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MOTHERHOOD CHOICES:
INFLUENCE OF
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THE RATIONALE OF MOTHERHOOD CHOICES: influences of employment conditions and of public policies

EUROPEAN COMMISSION RESEARCH

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The Rationale of Motherhood Choices: Influence of Employment Conditions and of Public Policies

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Foreword

The establishment of the *Targeted Socio-economic Research Programme* (TSER), within the European Union's 4th RTD Framework Programme (1994-1998) provided a major impetus for European level Socio-economic research.

The scope of this research is both deepened and widened through the implementation of the Key Action "*Improving the Socio-economic Knowledge Base*" of the 5th Framework Programme (1998-2002).

Socio-economic research requires an effective dissemination strategy and the development of such a strategy is a top priority with respect to the Key Action. It should be recognised that there is a broad range of potential users of this type of research apart from the research community, policy makers at various levels and civil society: the citizens of Europe also constitute an integral target group.

Different users require different types and levels of information with respect to the results arising out of EU socio-economic research.

While the research community may be interested in "raw" results of many of the 200 or more research projects supported to date, some other users require more analytical information. The latter audience is targeted by our Publication Series at the level of State of the Art Reports. These represent reports that are normally produced by the Projects in their first year of implementation and they reflect the current 'state of the art' of the specific topic of research to be dealt by each individual project.

The present report was prepared within the framework of the following project:

"The Rationale of Motherhood Choices: Influence of Employment conditions and of public policies"

This project was funded by the Key Action "Improving the Socio-economic Knowledge Base", second call for proposals.

The main objectives of the project are to examine how motherhood decisions in European Member States are affected by labour market conditions, and how public policies can be developed at national and European levels to promote shared responsibility for parenthood among dual career couples.

The state of the art report reviews available research in this field and presents it in a comparative setting.

The following key conclusions were reached:

1. Fertility levels are below the replacement rate of 2.1 child per adult female in all European Member States. Furthermore, new mothers in Europe have never before been so old: the 1990s saw a rising trend in the age of women having their first child.
2. Broken down by levels of educational attainment it is clear that highly educated women wait longer than less well-educated women to have a baby. But viewed over the life cycle, mothers tend to accumulate less human capital than childless women.
3. The authors look at a range of typologies with which to categorise the European Member States but find little difference between them in terms of results. The findings hold across all categorisation

models. For example, in countries with relatively well-developed systems of work-family policies, women tend to have higher employment rates in their 30s, and for all countries studied, an increase in the range of childcare facilities and an improvement in their quality generates a strong effect on mothers' employment rates.

4. The report suggests that a number of European countries have a long way to go before they meet the 60% employment target for women by 2010. However, countries could be aided by the development of certain social policies and by sociological and psychological factors. The authors claim that as long as domestic tasks, including childcare, are viewed as a natural female domain it will be hard for women to carve out an equal place in the labour market when compared to men.

The following recommendations were made:

1. The authors highlight several examples of good policy practice that encourage shared responsibility for childcare. The most prominent of these is parental leave for fathers. According to the authors this should be at least partly paid and correspond to an individual and non-transferable right.
2. Other good examples are home helps or policies offering care at home, but only when implemented on a large scale. The report suggests that organised volunteering can also play an important role, and that informal networks of support that traditionally supported the family should be reinforced.
3. More generally, the authors claim, an exploration of new forms of interaction between the public and private spheres is needed. They argue that the policy challenge for the future will be to develop forms of intervention that combine financial support for beneficiaries and carers with services in kind, but without undermining the structure of family life.

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Preliminary note : Graphs that have been adapted from other authors have been scanned from publications. In order to publish these graphs we need permission from both the author and the publisher. These scanned graphs appear as pdf-files in the appendix. In a final version we will decide whether to exclude those graphs if permission is not given or substitute them by a similar graph drawn by ourselves or change the text.

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Introduction

Our project is entitled « The Rationale of Motherhood Choices : Influence of Employment Conditions and of Public Policies (MOCHO) ». It is part of the Key Action « Improving Human Research Potential and the Socio-economic Knowledge Base » of the Fifth Framework Programme of the European Commission. It is a three-year project that has started on the 1st of October 2001 and will run until the 1st of October 2004. Five countries participate in the project. Besides Belgium and the Netherlands, the two coordinators of the project, Italy, Greece and France are involved.

In this project we aim to study how motherhood decisions are affected by labour market conditions and how public policies can be designed in order to promote parenthood by dual career couples, which is becoming the normal way of life in the European Union's member states. Such an in-depth analysis will allow us to contribute to the design of better policies at the European and at national levels to facilitate the combination of parenthood and work. Particularly we focus on supplying results to the EU officials that are responsible for the gender mainstreaming of the policy recommendations coming from the EU. A similar target group are officials at the national government level who are responsible for gender mainstreaming and equal opportunities.

Over the last twenty years, two opposite trends were observed in European countries: on the one hand the rise of women's labour supply and employment, on the other hand the decrease in fertility rates.

The first objective of this project is to make a contribution to the prediction of fertility rates. Women's attitudes towards motherhood are at the core of all economic and social problems raised by the ageing of the European population. The single most important reason for the ageing of the population and the difficulties to design pension systems is the variability and unpredictability of the fertility rate (Cutler et al., 1990¹; Weil, 1997²). The future of the welfare states depends on women's willingness to insure a reproduction function. Because they choose to take part in paid employment, fertility rates will depend on their possibilities to combine employment and motherhood.

¹ Cutler D.M., Poterba J.M., Sheiner L.M., Summers L.H. (1990) Brookings Papers on Economic Activity n°1: 1-73.

² Weil D.N. (1997), "The Economics of Aging" in Rozenzweig M.R. and Stark O. eds *Handbook of Population and Family Economics*, Elsevier, Amsterdam.

The second objective is to analyse the impact of employment conditions on fertility. The feminisation of the labour market or the growing proportion of women in the working population are common features of European economies. Working women seem to have become the dominant social norm. The increase in the working population within Europe for at least the last ten years is due to the upsurge in the number of working women between the ages of 25 and 49, that is to say women of child-bearing and child-rearing age. Increasingly young women in all European countries educate themselves for a lifelong labour market career. However, gender inequalities in the European labour market are persisting, the high unemployment level exerts a pressure on job quality of women who are exposed to atypical forms of employment like part-time and temporary work and to low wages (See for example: Maruani, 1999³; Meulders, 1993⁴, 1994⁵; Rubery, 1998⁶). In this context, many women find that there is no room for children. Maternity leaves, parental breaks, employers' attitudes towards motherhood exert a negative influence on careers and earnings prospects, which results in postponing childbirths or refraining from children altogether.

The third objective is to investigate the influence of social policies on parenthood choices. Social policies can affect women's decisions in different ways: on the one hand, there are policies that facilitate the combination of work and motherhood by reducing the costs of care, by providing quality services or legal protection against firing and by acting against discriminatory practices preventing the hiring of mothers, on the other hand, lots of policies give advantages to non-working parents: by giving tax or cash advantages in case of a non-working spouse with children or by providing replacement income in case of career breaks which encourages women to leave the labour market. The traditional appraisal of employment traps in the literature (OECD, 1994⁷) suggests that they are gender neutral, however, tax and social systems in Europe still contain different advantages for traditional male breadwinner families imposing high marginal tax rates for women entering or re-entering the labour market. Since the 1980s, European employment policies, in order to decrease unemployment rates, have built new forms of employment traps for women. Some policies aimed at facilitating the combination between

³ Maruani M. (1999) "Women'Employment in a Society of Rampant Unemployment" in S.S. Gustafsson and D. Meulders eds. *Gender and the Labour Market. Econometric Evidence on Obstacles in Achieving Gender Equality*, forthcoming MacMillan, London.

⁴ Meulders, D., R. Plasman & V. Vander Stricht (1993), *Position of Women on the Labour Market in the European Community*, Aldershot, UK: Dartmouth.

⁵ Meulders D., O. Plasman & R. Plasman (1994), *Atypical Employment in the European Community*, Aldershot, UK: Dartmouth.

⁶ Rubery J., Smith M., Fagan C., Grimshaw D. (1998), *Women and European Employment*, Routledge, London.

⁷ OECD (1994), *The OECD Jobs Study*, OECD, Paris.

work and family life, like parental leaves and other forms of career breaks, that are taken nearly exclusively by women, decrease the growth in the female share of the labour force (Bettio, 1998⁸). The project will contribute to the analysis of the influence of social policies on fertility decisions.

Until recently the research agenda in the field of population economics that focuses on the lack of equal opportunities has stressed the labour force participation of women with young children. In this project, however, we chose to test the reverse relationship: what are the determinants of women's choices concerning motherhood (dependant variable) and, more specifically, what is the role played by employment prospects and public policies concerning children and motherhood (explanatory factors)?

The first year of research in the framework of the MOCHO project gave rise to the underlying State of the Art. It contains six chapters and an appendix.

The first chapter focuses on analysing and presenting recent trends in fertility development. First, fertility is currently below the replacement level of about 2.1 child per woman in all European Community member states.

