1. Traditional family policy

In the previous section, we have seen that the childbearing opportunity cost varied greatly for fathers and mothers. In this last part of the essay, we examine how this distribution of the cost varies between countries in relation to a given family policy setting and what outcomes this has in terms of fertility levels.

The general goal of family policies is to facilitate childbearing through the alleviation of the burdens inherent to it. The family policies’ approach has long been an economic one, based on the argument “the higher the cost of the children the lower the demand for them”. It was assumed that the demand for children was always potentially high but that their price prevented parents from having the number of children they wished. In post-industrial societies however, Becker’s theory of substitution of quality for quantity is likely to play a role and higher benefits lead to children of “higher quality” rather than to more children (Ermisch 1996:154). Econometric analyses have not been able to establish a direct relationship between the amount of country cash transfers and national fertility rates in Europe today; if welfare benefits have an effect on demographic behaviour, it is likely to be very small as compared to other factors (Hantrais 1997, Gauthier 1997, 2002).

Cash benefits are however not the only component of traditional family policies. The traditional components of family policy are the following ones (Gauthier 2000):

- Direct cash transfers (e.g. family allowances, housing benefits, education scholarship, etc)
- Indirect cash transfers (e.g. tax relief, subsidies)
- Maternity and parental leave and benefits
- Childcare facilities
While empirical research has found no correlation between the length of paid maternity leave and fertility in Europe, the availability of childcare facilities seems to play an important role for fertility behaviours (Vogel 2000). Considering the central position of women’s paid employment in Europe today, family policies providing public childcare are likely to have a positive impact on fertility levels. Empirical studies show that, even nowadays, the first child is often not planned but the second child probably is and if the experiences with day-care services for the firstborn are bad, a young couple will think twice before having another child. (Taskinen 2000: 68).

Family policies are dependent on the welfare system that produces them. Sainsbury (1996) divides welfare states by the prevalence of the breadwinner/homemaker model; she classifies states as “strong”, “modified” and “weak” breadwinner states. This typology fits our purpose since it allows for the differentiation of countries according to basis for both entitlement and taxation. Strong breadwinner states are characterized by joint taxation and by differentiated entitlement among spouses, the recipient of benefits is the head of household. In weak breadwinner states, entitlements are based on citizenship or residence and taxation is separate. We suggest the basis of entitlement to be more important for fertility than the level of benefits itself. Sainsbury’s classification allows us to compare countries according to the individuals’ control over resources such as married women’s access to personal income, which we argue is central for the evaluation of the opportunity cost of children.

“Policy-makers in many countries, assuming a unitary model, have typically directed resources to male household heads, assuming equitable intra-household sharing of resources or benefits thereof. A bargaining model would suggest that policies and resources be directed differently, taking account, say, of the gender of the recipient, insofar as the welfare, efficiency and equity implications could differ by gender.” (Agarwal: 1997: 5-6).

Countries where entitlements are provided on the basis of citizenship (Sweden, Finland, Norway, Denmark) exhibit in general higher fertility rates than those where a mother’s social rights are contingent on the husband’s social rights (Italy, Spain, Portugal, Greece, Germany, Belgium, France). Also, in Germany, the tax system greatly penalises couples where mothers of young children want to remain in the labour force (Lohkamp-Himminghofen and Dienel 2000: 63).

The clustering of states along a strong–weak breadwinner spectrum sheds light on differences with regard to familial ideologies. On the one side of the spectrum, there is a celebration of marriage and a strict gender division of labour following traditional gender roles; on the other side of the spectrum, we have a more egalitarian sharing of roles with no preferred family forms. This theoretical framework enters the scope of what is commonly labelled the second demographic transition (Van de Kaa 1987). This transition is characterized by the decrease of marriage rates, increasing prevalence of consensual unions and a high proportion of extra-marital births as well as a shift from a uniform family model to pluralistic ones. The “leader” countries with regard to fertility in the 1990s (Sweden, Norway, Denmark, Finland and France) all have a much higher rate of “defamilisation” with a higher frequency of consensual unions and a much higher proportion of extra-marital births than the rest of Europe. Recent findings show that family forms and gender division of labour are linked to one another,