A substantial share of the decreasing development of the period total fertility rates can be accounted for by what demographers call the tempo effect or the timing of maternity as opposed to the quantum effect or the number of children born to a woman over her life cycle. New mothers in Europe have never been so old before. The trends in the mean age of the woman at the birth of her first child show for European countries a U-shaped pattern with new mothers of the 1960s and early 1970s being younger than mothers of the late 1970s and 1980s. However, in the 1990s, there has been a monotonically rising trend in mothers' age at first birth creating a J-shape rather than a U-shape.

Breaking down fertility patterns by education of the woman reveals that high educated women wait longer than less educated women before they have a child. Also, more educated women are more likely to remain ultimately childless. This creates a hypothesis that longer education causes decreasing fertility. Research work under way for the MOCHO project analyses further the relation between education and childbirth. One result (Gustafsson, Kenjoh and Wetzels, 2002⁹) shows that women who are currently studying have a very low probability of having a

⁸ Bettio F., Preshal S., Bimonte S. and Giorgi S. (1998), Care in Europe, Report to the European Commission, DGV-equal Opportunities Unit. Brussels: European Commission.

⁹ Gustafsson, S. ; Kenjoh, E. ; Wetzels, C. (2002) The role of education in postponement of maternity in Britain, Germany, the Netherlands and Sweden. In: Ruspini, E. and Dale, A. (eds.) *The Gender Dimension of Social*

child for all educational groups in Germany, Britain, the Netherlands and Sweden. A study of the duration since the age at which education is finished shows that there are no educational differences anymore in waiting time to have a child. This suggests that finishing education is crucial. Another piece of research under way from the Amsterdam team analyses the age at which a woman moves together with a man and his age and education. The purpose of that research is to find out whether it is in fact the formation of a couple that is delayed causing postponement of maternity or if it is a couple's decision once the union has been formed.

In the second chapter, an inventory is made of the different existing typologies of welfare state regimes. In recent years, a great number of researchers have established such typologies. Many have evaluated welfare states using different criteria, starting out from different angles and weighing differently separate features of welfare states. This chapter sheds light on the different existing typologies of welfare states and how they differ in methodology and results. The main finding is that typologies differ only slightly no matter which methodology the researcher used or which features his attention was concentrated upon.

The different typologies presented in this chapter were structured into what has been called clusters of welfare state typologies. Three such clusters can be identified and the author suggests the existence of a fourth one.

The first cluster is made up of those comparative analyses in which only one particular variable was looked at to construct the typology. The typologies established by Mac Farlan and Oxley (1996¹⁰) and Adema (1996¹¹) are presented as two examples of this first cluster.

More attention is given to the second cluster of welfare state typologies. As opposed to the typologies of the first cluster, the second cluster typologies rely not on a sole variable but rather on packages of ideologies and policies. The father of these second cluster typologies is Esping-Andersen with his threefold typology of liberal, conservative-corporatist and social-democratic welfare state regimes (Esping-Andersen, 1990¹²). Esping-Andersen's work has enormously inspired many researchers. They have either focused on the weaknesses of his work, adopting a critical approach but nevertheless learning from his work to build up their own typologies, or they have focused on the strengths of his work and tried to improve it in their own comparative research.

Change: The Contribution of Dynamic Research to the Study of Women's Life Courses. The Policy Press, Bristol (UK), pp. 55-79.

¹⁰ LUMEN, J., LE CACHEUX, Jacques, MEULDERS, D. (2000) *Policy Digest*.

¹¹ ADEMA, Willem; EINERHAND, Marcel; EKLIND, Bengt; LOTZ, Jorgen; PEARSON, Mark. (1996) *Net public social expenditure*. OECD, Paris, Labour market and social policy occasional papers n°39, 1996.

A third cluster contains those typologies that have categorised welfare states on the basis of their outcomes in terms of poverty relief. This cluster is different from the first cluster in that it is not a sole measure but a sole outcome that is examined, namely the efficiency of social protection systems in terms of poverty.

Finally, the author suggests the appearance of a fourth cluster of typologies. In the second cluster, the gender variable has received its first share of attention in typology-building, chiefly by feminists drawing on Esping-Andersen's work. However, Pfau-Effinger (2000¹³) noticed that feminists have often been blind to the cultural context of gender models. Starting out from this observed gap in earlier typologies of gender regimes, Pfau-Effinger (2000) has constructed a typology of gender cultural models accounting for the cultural constructions of inter-generational relationships and of the gender division of labour that are dominant in different societies. It is the opinion of the author that Pfau-Effinger might have set an example and cleared the way for a fourth cluster of comparative welfare state research in which not only gender but also the cultural context receive due attention.

All four clusters were brought together into a summarising table which clearly illustrates how they resemble or differ from one another. Although some countries do not easily fit into one category, it seems true to say that there are no shocking differences between the different typologies.

The last section of this chapter outlines the methodology that is intended to be used for the construction of a new typology of welfare state regimes in the framework of the MOCHO project.

The third chapter closely investigates the inter-relationship between mothers' employment and public policies.

At the Lisbon summit (March 2000), the Council re-emphasised the gender dimension of employment. For the first time, the Council stated that Member States should each set quantitative targets for higher employment rates in line with EU targets. These were set at 70% for all employment and 60% for women, to be reached by the year 2010.

¹² ESPING-ANDERSEN, G. (1990) *The Three Worlds of Welfare Capitalism*. Cambridge, Polity Press, 1990.

¹³ PFAU-EFFINGER, B. (2000) *Changing Welfare States and Labour Markets in the Context of European Gender Arrangements*. Centre for Comparative Welfare State Studies, Aalborg University, Denmark, COST A13 Action "Changing Labour Markets, Welfare Policies and Citizenship", Gender Group Working Paper, 2000. (<http://www.socsci.auc.dk/cost/gender/workingpapers.html>)

In the report given to the Belgian Presidency of the European Union (September 2001), Gosta Esping-Andersen stated that reducing child poverty must be the main objective of the European Social Model. Therefore, it is necessary to favour mothers' employment by way of assuring job security, job flexibility and job quality. Despite some contextual improvements and their strong willingness to work, women still have to face up to the famous challenge of reconciling work and family life.

This chapter looks into the details of female employment and public policies. In the first section, the focus is on the participation of women in Europe's labour market. The main trends in each country are described. Both female employment rates and actual working time are examined in order to draw the complete picture of women's participation in the labour market. Activity rates might well be high, but if women essentially work part-time, their career pattern and investment in the labour force will be different. The authors have also explored the issue of gender discrimination on the labour market, both in terms of wages and career development. Finally, attention is given to a variety of public policies that affect female employment, with special attention to taxation policy.

In the second section, the more specific problem of female employment and family life is analysed. First, the trend for Europe of mothers' employment according to the number of children is presented. Second, the gender divide between paid and unpaid work within the household is illustrated. Finally, a range of European family policies and their effects on mothers' employment were studied and compared across countries.

From their analysis the authors have concluded that female employment is still too low in many European countries. Having children and caring for them remains a major problem for women, far more than for men. Reconciling work and family life has also kept a predominantly female character.

The international perspective has led to a number of findings of policy relevance. The first is that, in countries with relatively well-developed systems of work/family reconciliation policies, women tend to have higher employment rates when in their thirties. Both formal child-care coverage of young children and paid maternity leave policies appear important from this point of view. For all countries, it is an issue of major importance to increase the possibilities for child-care and to improve their quality in order to generate a strong effect on mothers' employment. A lot of European countries still have a long way to go if they want to reach the EU target by 2010. However, even if they succeed, there will still remain a lot to be done. Indeed, the EU target lacks sense in that it is not sufficient to increase female employment rates if women keep having mainly part-time, less paid, or less protected jobs. If

such remains the scenario, then gender equality will not be achieved. A target such as the European one must, therefore, be specified more precisely by integrating a range of “job quality” measures, related to working time, wage, promotion, etc.

Finally, sociological and psychological factors have a great role to play: as long as women are considered the most competent to fulfil domestic tasks, caring for children included, and as long as women consider themselves to be so, it will be difficult for them to conquer a place equal to that of men on the labour market. Nevertheless, public policies can significantly improve their situation and their independence in many ways.

Motherhood and wages, the topic of the fourth chapter, has a long history in human capital studies (Mincer and Polacheck 1974¹⁴, Gustafsson 1981¹⁵, Mincer and Ofek 1982¹⁶). Viewed over the life cycle, mothers risk to build up less stable human capital. This chapter focuses on the earnings gap between childless women and mothers, a topic that has recently gained significant attention from researchers. This is no doubt due to the striking changes that have occurred in many countries with respect to increased educational levels and labour force participation rates of women as well as equal pay legislation that was put into force in the 1970s and 1980s. However, gender wage equalisation has stagnated after a sharp improvement in most countries (Datta Gupta and Smith 2000¹⁷). Therefore, there is an increasing focus on the effects of family responsibilities on women’s wages as one of the explanations of the apparent paradox of this stagnating gender wage equalisation. Most of the studies on the family gap in pay among women have been conducted in Britain and the United States (Waldfogel 1994,1995,1997,1998¹⁸; Joshi, Paci and Waldfogel 1999¹⁹) but also in Scandinavian countries (e.g. Datta Gupta and Smith 2000).

¹⁴ Mincer Jacob and Salomon Polacheck 1974. Family Investments in Human Capital: Earnings of Women, *Journal of Political Economy*, 82 (2): 76-108.

¹⁵ Gustafsson S.S. 1981 Male-female lifetime earnings differentials in: studies in Labour Market behavior: Sweden and the United States, ed Gunnar Eliasson, Bertil Holmlund and Frank Stafford, 235-68. Stockholm. Industrial Institute for Social and economic research.

¹⁶ Mincer Jacob and Haim Ofek 1982, Interrupted Work Careers, *Journal of Human Resources* 17:3-24.

¹⁷ Datta Gupta Nabanita and Nina Smith 2000 Children and Career interruptions: The Family Gap in Denmark, CLS working paper 2000:18, University of Aarhus and Aarhus School of Business.

¹⁸ Waldfogel Jane 1994a, Women working for less: family status and women’s pay in a young British cohort, Oxford Economic papers; Waldfogel Jane 1994b, Family Status and women’s pay in the United States and UK, doctoral dissertation, Harvard University; Waldfogel Jane 1995, The price of motherhood: family status and women’s pay in a young British cohort, Oxford Economic Papers 47, 584-640; Waldfogel Jane 1997, Effects of children on women’s wages, American Sociological Review vol. 62. 209-17; Waldfogel Jane 1998, The family gap for young women in the United States and Britain: Can maternity leave make a difference? Journal of Labor Economics, vol. 16, no 3, p 505-545; Waldfogel Jane 1998b, Understanding the family gap in pay for women with children, Journal of Economic Perspectives, 12, no 1, 137-56.

¹⁹ Joshi Heather, Pierella. Paci and Jane Waldfogel 1999, The wages of motherhood: better or worse? Cambridge Journal of Economics, 23, 543-564.

Four major groups of explanatory variables for the child penalty are presented. The first group relates to child-related career breaks with or without continuous employment relation, thus referring to human capital accumulation. The second group relates to labour market selection, which may change once women have given birth (a preference for part-time jobs, for example). The third group relates to energy to work, assuming that the increased household work because of children reduces the energy to work for pay. The fourth group relates to attitudes, assuming that women with children have different attitudes and therefore a different behaviour compared to childless women. Yet, the causal relationship is complex because these attitudes may also influence women's decisions with regard to family formation. In economic research, the first and the second group have received far more attention than the latter two groups.

The chapter reviews a number of international publications on women's wage structure. In line with most of the research on human capital, the scientific contribution of most articles lies in the empirical findings presented (Oosterbeek 1992:12²⁰). The empirical models on women's wages differ in focus because the countries analysed, mostly the United States, the United Kingdom, the Scandinavian countries and a few other industrialised countries, differ in policies on women's employment during the life cycle, mostly related to combining work and family, and therefore they differ in policies to accumulate human capital and women's labour market productivity.

Her review of existing studies has led the author to conclude that the studies of women's wages in the Scandinavian countries are likely to focus on the effects of leaves, both parental and other leave arrangements. The research analysing data on the United Kingdom and the United States includes also the effect of women being concentrated in part time jobs which appear to be paid less in the United Kingdom and the United States. Sweden and Denmark have not included part time work as an explanation for differences in pay between mothers and childless women. The empirical results, mostly on the United Kingdom and the United States, found a wage penalty associated with working part time.

The studies reviewed are unclear about what part of the child penalty is explained by accumulated years of employment experience, because some authors report only penalties with or without controls for experience. The studies on the United Kingdom and the United States did find an exogenous effect of children in women's wages after controlling for actual human capital. However, a most recent study does not observe this child gap for the younger

²⁰ Oosterbeek Hessel (1992) Essays on human capital theory, Thela Thesis Amsterdam, doctoral dissertation.

generation in the United States (Avellar 2002²¹). In the Nordic studies no additional effect of children was found after controlling for actual human capital.

Fertility and women's work status is the central topic of the fifth chapter. During the last two decades, fertility rates have sharply decreased in most developed countries, childbearing has been delayed and the correlation between fertility and participation rates across the European countries has become positive. The flexibility of the market to accommodate women's exit and entry decisions and the reduction of the penalty induced by career breaks, like foregone experience, delayed wage growth and increased risk of unemployment, are aspects that can explain those trends. Both changes in fertility and changes in employment are related to an increased emphasis on individual independence and to the desire of women to be attached in a more permanent way to the labour market (Lesthaeghe, and Willems 1999²²).

The authors have first presented the analytical framework which has been used to study labour supply and fertility. Consequently, they have discussed some important facts that are likely to have affected the recent trends. Finally, some empirical results of a range of studies are explained and the relationship between women's work status and fertility in various countries as well as the cross-country differences have been interpreted in several possible ways. The authors distinguished different equilibriums across EU countries. In Northern Europe, both large public sectors with a large share of female workers and generous maternity benefits guarantee a high level of female participation and a high fertility rate (still barely below replacement rate). In Southern Europe, in which female participation is relatively low, part time is uncommon and the stickiness of unemployment has brought about a dual market with unstable labour contracts for young workers. Fertility is relatively low.

Other factors were also analysed such as education, child care, part time, and coresidence with adult children. Child care subsidies seem to be a significant factor in determining women's participation in areas where availability of services is adequate. Education raises the job attachment of women and induces fertility postponement. Comparative studies have found a high correlation between the proportion of part time jobs and the participation rates of women, in particular married women with children, but in the Southern Europe countries, the rigidity of the labour market is higher than in Northern Europe countries and part time jobs as

²¹ Avellar S. 2002, *The Family Wage? A Cross-Cohort Comparison of the Motherhood Wage Penalty*, Paper, Population Studies Center, University of Michigan.

²² Lesthaeghe, R., and Willems, P., (1999), "Is Low fertility a Temporary Phenomenon in the European Union?", *Population and Development Review*, Vol. 25, n. 2, pp. 211-228.

well as flexible hours or teleworking are scarce. The negative correlation between coresidence and fertility suggests that the stronger the traditional family ties, the lower the fertility rate.

The sixth and last chapter of our State of the Art provides some insight into the question of how motherhood influences time allocation. According to the theory of time allocation, time has a cost, and this cost is examined in the same way as the cost of market goods. Households are considered as “producers” as well as “consumers”. They produce income by working or in other ways and this income is available for consumption. In order to have a balance between production and consumption of earnings and other income a specific allocation of time is needed (Becker, 1976²³). The more time (working time) is dedicated to increase earnings, the less time is spent on “quality commodities” including “leisure”. Household commitments are part of the “consumption time” of individuals. These commitments include childcare, studying or taking to a walk as well as domestic chores such as cleaning, washing etc.

It is obvious that considerable socio-economic changes have occurred since Becker introduced his theory on time allocation. Nowadays, in order to understand differences among peoples’ allocation of time in different countries it is necessary to take into consideration many variables such as men’s and women’s access to paid work and their economic independence, or the complex relationship between work, household duties and welfare provision. All these variables seem to play an important role in the configuration of the allocation of time.

Since female labour force participation rates begun to rise in recent decades, the interaction between work and family has attracted considerable attention, particularly on the individual level. The way in which labour affects the availability of time is differently perceived in the various European countries, possibly due to the existence of different productive and managerial structures. Therefore, it is necessary to specify individuals’ commitments on labour and especially to locate their time use on paid and unpaid work. Moreover differences exist on the basis of the cultural differences of societies, which can also affect the division of paid and unpaid work. The development of work in the labour market is not homogenous in all European countries, nor is the development of unpaid work in households. Consequently it is important to figure out how the time is budgeted for these activities in different countries.

It seems quite difficult to detect the influence of policy measures on the actual behaviour of men and women, especially with regard to work, childcare and housekeeping. The more

²³ Becker G.S. (1976). *The Economic Approach to Human Behaviour*. University of Chicago Press: Chicago and London.

women have to give up earnings in order to reconcile family and working life (or, the more domestic work is time-consuming), the more they are inclined to leave their labour market position and give up their independent income. Quite often, taking care of children or elderly family members determines the position of women in the labour market and their family size. Current legislation on equality between men and women is quite progressive in European countries, and the question of equality has been widely debated in the last decades. Nevertheless, the prevailing norms and values are not in line with the relevant legislation. The discrepancies observed among men's positive attitudes towards the division of household chores and child care and the practices of non-division is a quite representative example of the present situation.

One good example of policies to be adopted is to encourage fathers to take parental leave. This leave should be at least partly paid and should correspond to an individual and non-transferable right. Moreover, it is important to find appropriate forms of intervention for supporting the family, which should combine financial support for beneficiaries and carers with services in kind, without undermining the structure of family life. Measures such as 'home help' and 'care at home' are a good move in this direction if implemented at a large scale. Organised voluntarism could also play an important role, while the informal networks, which have traditionally sustained the family, should be reinforced. Exploration of new forms of interaction between the 'public' and the 'private' is needed.