12 Probably because all analysed European countries offer a relatively high minimum level of maternity leave.
marriage appears to be associated with a more gender-based specialisation than consensual unions (Kravdal 1997, Prinz 1995) and married women have a higher risk of interrupting work as well as a lower risk of re-entry to the labour market than women in consensual unions (Sundström and Henz 2002). This reflects both less traditional norms and economic considerations; married women have in general greater economic security. Family forms do matter for the distribution of the opportunity cost of children and are therefore very much a part of the post-industrial fertility problem.

5.2. Reconciliation policies

An increasing number of researchers (Gauthier 2000, Hantrais 2000, Mac Donald 2000, 2001, Chesnais 1996 a,b, Folbre 1994, 2000) believe that, in order to better understand the determinants and the effects of family policies, we have to move away from conventional family policy approaches. On the European level, there is one approach to family issues that seems to gain importance, namely the theme of the reconciliation of family and work responsibilities. In the wake of the Maastricht Treaty, the Council of the European Union adopted recommendations13 aiming, among other things, to remove obstacles to occupational activity by providing measures to help parents to reconcile their family and professional responsibilities. This gave rise to a whole set of national “reconciliation policies”. While the idea of combining paid employment with family care has been at the centre of concern for several decades in Scandinavia already, the rest of Europe has had it on their political agenda since the end of the 1980s only. The idea of facilitating the combination of female labour participation and child rearing is now widespread, even among partisans of pro-natalist policies (Hecht and Leridon 1993).

Lohkamp-Himmighofen and Dienel (2000) have identified different models of European reconciliation policies. The Nordic states represent the egalitarian model, Belgium and France, the labour market demographic model. The Netherlands, Germany and Austria are characterized by a three-phase model and the four Mediterranean member states follow a family-based model. The egalitarian model is characterized by equal parenthood and dual-earner family. Both entitlements and taxes are individual-based. The labour market orientated demographic model recognises the importance of women’s contribution to the economy and supports it, but the underlying objective differs from the Scandinavian model, it does not actively promote the participation of fathers in care activities. Rather, it supports market substitutes, the result being extended public childcare facilities, short parental leave and full-time work for mothers. In the three-phases model, women are encouraged to leave employment as they become mothers. It is therefore characterised by a first phase with full employment prior to family formation, a second phase of withdrawal from the labour market and a third phase with gradual return, generally on part-time basis. Taxation is joint and discriminates against working wives. The Mediterranean family-based model encompasses countries where female labour market participation has traditionally been below the EU average. Mothers have relied on the help of a multigenerational family for the care of young children and gender role divisions have gone unquestioned.

It is around this notion of childcare that between countries cultural variations are mostly marked. In Germany, Austria, Netherlands and Luxembourg, there is a general strong conviction that young children need continuity of care and that mothers cannot be replaced in

that care without posing a threat to the child’s development (Lohkamp-Himmighofen and Dienel 2000:63-64). This has resulted in poor provision of childcare facilities and half-day schooling on the assumption that the mother prepares lunch and supervises the homework. Belgium and France, on the contrary, have a long tradition of publicly funded childcare, which is considered to be important for the development and socialization of the child. Particularly in France, childcare is associated with republican values because it provides equality of opportunity to all children right from the beginning. In Scandinavia, publicly financed childcare is also available to a great extent and at reasonable prices. Mediterranean countries have very poor supply of public childcare and have traditionally relied on intergenerational help for the care of the children, without support from the state. In the next section, we examine more in details what these models imply for the distribution of the opportunity cost of childbearing between parents and what it means for fertility levels.