Finally, the appendix to this State of the Art situates MOCHO among related EC projects. Since the European Community keeps calling for more and more research on the interaction between the decrease in fertility, female employment and public policy, a lot of different projects are in progress. Since the research field is very large, a multidisciplinary approach is necessary. As a result, many projects were commissioned to address the topic from either an economic, a sociological or a demographic angle. Nevertheless, it is always useful to integrate each particular project within the set of similar ones in order to obtain a comprehensive view of the results.

A few European projects in progress were identified as close to our present work: NIEPS, DynSoc, FENICs, and Working and Mothering. All these European programs together draw up an overall picture of Family, Work and Fertility, each bringing a different answer to the problems involved. A glance at these four related projects makes it possible to put forward the originality and interest of MOCHO.

(Danièle Meulders and Síle O'Dorchaí)

CHAPTER 1: European Fertility Developments

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1.1. Around 1900-1930 the demographic transition was completed in Europe

All human populations have gone through or are in the process of going from a situation with high death rates and high birth rates to a situation with both low death rates and low birth rates. This phenomenon is called the Demographic Transition. During this transition death rates usually start falling before birth rates with a period of rapid population growth between. The Demographic Transition is illustrated in Appendix graph 1.1. How do we know when the Demographic Transition has started? One such definition is presented in Table 1.1 (adapted from Yaukey 1985). According to Table 1.1 the Demographic Transition started when marital fertility rates decreased by at least 10 per cent. By this definition France went through the demographic transition almost one century before other European countries. No convincing explanation has so far been developed to explain why France was so early. In some parts of the world e.g. Sub-Saharan Africa the Demographic Transition is projected to take place only in the 21st century. By the year 2100 the Demographic Transition is predicted to have been completed in the whole world, with world population stabilizing at about 10.000 million people (Bongaarts and Bulatao, 1999). This is an increase from 6 000 million in the year 2000.

Table 1.1 Starting Dates of Beginning of Neo-Mathusian Transitions, Selected European Countries

Country	Date of Decline in Marital Fertility by 10%	Country	Date of Decline in Marital Fertility by 10%
France	1800 ^a	Netherlands	1897
Belgium	1882	Denmark	1900
Switzerland	1885	Norway	1904
Germany	1890	Austria	1908
Hungary	1890 ^a	Finland	1910
England and Wales	1892	Italy	1911
Sweden	1892	Bulgaria	1912
Scotland	1894	Spain	1918
		Ireland	1929

^aApproximate figure.

Source: Yaukey, David, 1985, *The Study of Human Population*, Srt Martin's Press, New York. Primary source Van de Walle and Knodel (1980).

1.2. Fertility is below replacement in Europe

If each generation of women give birth to on average of 2.1 children per woman each younger generation will exactly replace the previous generation and the population will be stable. In the 1930s fertility rates decreased rapidly in European countries. In Sweden it was as low as 1.77 in 1930 (see Box 1.1).

The 1930s was a period with worries about population decrease in most European countries. Conservative male politicians introduced repressive measures to counteract population decrease. Selling contraceptives and give information about contraceptive methods was forbidden; in Sweden for example from 1910 to 1938. Abortion was forbidden, married women were forbidden to have jobs and young couples could receive a marriage loan and access to an apartment of their own only if they were legally married, considered as suitable parents or in some cases already had a child within marriage. The Nazist regime of Germany denied marriage loans for example to couples who were not of German ethnicity. Forced sterilization of people, who were considered imbecile or had a criminal record was carried out also under the Swedish Social Democratic Government, because the general thinking was, that such behavior was genetically determined rather than caused by social circumstances. The discussion on the relative weights of genetically hereditary factors as compared to social factors in shaping a persons character continues, but more weight is now placed on social explanations than was the case in the 1930s. Population policies in the 1930s also aimed at improving the quality of the population. By all these population policies of the 1930s the mere expression 'population policies' came to be considered as identical with extreme right

repressive policies. However most European countries today have fertility rates well below those of the 1930s.

BOX 1.1 CRISIS IN THE POPULATION QUESTION BY ALVA MYRDAL AND GUNNAR MYRDAL 1934

Age specific fertility statistics have been collected in Sweden since 1751. The five-year averages of the total fertility rate for the first 150 years, 1751-1900, showed more than 4 children per woman. There were some fluctuations for the five-year averages before 1900, but the TFR's never reached 5 children per woman and they never decreased below 4 children per woman.

At the time when Alva and Gunnar Myrdal wrote 'Crisis in the Population Question' (1934), the total fertility rate showed a rapidly decreasing negative trend for the first time in history and by 1931-1935 it had decreased to only 1.77 children per woman. This was around 30 per cent fewer births than the fertility rate required for the Swedish population to replace itself according to the computations of Myrdal & Myrdal, (1935 4th ed. p. 102). It is no wonder that people were worried about the rapid fertility decrease. Would the negative trend come to a stop? The Myrdals projected that it would not (1935 p. 122) unless by public policies the underlying reasons for people to refrain from becoming parents were changed. The Myrdals argued that a couple decides on becoming parents on rational grounds. For example the widespread beliefs in the 1930s, that married women should be forbidden to have a job, was a very bad idea if one wanted to increase fertility, because if a couple could barely make it on two incomes, how could they then decide on increasing their costs by having a child, while simultaneously reducing family income? The recipe of the Myrdals was social benefits for families with children. Among their suggestions were: housing subsidies for large families; general and free health care for all children; free school lunch for all children; price discounts for some food for all children; all costs for schooling removed: free books, free materials, free school busses, free day-care for preschoolers and free education stipends for talented youth. The suggestions of the Myrdals gradually became public policies in Sweden, because the Myrdals not only suggested these policies, but also participated in the social democrat government committees to make concrete policy suggestions. (See Hatje 1974, Gustafsson 2002.)

Today all European countries have fertility below replacement (see Table 1.2), although Iceland with 2.05 comes rather close. In 1980 a number of European countries had fertility rates above replacement including Iceland, Ireland, Portugal, Spain and the Czech Republic. In those countries the decrease in the fertility rate has been particularly rapid. The decrease in fertility rates has been particularly rapid in Spain and Italy because these countries only two decades ago had among the highest fertility rates in Europe. Both Italy and Spain have fertility rates around 1.1 child per woman in the year 2000. If a fertility rate of one child per woman would persist, the population size would be halved in one generation. However, part of the explanation for the low fertility rates is that women are getting older when they become mothers.

Table 1.2. Total Fertility Rates, Selected Countries, 1960 - 1998

	1960	1965	1970	1975	1980	1985	1990	1995	1998
Belgium	2.56	2.61	2.25	1.73	1.68	1.50	1.62	1.55	1.53
France	2.73	2.84	2.47	1.93	1.95	1.82	1.78	1.71	1.75
the Netherlands	3.12	3.04	2.57	1.66	1.60	1.50	1.62	1.54	1.62
Germany W.	2.37	2.51	2.03	1.45	1.56	1.27	1.45	1.25	1.34
Germany E.	2.33	2.48	2.19	1.54	1.94	1.74	1.40	-	-
Norway	2.91	2.93	2.50	1.99	1.72	1.68	1.93	1.87	1.81
Sweden	2.20	2.42	1.92	1.77	1.68	1.73	2.13	1.73	1.51
United Kingdom	2.72	2.85	2.43	1.79	1.91	1.78	1.83	1.70	1.72
Denmark	2.54	2.61	1.95	1.55	1.55	1.45	1.67	1.80	1.72
Finland	2.72	2.47	1.83	1.69	1.63	1.65	1.78	1.81	1.70
Iceland	4.17	-	2.81	-	2.48	-	2.30	2.08	2.05
Ireland	3.76	4.05	3.93	3.44	3.25	2.49	2.11	1.83	1.93
Italy	2.41	2.55	2.42	2.19	1.64	1.42	1.33	1.18	1.19
Portugal	3.10	3.07	2.83	2.59	2.18	1.70	1.57	1.40	1.46
Spain	2.86	2.97	2.90	2.81	2.20	1.61	1.36	1.18	1.15
Hungary	2.02	1.82	1.97	2.35	1.92	1.83	1.84	1.57	1.33
Czech Republic	2.11	-	1.91	-	2.10	-	1.89	1.28	1.16

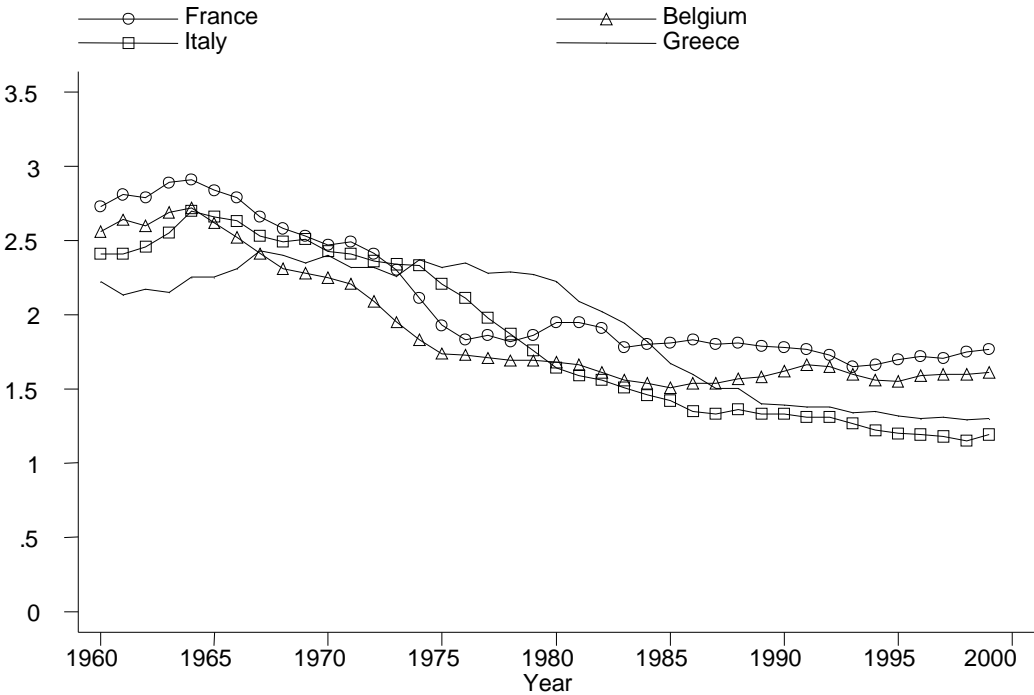
Source: Gustafsson, Kenjoh and Wetzels 2002, primary source OECD Health data 2000

1.3. Period fertility rates vary much more than cohort fertility rates

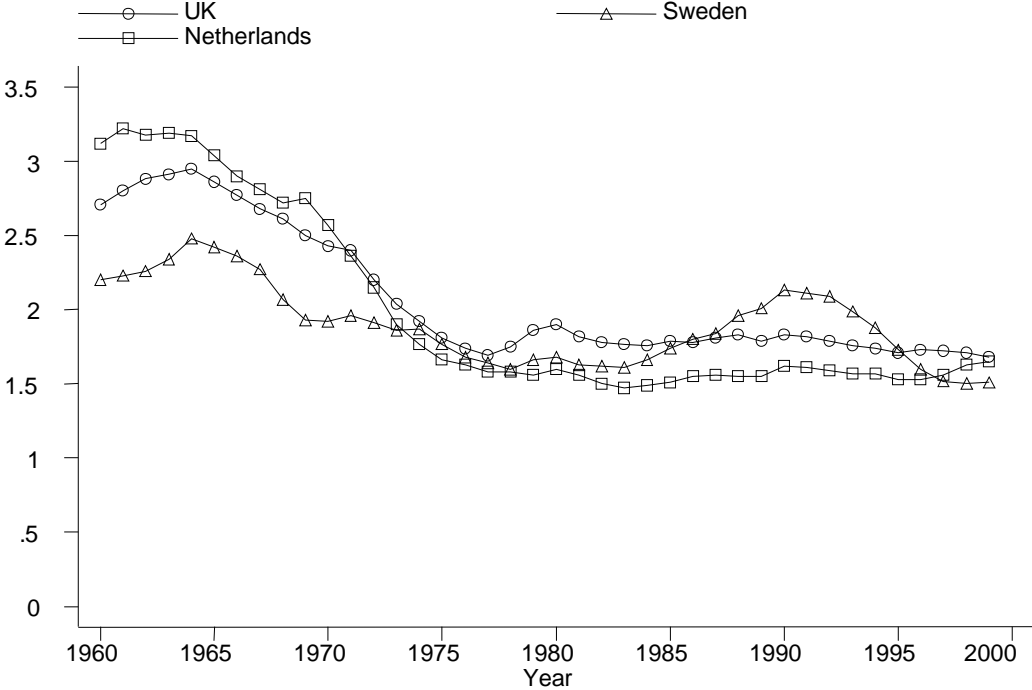
The most common and widely available statistic of fertility is the period total fertility rate, TFR which is usually computed for each year for each country in the world. This measure

captures the average number of children per woman in childbearing age. It is computed by adding number of births by age of mothers that occurred during the year. In this way a synthetic life-cycle fertility for the average woman is constructed. The TFR of one year 2002 for example is the completed family size that would materialize, if age specific fertility rates remained the same in the years to come, so that women who are now aged 20 would experience the same fertility rates in 10 years as those, that 30 year old women experience now. To construct the TFR, one only needs information for one particular year for the number of births by age of the mother. Changes in the TFR receive much attention.

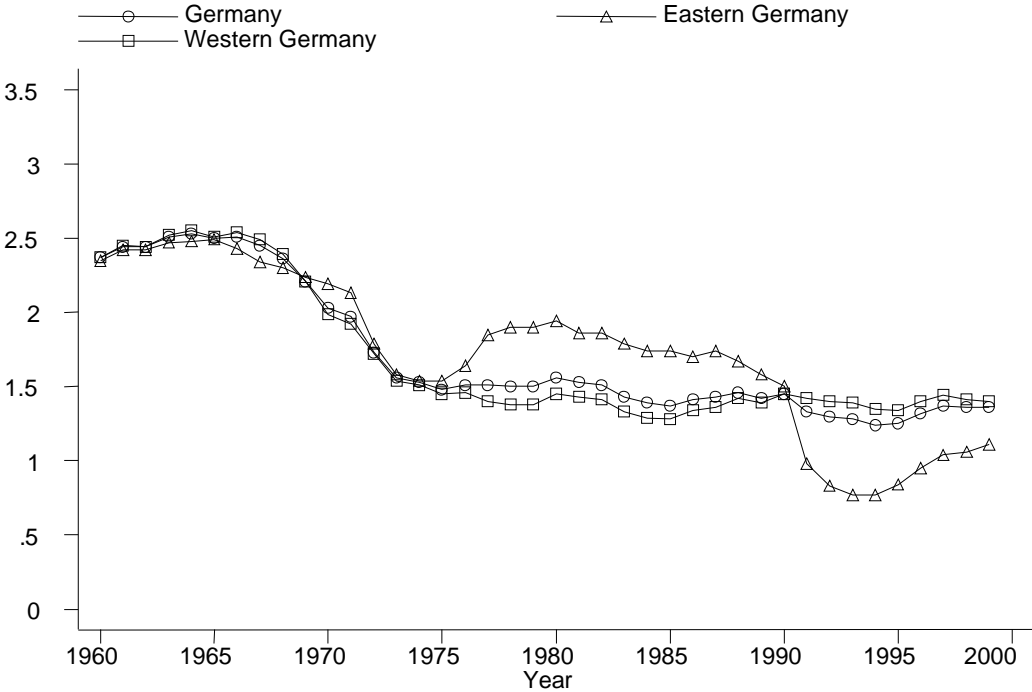
There has been much variation in the TFR:s in each of the European countries during the 20th century. Graph 1.1a-1.1c shows the developments of TFR from 1960-2000 for France, Belgium, Italy, Greece, the Netherlands, Germany, Sweden and the UK.