Table 3. Labour market participation of mothers.
Proportion of currently employed women according to the youngest child school age

<table>
<thead>
<tr>
<th></th>
<th>nursery school</th>
<th>kindergarten</th>
<th>primary school</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweden</td>
<td>0.50</td>
<td>0.75</td>
<td>0.85</td>
<td>0.70</td>
</tr>
<tr>
<td>Norway</td>
<td>0.53</td>
<td>0.67</td>
<td>0.80</td>
<td>0.67</td>
</tr>
<tr>
<td>Finland</td>
<td>0.41</td>
<td>0.87</td>
<td>0.90</td>
<td>0.73</td>
</tr>
<tr>
<td>Denmark</td>
<td>0.79</td>
<td>0.82</td>
<td>0.83</td>
<td>0.81</td>
</tr>
<tr>
<td>Belgium</td>
<td>0.68</td>
<td>0.71</td>
<td>0.69</td>
<td>0.69</td>
</tr>
<tr>
<td>France</td>
<td>0.53</td>
<td>0.59</td>
<td>0.66</td>
<td>0.59</td>
</tr>
<tr>
<td>Netherlands</td>
<td>0.43</td>
<td>0.50</td>
<td>0.56</td>
<td>0.50</td>
</tr>
<tr>
<td>Austria</td>
<td>0.21</td>
<td>0.53</td>
<td>0.63</td>
<td>0.46</td>
</tr>
<tr>
<td>Italy</td>
<td>0.41</td>
<td>0.41</td>
<td>0.40</td>
<td>0.41</td>
</tr>
<tr>
<td>Spain</td>
<td>0.34</td>
<td>0.36</td>
<td>0.41</td>
<td>0.37</td>
</tr>
</tbody>
</table>

Source: Family and Fertility study

5.3. Empirical observations

5.3.1. Germany and France

Germany (former FRG) and France both belong to the conservative-corporatist type of welfare state\(^\text{15}\) where state policies aim to uphold traditional family forms and offer better economic outcomes for those who fulfil societal expectations concerning their role in the

\(^{14}\) Refers to the youngest child currently living with the woman  
Nursery school age: usually from 0-2 years  
Kindergarten: from 3-5 years  
Primary school: from 6-11 years  
Note. For Belgium, the results of the survey are limited to the Flemish Region and the Brussels Capital Region.  
\(^{15}\) As classified by Esping-Andersen (1996).
family and the labour market. Eligibility for social benefits and the length of paid maternity leave is comparable in both countries as well as the share of social benefits devoted to family and children. In spite of better economic conditions and lower unemployment rates during the 1990s, Germany has displayed on average a much lower fertility level than France.

Figure 6.

![Completed fertility (1933 - 1965) and Period fertility (1968 -1998)](image)

*Source: Recent demographic developments in Europe 2000 (Council of Europe Publishing 2001)*

While both countries have an explicit family policy emphasising the role of the family for social cohesion, policies in France have long been pro-natalist (Laufer 1998: 63). Germany, on the contrary, has been very reluctant since World War II to support any kind of explicit population policy. Second, although the family as an institution has a strong legal support in both countries, Germany and France differ in the “defamilisation” level of their society. The proportion of extra-marital births in the birth total is, for instance, much higher in France (figure 7.). While only 14% of births occurred outside marriage in Germany in 1997, 40% of the babies born in France the same year were born outside of wedlock, almost all of them within consensual unions.

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16 For the former FRG only, the figure for the former GDR is much higher (Council of Europe Publishing 2001).
Proportion of extra-marital births (1967 - 1997) France and Germany

Germany and France also differ greatly by the activity rate of mothers. While the proportion of women working (aged 20-49) is higher in Germany than France for childless women, mothers are working to a much larger extent in France (Figure 5.)

Source: Recent demographic developments in Europe 2000 (Council of Europe Publishing 2001)

The supply of childcare facilities reflects differences in family policy orientations and childcare norms between the two countries. Family policy in Germany provides strong financial and social support for childcare, but is formulated as to encourage child rearing to take place in the home with one parent specialising in family responsibilities. Norms about care as a female speciality are very strong (Fagnani 2000). The rationale behind traditional division of work between genders is foremost normative, not economic (Blossfelt and al. 2001: 60). These findings are in line with the cross-national comparison of educational sex ratio; Germany was one of the very few countries studied where young women were, on average, less educated than men (see Table 1.). It might reflect a situation where norms and structural support to traditional gender division of work are so strong that they cannot be overcome by comparative educational advantages. Therefore, young women perceive it as meaningless to “over-invest” in education. Although relative equality of opportunity in the public sphere of employment, traditional gender norms are ruling family strategies to a large extent. Becoming a mother projects the German woman into a whole new world of gender relations and gender roles crystallises around recommendations about the best suitable model of care for young children. As in most parts of Europe, social norms prescribe that women should subsume their identity as workers to their identity as mothers.

The comparison between France and Germany illustrates the interplay between social policy and societal norms. Declining economic conditions in France in the 1970s gave mothers a legitimate ground to engage in paid employment. It gave rise to demands for publicly financed childcare provision, which in turn further accelerated women’s labour market participation. In Germany, state support to the male breadwinner system is characterised by a fiscal system that works as a strong disincentive for mothers of young children to engage in paid employment. It is supported by the general view that childcare should take place in the home. Also, with a strong state support to the traditional division of work between genders, mothers’ work is made optional. Germany has evolved towards a modern version of the old male-breadwinner model: a “one-and-a-half-earners couple with the wife following a patchwork career” (Scheiwe 2000:98).

Eventually, differences in norms about working mothers impinge on women’s identity construction and life strategies. Employment has today become a central component of French women social identity. Although sometimes difficult to reconcile, family and career do not fundamentally clash with one another. By contrast, in Germany, women’s identities as worker and mother are not only difficult to combine but are also somehow contradictory, as it is often believed that “a career-woman cannot be a good mother”. There is a strong internalisation of norms regarding the care of young children by the majority of women. In contrast to France, these norms are at odds with the growing desire of young educated women to be in paid employment and have therefore an indirect negative impact on the German fertility level (Fagnani 2000:13). The discrepancy between the desire of women to work, and the incompatibility between paid employment and family, does not mainly express itself in pressures towards a transformation of family policy orientation, but rather, takes the form of low fertility levels.

Germany has managed to prevent fertility levels from reaching alarmingly low levels by strong financial support to families. Thereby, part of the opportunity cost of children resulting of the strong unequal distribution of the cost between genders, was somewhat compensated by a lower monetary cost for having children. We will now examine the case of Mediterranean
countries where women’s heavier opportunity cost of childbearing has not been mitigated through financial incentives.

5.3.2. Mediterranean countries

The development of pre-school structures in Italy (at the end of the 1960s) and Spain (during second half of the 1970s) occurred in a context of the modernisation of the education system and was aimed at the intellectual development of the child (Valiente 2002). It was not meant as a substitute for family childcare, nor did it challenge the male breadwinner model by allowing mothers to take paid employment, not even on part-time basis. The family as a private unit of rights remained untouched, as was the general belief that childcare was a family matter. As in Germany, mothers’ care is considered as having no real substitutes; neither fathers nor childcare centres are able to replace it. Similarly, full-time employment of mothers is believed to endanger the upbringing of small children (ibid.). This emphasis on education rather than care resulted in the creation of numerous places in publicly funded centres for children aged 3 or older, but hardly any for those under three (Table 4.).