Graph 1.1a Total Fertility Rate



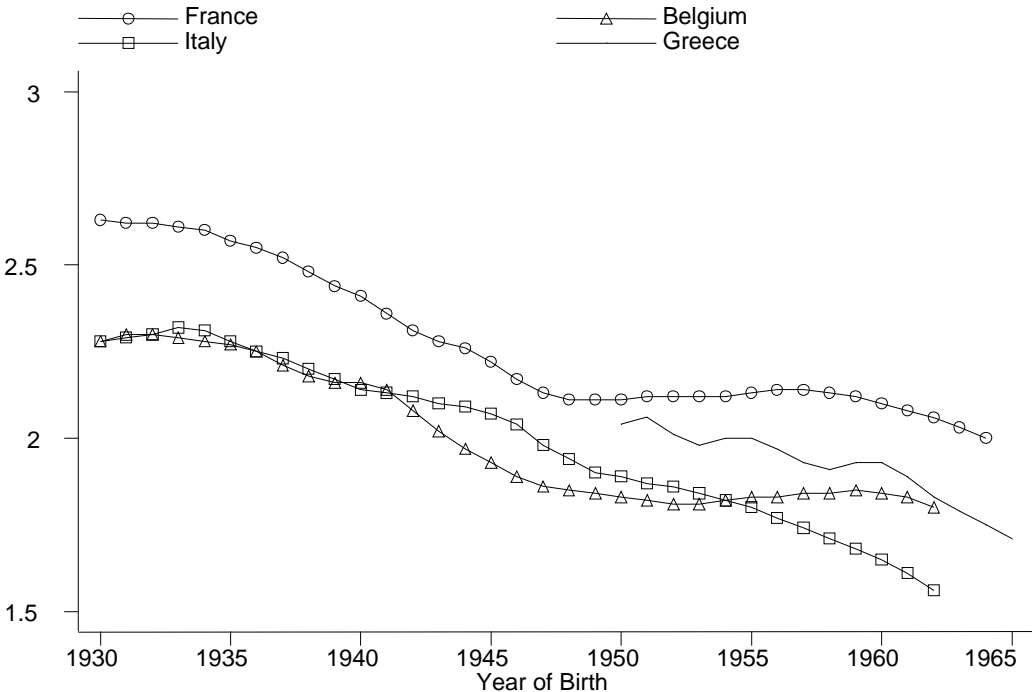
Graph 1.1b Total Fertility Rate



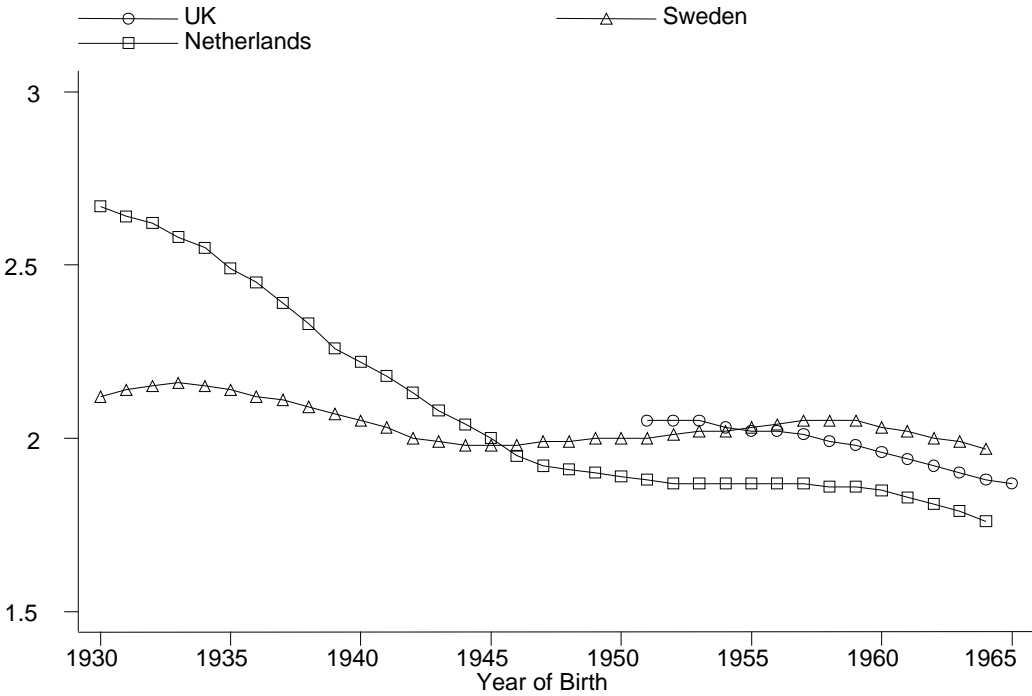
Graph 1.1c Total Fertility Rate

A different way of studying fertility, is to look at life cycle fertility of a particular woman to see how many children she has had, when she reaches the end of her childbearing age. The disadvantage of this measure is, that one has to wait until the woman reaches the end of her fecund age say age 45 before one can measure it. In spite of this, this measure computed for the group of women, who were born in the same year is often computed, and it is called the cohort fertility rate or CFR. One CFR is computed for women born in 1930, who reached age 45 in 1975, another one for the cohort of 1965 who will reach age 45 in 2010.

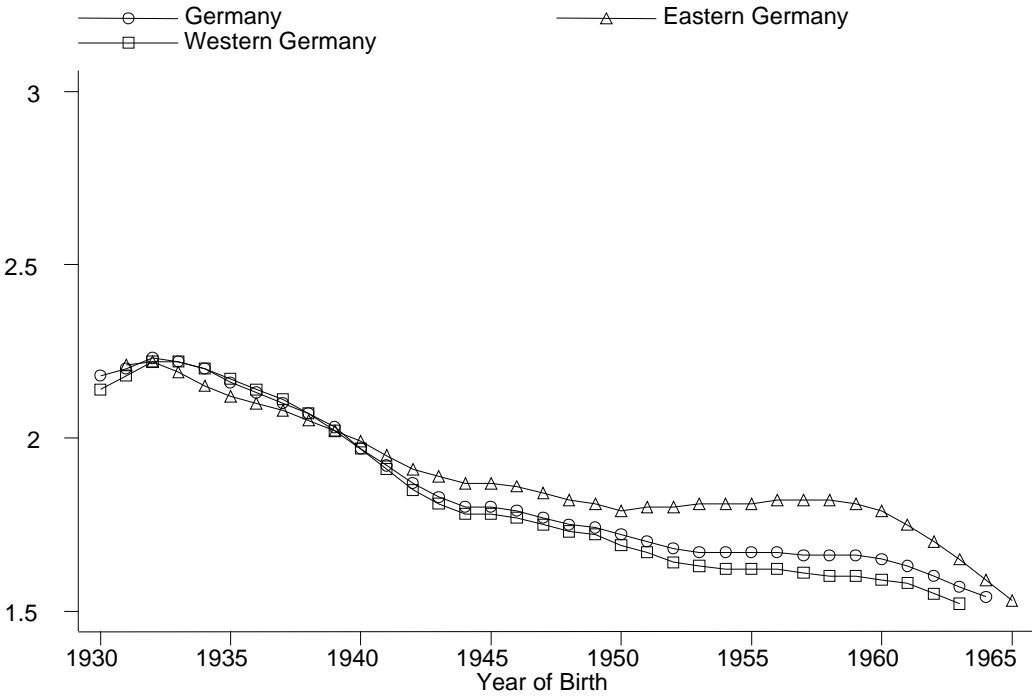
The cohort fertility rate, CFR, varies much less than the period fertility rate, TFR. Graphs 1.2a-1.2c show CFR:s or completed family size for cohorts of women born between 1930 and 1965. However demographers make forecasts. The fewer the number of years that remain, until the cohort of women reaches age 45, the closer the estimated CFR rate is going to be to the actual CFR. The CFR:s show more of a continuous downward trend, than the wide variation which is observed in the TFR:s of Graph 1.1 and Table 1.1. The reason is, that there is a period effect on fertility, so that a couple who aspires to a completed family size of 2 children may decide to postpone having a child if they perceive times as being bad. There were for example not many children born in the Netherlands during World War II, but instead there was a jump in 1946 when many couples realized their postponed child wishes.



Graph 1.2a Completed Fertility of Female Birth Cohorts



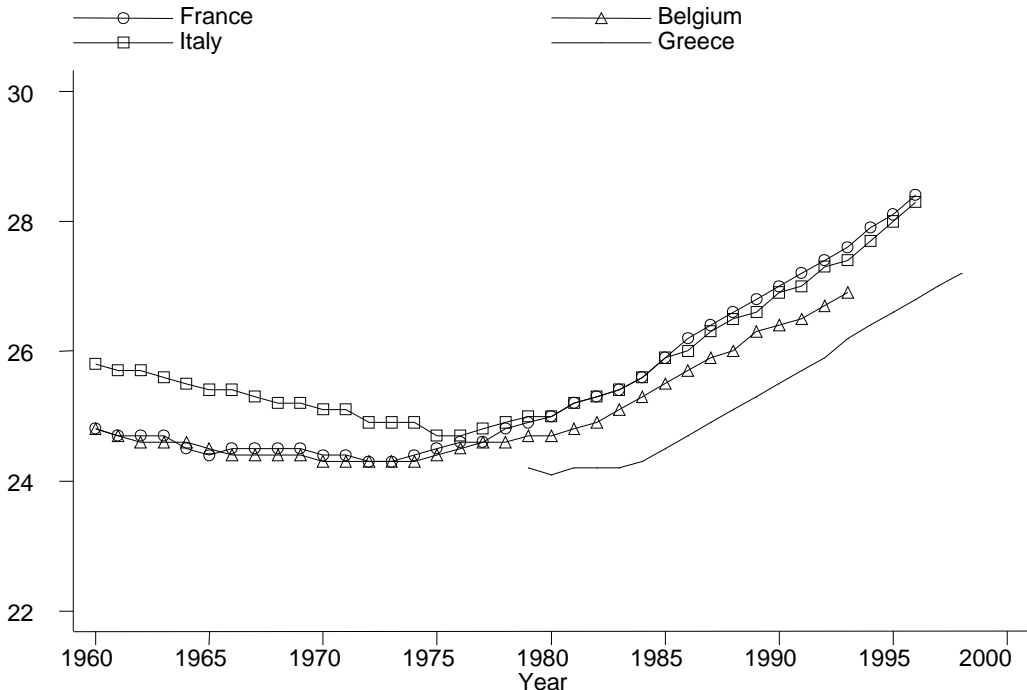
Graph 1.2b Completed Fertility of Female Birth Cohorts



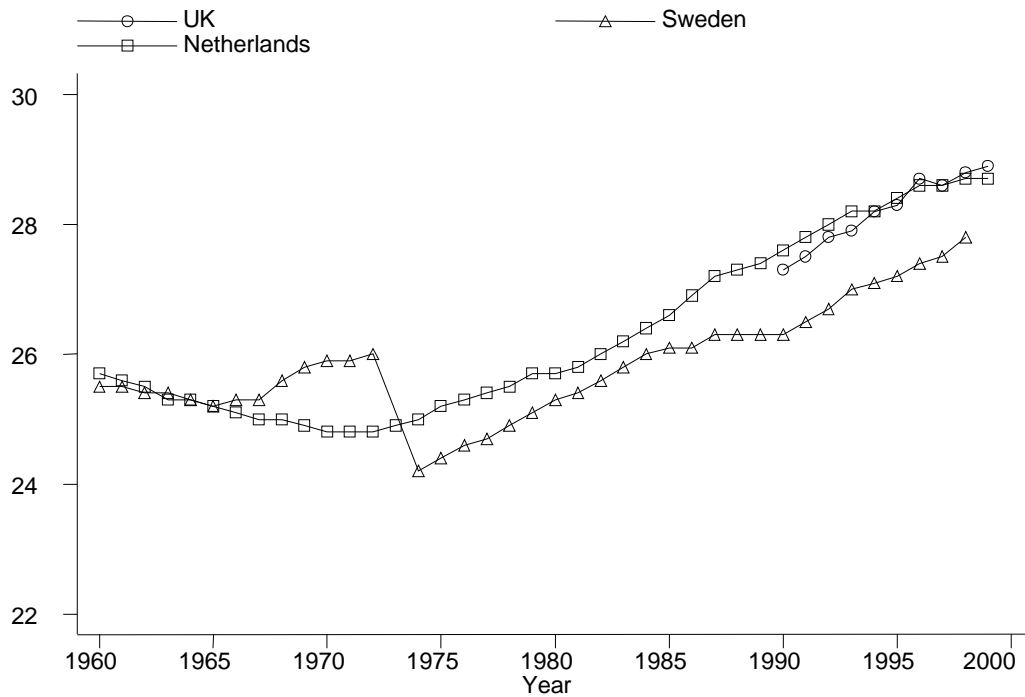
Graph 1.2c Completed Fertility of Female Birth Cohorts

1.4. New mothers in Europe have never been so old before

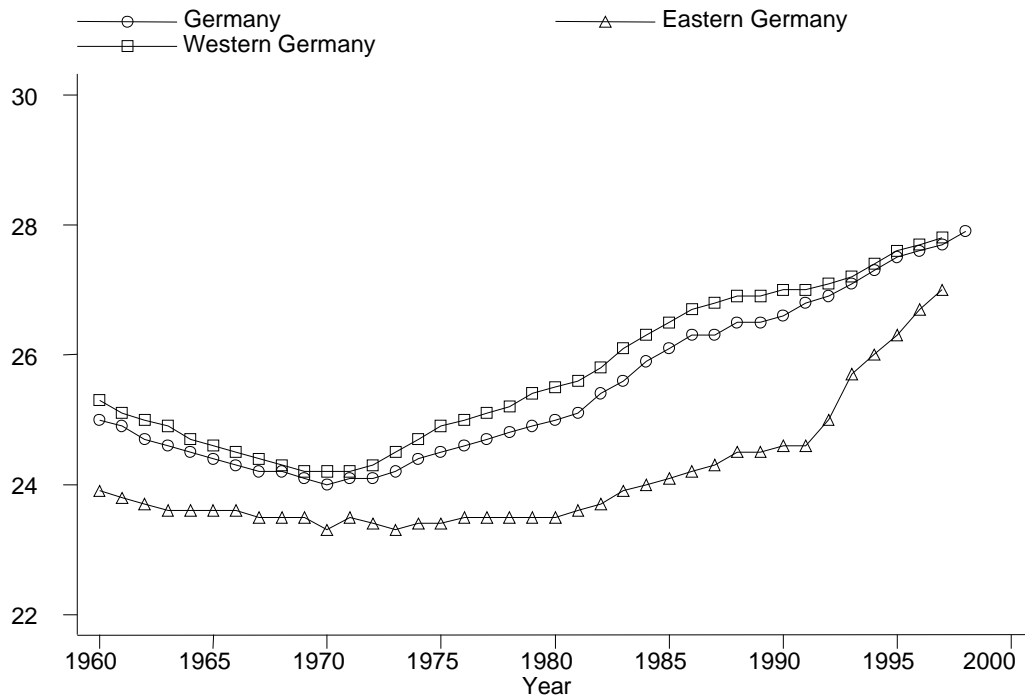
New mothers in 1960 were older than new mothers in 1970 and again older in 1980 than in 1970 for most European countries (see Graph 1.3a to 1.3c and appendix graphs and Table 1.3). The woman’s age when she has her first child shows a U-shaped pattern in West European countries. This is the case for the countries of Northern Europe as well as for the countries of Southern Europe. The countries of central Europe have experienced an increase in mean age of the mother at first birth only since 1990 after the fall of the Soviet Union. In 1998 the figures for mean age of the mother at first birth were for Bulgaria 22.9, Czech Republic 24.3, Hungary 24.5, Poland 23.3 and Russia 22.8 (see Table 1.3). Although since 1993 all these central and east European countries showed increases in mean age of the mother they are still lower than the corresponding figures for West, South and North of Europe (Philipov and Kohler 2001). In table 1.3 including 1997 and shows that including those later years makes the pattern of mothers age at having her first child look more J-shaped than U-shaped. Women have never been so old when they have their first child before as they are in more recent years.



Graph 1.3a Mean Age of Women at Birth of First Child



Graph 1.3b Mean Age of Women at Birth of First Child



Graph 1.3c Mean Age of Women at Birth of First Child

Mean Age of Women at Birth of First Birth
 Order within current marriage for Belgium, France, Germany, and UK.
 Biological birth-order for Greece, Italy, Netherlands, and Sweden.

Source: Council of Europe (2000), *Recent Demographic Developments in Europe 2000*.

Table 1.3. Mean Age of the Mother at First Birth, Selected Countries, 1950-1997

	1950	1955	1960	1965	1970	1975	1980	1985	1990	1991	1997
Belgium		25.2	24.9	24.6	24.4	24.4	24.8	25.6			27.0 ^a
France	24.7	24.3	24.4	24.1	24.0	24.1	24.6	25.5			28.1 ^b
Netherlands											
	26.5	26.1	25.7	25.1	24.7	25.2	25.7	26.6	27.6	27.7	29.0
West Germany*			24.9	24.2	23.8	24.4	25.0	25.9	26.3	25.9	28.4 ^c
Norway						24.3	24.9	25.6	25.8	27.0	
Sweden					24.4	25.3	26.1	26.3	26.5	27.3 ^b	
England-Wales											
	24.6	24.3	24.0	23.6	23.2	23.6	24.2	24.6	25.0	25.1	26.7 ^c
Denmark					23.8	23.9	24.6	25.7	26.4	26.8	27.7 ^c
Finland							25.4	26.5	26.6	27.7	
Iceland					21.8	21.7	22.8	23.9	24.3	25.0	
Ireland					25.0	25.0	25.6	26.2	26.3	27.0	
Italy		25.3	25.3	24.9	24.6	24.2	24.6	25.4	26.4		27.5 ^a
Portugal	25.6	25.6	25.5	25.3	25.0	24.4	24.0	24.2	24.9	25.1	25.8 ^c
Spain					25.1	25.0	25.8	26.8	27.1	27.7 ^b	
Hungary		23.4	22.9	22.9	22.8	22.5	22.5	22.9			23.4
Czech Republic*		23.2	22.8	22.7	22.5	22.6	22.5	22.5			24.1
East Germany*		23.6	23.0	22.7	22.5	22.5	22.3	22.3			27.3 ^c

*Former (countries with border changes around 1990).

Source: Willy Bosveld kindly supplied the figures until 1992, which are the sources for her dissertation, Bosveld (1996). Figures for 1997 or latest year available the source is Council of Europe (1998). The following are for a different year than 1997, a=1993, b=1995 and c=1996.

Is there any reason to worry about the fact that new mothers are older than they have ever been before? Take the case of the Netherlands. In 1970 according to Table 1.3 the average age of the first time mother was 24.7. In 1997 new Dutch mothers were on average 29 years old. This is an increase by 4.3 years in a time period of 27 years. One reason to worry is, that the later in life a woman with her husband decides to become a mother, the more likely she will be running against the biological clock. The numbers shown in Graph 1.3 and Table 1.3 are averages. There is also a distribution around the averages so that many women decide to have a child when they are 35-40 years old. In this age range many women run against the end of their fecund period and will be unable to fulfill their child wish. In Appendix Graph A1.2 adapted from Beets (1997) the age range at which different cohorts of women in a country have had their first child is depicted. The length of the horizontal line in Graph A1.2 extends from the age at which 25 per cent of women of a cohort have given birth to their oldest child until the age at which 75 per cent have had a first child. At some point on such a horizontal line for a cohort within a country there is a discontinuity. This unfilled space is the median, the age at which 50 per cent of women of a birth cohort have given birth to their first child. For example, for the birth cohort of women born in 1955 in West Germany the first quartile is at age 21.5 years which one gets by drawing a vertical line from the point where the line 1955

starts to the age axis below. The median is at 25.5 and the third quartile is at age 34. It means that in West Germany among those women born in 1955, who are 34 years old in 1989 as many as 25 per cent are childless. Some of these women will have a child after age 34, but most of them will end up childless, as we will see later in this chapter.