<table>
<thead>
<tr>
<th></th>
<th>Italy</th>
<th>Spain</th>
<th>Greece</th>
<th>Portugal</th>
</tr>
</thead>
<tbody>
<tr>
<td>under the age of 3</td>
<td>6</td>
<td>5</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>age 3 to school age</td>
<td>97</td>
<td>84</td>
<td>64</td>
<td>48</td>
</tr>
</tbody>
</table>

*Source: Gauthier (2000)*

High unemployment rates have characterised Mediterranean economies for several decades now. Surpluses of labour have kept women at home in unpaid work and explain the persistence of the breadwinner/homemaker model in this region (Table 5.). Also, this results in a weakening of the workers’ bargaining position, especially of female workers. A woman with problems to reconcile work and family can easily be replaced by another worker with less family duties. The management of work and family responsibilities is viewed as a private issue only. Unlike other countries, the theme of reconciliation of work and family has until now, not been subject of public debates, nor has it entered the scope of feminist’s requirements (Valiente 2002). Because of high unemployment levels, support for women entering the labour force has never been a priority in Mediterranean countries. In these regions, unemployment further reinforces the much higher opportunity cost of childbearing for women than for men that results from norms about childcare. At the same time, such an economic context prevents these norms from changing.
Activity rates of women ages 20 – 49 by number of children\textsuperscript{17}
In Italy (I), Spain (E), Greece (EL) and Portugal (P).

<table>
<thead>
<tr>
<th></th>
<th>0 child</th>
<th>1 child</th>
<th>2 children</th>
<th>3 + children</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I</td>
<td>E</td>
<td>EL</td>
<td>P</td>
</tr>
<tr>
<td>employed</td>
<td>52.7</td>
<td>54.2</td>
<td>52.9</td>
<td>69.2</td>
</tr>
<tr>
<td>unemployed</td>
<td>10.5</td>
<td>14.4</td>
<td>13.3</td>
<td>3.9</td>
</tr>
<tr>
<td>inactive</td>
<td>36.7</td>
<td>31.5</td>
<td>33.8</td>
<td>27</td>
</tr>
</tbody>
</table>


Portugal is somehow a regional exception and scores much higher female activity rates than its neighbours. It seems to support our argumentation about returns of human capital investment and fertility since both educational sex ratios\textsuperscript{18} for women and fertility levels are higher than in Italy, Spain and Greece (Table 1.). The number of extra-marital birth is also much higher in Portugal than in the rest of Southern Europe (Family and Fertility Study Portugal 2000). It calls for extensive research on the Portuguese case.

Mothers have traditionally relied on the help of the female members of the extended family for the care of the young children, without support from the state (Valiente 2000, Rodrigues: 50, Lohkamp-Himminghof & Dienel 2000). It seems as if this is less and less the case, and the “younger” generations of grandparents might be more individualistic value oriented. It is not a strong labour force attainment that prevent them to assist their children in the care of their grand-children; they retired at younger age than before\textsuperscript{19} and are relatively well off, they want to enjoy retirement by travelling, hobbies etc. They do not want to be tied by the care of young children. This jeopardises the old childcare model and causes a severe crisis of childcare solutions that makes it extremely difficult for mothers to reconcile work and family.

\textsuperscript{17} Children ages 0 –14, living with the mother.

\textsuperscript{18} The educational sex ratio is 152 in Portugal in favour of women (= for 100 men with university degree, there are 152 women) while Italy , Spain and Greece score an average of 123. (Eurostat, Labour Force Survey 2000).

Average fertility level for Portugal during the 1990s is 1.48 while Italy, Spain and Greece show a TFR of respectively, 1.21, 1.22 and 1.35

\textsuperscript{19} Employment rates for men ages 50 – 64 is 54.4\% in Italy, the same rate for women ages 50-64 is only 27.7 in Italy, 29.5 in Greece and 25.6 in Spain (Eurostat, Labour Force Survey 2000).
Moreover, part-time work was until recently very uncommon in the South of Europe and in spite of the recent increase of this type of jobs, it is very unlikely that it will have a positive impact on fertility. They have appeared as a response to the needs of employers looking for greater flexibility of the employees. Part-time jobs are therefore highly precarious and require precisely a flexibility that is utterly incompatible with the care of young children. The solution adopted by many women to enable them to undertake paid work is then not to have children (Del Re: 122). If women have to choose between paid work and children, they generally give priority to the first one. The gender ratios of university degrees for people between 25 and 34 (Table 1.) suggest that this priority order in life strategy plans is likely to remain, since women are likely to expect return for human capital investment. Not only is employment a prerequisite for childbearing decisions, but the decision to have children is conditional on its compatibility with employment.

5.3.3. France and Sweden

Both countries have shown relatively high fertility rates during the 1990s. The average fertility level was 1.81 for Sweden and 1.72 for France respectively. While Sweden has been “the leader” of Europe at the beginning of the decade (1990-1993), France showed the highest European fertility rate by the turn of the century (1999-2001). Their total fertility patterns are different with much stronger variations for Sweden. The cohort fertility of both countries has however remained remarkably high and constant in a European perspective.

Figure 9.
If we look at their progression in the second demographic transition (Van de Kaa 1987), we observe among other things, high proportions of extra-marital birth in both countries (40% for France and 55% for Sweden in 1999), France is the non-Nordic country with the highest “defamilisation” rate. Both nations have long traditions of demographic concerns. As early as the 1930s, Sweden developed strategies aimed to boost the low fertility as well as improving social conditions of families (Myrdal & Myrdal 1934); France has long been concerned with population issues and has developed family policies with a strong pro-natalist character (Laufer 1998: 63). In France, as well as in Sweden, children are considered as both private and public “goods” and the responsibility for children is therefore shared between the state and the family (Lanquetin 2000: 81).

Family policies support the reconciliation of family and work for women in both countries. This development started earlier in Sweden. From the 1960s on, a bunch of measures have favoured the combination of family responsibilities and work participation for mothers (Nyberg 2002, Björnberg 2002). In France, support for this kind of policy orientation increased with the expansion of childcare at the end of the 1970s (op. cit. p.23). There are however clear differences in the formulation of family policy objectives between the two countries. Since the 1960s-1970s, Swedish policy has an explicit purpose of facilitating a new type of society where it would be possible for both women and men to combine gainful employment with parenting (Nyberg 2002: 74). Instead of insisting on parenting roles of both men and women, French family policy concentrates on women, and reconciliation policies address the needs of women exclusively. On the whole, it is less explicit and by far less consensual than Swedish family policy. The goal of this policy is to give women the “free choice” either to stay at home and take care of the children or to combine paid employment and motherhood with the idea that the woman shouldn’t have to chose between the two (Lanquetin 2000: 70, Laufer 1998: 63).

While Sweden belongs to the weak breadwinner group, France is classified as a modified breadwinner state (Sainsbury 1996) and by the late 1990s in France, the individual was still not the basic unit for assessment in fiscal and social security law (Lanquetin & al. 2000: 71). There is in France, a family-based conception of rights that does not exist in Sweden where rights and obligation are linked to citizenship and where even married individuals are separately taxed. Since taxes are strongly progressive and men usually earn more than women, Swedish social security and tax systems reduce income differences between genders and strengthen women’s economic independence of men while the French tax system does not.

The opportunity cost approach adopted in this paper stresses the importance of the distribution of this cost between the parents as the critical element for period fertility levels. The promotion of gender equality in both family and work supported by Swedish family policy should have had a positive impact towards a more even distribution of that cost and should therefore have resulted in higher fertility in Sweden than in France. Empirical observations show however very similar average fertility figures for the two countries during the 1990s. Why is that so?
While French family policy allows 16 weeks of fully paid maternity leave and 2 days of paternal leave, Swedish policy is by far more generous and grants 12 months for either parent with an income replacement of 80 percent. Since 1995, there is a compulsory “daddy month”; that is, one of the 12 parental leave months has to be taken by the father otherwise it would be lost. Fathers are also allowed 10 days leave just after the birth of the child. In the light of these regulations, it is obvious that Swedish parental leave is theoretically much more gender equal than the French one. In a long term perspective however, things might be a little more complicated. In fact, 85-90 percent of available parental leave days in Sweden are used by the mother (Björnberg 2002: 40). It means that, in spite of the gender equal family policy orientation, it is almost exclusively the mother’s career that suffer from a year-long break.

On the other side, long parental leave seems to facilitate women’s return to the labour market and constitutes a satisfying solution for reconciling work and children since this reconciliation is often more difficult when the child is very young. So, in France, while a short break might limit the negative effects of childbirth on career perspectives, the return to work is sometimes difficult so soon after childbirth and increasingly so for the second or the third birth. The labour force participation of young mothers in France for children aged 0-2 is higher than in Sweden, but lower for mothers of older children (see Table 3.). This indicates that continuity in the labour market in the long term is more complicated for French mothers. Part-time work also scores much higher rates in Sweden than in France. Although part-time work makes it more difficult for women to be economically independent of their partner or to reach high-status positions, it facilitates the combination of work and motherhood. It is important to underline that Swedish part-time work is especially well regulated; it often leads women to progressively re-enter full-time work along with the children becoming older. Thanks to the strong and extended Swedish public administration that employs a majority of women, part-time work is both possible and probably less penalising than in many other countries. Additionally, eligibility for parental leave in Sweden is strongly connected with the establishment of women in the labour market and thereby favour the mother’s economic independence, which is not the case in France.

The father’s share in home-production in Sweden is higher than in many other countries (Anxo & al. 2001: 3). Empirical studies show that while the average relative share of women in home-production amounts on average to 70% in France, it is “only” about 60% in Sweden (ibid.). In France, time-use studies show that the division of work in the household is still very traditional and the future mother knows that she has to absorb almost entirely the increase in home-production after childbirth (Matisse 2000). In Sweden, even though societal norms about mothers taking the main responsibility for the children are still strong, I would argue that the issue enters the scope of negotiation between partners. Moreover, fathers staying at home to take care of children seem to be well-accepted. The responsibility of managing the combination of work and family is generally seen as not only the mother’s. The perspective that both parents may somehow absorb the increase in home-production consecutive to the arrival of the child may relieve the future mother from much stress and hesitation.

Differences are also observable between France and Sweden with regard to the relationship between education and fertility on individual levels. While Swedish women with higher education have a higher third-birth risk and seem to combine childbearing with persistent

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21 It has been extended to 10 days in January 2002.
22 It is probably also an effect of generally higher unemployment rates in France.
23 However, the more educated is the woman, the more egalitarian is the division of work between genders.
working behaviour more often than other women, the reverse is true for France in spite of family policy orientations that systematically support the arrival of the third child (Corman 2001, Hoem 1993). Rather than explaining it by a pure income effect that would exceed the opportunity cost effect, we explain these findings by a more gender equal level of intra-household bargaining power that results in a more even distribution of the opportunity cost between the father and the mother. Empirical analysis on Swedish data shows on average a more gender equal division of work in families where the mothers are highly educated (Oláh 2001). In that kind of families, fathers take on average, a greater share in home-production and parental leave. What we argue is that the positive relationship between education and fertility in Sweden has to be assessed in relative, rather than absolute terms. It is not as much the overall high level of resources that allows the couple to have a third child as the ways relative earnings impinge on relative bargaining powers. Highly educated women are often assorted with highly educated men. This match is likely to result in a less traditional gender contract where both men and women are active both on the labour market and in home production. Labour attachment of these women is likely to be as continuous as possible so that the potential negative effects of births on the mother’s subsequent career perspectives are as small as possible. Its effect is to preserve the mother’s intra-household bargaining power as well as her long-term interest on the labour market. In such couples, the opportunity cost of having children is likely to be more evenly distributed between the father and the mother and is thereby reduced not only for the mother but also for the couple.  

Probably, the intra-household bargaining power of women is more directly related to earnings in Sweden than in France because men and women are more readily seen as substitutes for one another in home-production. The gender normative context being stronger in France than in Sweden, it limits the bargaining power mechanism that allows mothers with higher education (and earnings) to have more equal sharing of care responsibilities.

**Conclusion**

In this paper we have argued for the importance of the distribution of the opportunity cost of having children to understand post-industrial reproductive issues. The opportunity cost of having children represents a cost to the extent that it is very unevenly distributed between fathers and mothers. In today’s societies, mother’s labour force participation is increasingly less optional and most women make life strategy plans that place economic independence as a central element over their life course. The theme of reconciliation of family and work responsibilities is therefore less about giving mothers the possibility to participate in paid employment than giving young female workers the possibility to become mothers.

Family policies are at the crossroads. The inhibiting cost of children is not as much monetary as it is a question of time constraints. Therefore, traditional family policies are likely to be of little help to boost fertility. But, family policies in the form of reconciliation policies play an important role in fertility issues. They enable women to combine both family responsibilities and continuous labour attachment, which allows them to be economically independent. A

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24 Families where the father used his right to paternal leave for the first child have a 15% higher propensity of having a second child than other families (Oláh 2001).
career on her own gives the woman the possibility to have control over resources and increases her bargaining power inside the home. Reconciliation policies thereby have the effect of making the opportunity cost of children more evenly distributed between genders. Family policies are however only the mirror of national preferences. It is important to underline that there is no miracle recipe to level up fertility rates. Fertility rates are a function of how a given society socially constructs father’s and mother’s identities. There has often been an economic rationale behind changes in normative attitudes towards working mothers and childcare. Policies are designed as a response to these changes and once implemented they accelerate the normative changes. Family policies cannot be universal but have to find resonance in the specific societal environment where they are applied. However, the European societies we have studied in this article have in common that their fertility seems to be highly related to the way the opportunity cost of children is distributed between genders. Therefore, the distribution of the opportunity cost has to be central to any family policy design. Availability of publicly funded childcare seems to play an important role for the combination of work and family. Public childcare allows a more even distribution of the opportunity cost of having children between genders since it facilitates women’s labour market participation and economic independence.

Economic rationale is a powerful factor for social norm transitions. The long-standing low fertility levels in most part of Europe contribute to a population structure where the active population is likely to face problems to support an increasingly large proportion of non-actives. Fertility and labour force issues are likely to enter more and more often at the top of the political agenda. It might contribute to the full recognition of both mothers’ and fathers’ identities as worker and care-givers, to lead to less traditional gender role constructions and to have a positive effect on fertility levels.

References


Del Re, A. (2000), ”The Paradoxes of Italian Law and Practice” in *Gendered policies in Europe reconciling employment and family life* edited by Linda Hantrais; consultant editor: Jo Campling.


Appendix I. Total fertility rates 1965 – 1999

Source: Recent demographic developments in Europe 2000 (Council of Europe Publishing)
## Appendix II. Total fertility rates 1990s

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*Source: Recent demographic developments in Europe 2000 (Council of Europe Publishing)*
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- **Arbetsrapport/Institutet för Framtidsstudier; 2000:2**
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  Westholm, Erik. *Challenges for the Local Communities.*

- **Arbetsrapport/Institutet för Framtidsstudier; 2001:6**
  Sommestad, Lena i samarbete med Bo Malmberg. *Demografi och politisk kultur. Ett ekonomiskt-historiskt perspektiv på "den starka statens fall".*

- **Arbetsrapport/Institutet för Framtidsstudier; 2002:1**

- **Arbetsrapport/Institutet för Framtidsstudier; 2002:2**

- **Arbetsrapport/Institutet för Framtidsstudier; 2002:3**
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Essen, Anna. Kvarboende och äldrevård i hemmet med modern teknik. –Vad hämmar utvecklingen?
- Arbetsrapport/Institutet för Framtidsstudier; 2003:6
Ramstedt, Berith. Free movers som resurs och strategi –utländska studenter i det svenska utbildningsystemet.