Another way of showing the postponement of maternity is to compute what demographers call parity progression rates, namely the proportion of women of a given parity who progress to a higher parity. Women who have no children are of parity 0, women who have one child are of parity 1 and women with two children are of parity 2 etc. Appendix Graph A1.3a – 1.3d show such progression rates from parity 0 to parity 1 i.e. the proportion of women born in a given year, who have their first child. The birth cohort of the women are denoted on the horizontal axis in Graphs A1.3a - A1.3d. The parity progression rates have been computed for women of a given age over time so that one can follow how the progression to parity one has developed for 26-year-old women of different cohorts. The age-specific parity progression rates show that 26-year-old women in all the four countries: Belgium, France, the Netherlands and West Germany used to have the highest progression rates into parity 1. This means, that women who had their first child, more often were 26 years than they were of any other age, but for more recent 26 years old women the parity progression rate into parity one has decreased. Particularly interesting is the case of the Netherlands. The age specific parity progression of age 28, 30 and 32 are now higher than for 26-year-old women. The most frequent age to have the first child is at age 30 in the Netherlands. Also in Sweden and Portugal the parity progression rates into parity one is higher for women aged 28, 30 and 32 than for women aged 26 as shown in Graph 1.6b. The data used by Bosveld (1996) for computing the age-specific parity progression rates extend to around 1991 or 1993. Therefore the most recent development is not included. After the fall of the Soviet Union and the Communist regimes, there have been dramatic decreases in fertility behavior in central and East European countries. If more recent years had been included, we could probably have seen parity progression lines of women aged 28, 30 and 32 cross those of age 26 also for Hungary and the Czech Republic.

The increase in demand for medical help to enable a couple to have a child shows that, the biological clock ticks for an increasing number of prospective mothers. The medical technical help can be in the form of taking sperm from the husband, fertilize an egg taken from the wife in the laboratory and then enter the fertilized egg into the uterine of the woman. This procedure is called 'in vitro fertilization'. If the husband's sperm is the problem, sometimes a couple chooses for an anonymous sperma donor. There are ethical problems associated with

such a procedure. Many people feel, that a child has the right to know the identity of his or her biological parents. Some countries have legislated that sperm donors may not be anonymous. In many cases all these problems could have been avoided, had the couple been able to decide for a child at a younger biologically more suitable age. However, a biologically more suitable age may be in conflict with a socially suitable age to become a parent as we shall see in later chapters of this book.

BOX 1.2 AT WHAT AGE DOES A WOMAN'S FECUND PERIOD END ?

If a woman knew at what age range she can conceive and give birth to a healthy child a couple could take account of this fact in their family planning. However in reality there is a wide variation between different women. Medical research believes that the fecund period may be genetically determined, so that if a mother had her menopause early in life this might be an indication that her daughter also has a relatively short fecund age range. Many demographic studies have been performed on the Hutterites, who were a group of people living in California (in the 19th century) They did not practice any contraception. The average marriage age per woman among the Hutterites was 20 and they averaged 11 children per married woman (Becker 1981 p. 99 references Eaton and Meyer 1953 p. 233). The Hutterites has served as an approximation for a natural population. On the basis of fertility patterns among Hutterite women and more recent research and te Velde (1997) present the graph A1.4. It shows that already by age 31 half of women are beginning to experience a decrease in fecundity, by age 41 half of women have reached the end of the fecund period and by age 51 half of the women have experienced their menopause. Recent medical research also indicates, that although some men become fathers at very high ages men's fecundity in general also decreases with age but at a later age than that of women.

1.5. Postponement of maternity decreases the total fertility rate

When the age of first time mothers increases we observe declining total fertility rates. Some of the recent decrease in TFR, as observed in Table 1.2, is caused by the increase of the age at maternity as demonstrated in Table 1.3 and Graph 1.3. Suppose in year 1, that all women are 24 years old when they become mothers. If their one year younger sisters decide they will wait until they are 25 years, the births, that would have occurred in year $t+1$, if the younger women also had become mothers at age 24, will not occur in year $t+1$ but instead in year $t+2$.

We distinguish between the quantum effect, the number of women who have a child and the tempo effect at what age of the mother the child arrives.²⁴ Graph A1.5 shows a simple example. Suppose there are six women, who are born in the same year evenly spread over the year, so that the oldest one is born in February and the youngest one in December. If they all become mothers exactly on their 24th birthday all the six births will happen in the same year t . However, their one year younger sisters decide to delay until they are 24 years and 45 days the youngest woman will have her child in year t but in year $t+1$. This means that the fertility rate in year $t+1$ will decrease although all 6 women of each cohort had one child each.

It has been shown, that with a uniform distribution of births during the year a fraction c per cent increase in the mean age results in an equal fraction c per cent decrease of the TFR of a particular year. This can be written as the ‘Ryder basic translation equation’ relating the CFR to the TFR namely

$$\mathbf{TFR = CFR (1-c)} \qquad \mathbf{1.1}$$

Where TFR is the period total fertility rate; CFR is the cohort fertility rate or completed fertility rate and c is the percent change in average age at maternity. However both TFR’s and CFR’s are of course determined not only by first births but also by second, third and higher order births. Graph A1.6 shows mean ages of new mothers by birth order for the United States for the period 1950-1990. All the lines in this graph have to be included in the computation of to what extent the period total fertility rate is influenced by postponement of maternity. If we isolate postponement of maternity as a reason for decreasing fertility rates i.e. for a given cohort fertility rate we need to compute the basic translation equation for each birth order:

$$\mathbf{(adj)TFR_i = TFR_i / (1 - c_i)} \qquad \mathbf{1.2}$$

Where $(adj)TFR_i$ is the adjusted total fertility rate for a given birth order, i . We need information on number of births for each birth order and age of the mother i.e. age and birth order specific birth rates to compute this adjusted birth order specific total fertility rate. The adjusted total fertility rate taking all birth orders into account is then the sum of the birth order specific adjusted total fertility rates.

$$\mathbf{(adj)TFR = S (adj)TFR_i} \qquad \mathbf{1.3}$$

²⁴ This section draws heavily on John Bongaarts and Griffith Feeney, 1998, On the Quantum and Tempo of Fertility, Population and Development Review 24(2): 271-291.

Adjusted total fertility rates have been computed for some countries. Bongaarts (1999) concludes that there is no reason to worry about population replacement in Europe (see Box 1.3). However, as the fecund period remaining once a couple starts wanting to become parents, the risk of unwanted childlessness increases. Also high educated women are more likely to remain childless than less educated women, which is a reason to worry about the incompatibility of education and parenthood. The length of time that people spend in education is increasing for younger cohorts in comparison to older cohorts.

BOX 1.3 HOW IMPORTANT IS POSTPONEMENT OF MATERNITY IN THE DECREASE OF TOTAL FERTILITY RATES?

Bongaarts (1999) applies the birth order specific basic translation formula for adjusting TFR for increases in the mean age at giving birth to a number of countries for the period 1985-1989. The results show tempo effects of between 0.10 to 0.40 for the countries included with an average of 0.25 (see Table Box 1.3 below). Particularly France, Netherlands and Taiwan show large tempo effects due to sharply increasing age at which women become first time mothers. The adjusted TFR's are considerably closer to 2 than the observed unadjusted TFR's. Bongaarts claims that postponement of maternity eventually will stop and perhaps reverse and then observed TFR's will be closer to the actual number of children that women have over their life cycle. This number is two, because interviews with women carried out in the European Union Fertility and Family Surveys Project in the early 1990s show that young women aged 20-24 expect to have 2 children, women aged 30-34 many of whom already have one child also expect to have 2 children and women 40-44, most of whom have already had their two children find this number an ideal family size for themselves. Therefore Bongaarts concludes that the currently observed low TFR's in Europe is nothing to worry about.

Table box 1.3 Total Fertility Rate With and Without Adjustment for Tempo Effect.

Country and period	TFR (observed)	TFR (adjusted)	Tempo Effect
<i>Selected counties, 1985-1989:</i>			
France	1.81	2.21	0.40
Netherlands	1.54	1.90	0.36
Norway	1.78	2.05	0.27
Sweden	1.90	2.00	0.10
Taiwan	1.74	2.14	0.40
United Kingdom	1.80	1.92	0.12
United States	1.90	1.98	0.08
Average 1985-1989	1.78	2.03	0.25

<i>United States:</i>			
1975-1979	1.78	1.97	0.19
1980-1984	1.82	2.01	0.19
1985-1989	1.90	1.98	0.08
1990	2.07	2.06	-0.01

Sources: Bongaarts, 1998; Bongaarts and Feeney, 1998.

Bongaarts, John, 1999, Fertility Decline in the Developed World: Where will it End? American Economic Review Papers and Proceedings, May.

1.6. Proportion childless women increases in Europe and most among higher educated women

Although some of the fall of the TFR is caused by postponement of maternity comparing younger cohorts of women to older cohorts, other explanations are increasing proportions of women remaining childless and decreasing numbers of women, who have more than one child. Another way of studying this development is by parity progression rates for parity 0, 1, 2, 3 or higher order, where parity 0 are women, who do not have children, parity 1 are women with at least one child, parity 2 women with at least 2 children etc. Table 1.4 adapted from Bosveld (1996) shows estimated proportions of childless women by women's birth cohort for a number of European countries. It shows that in some countries like West Germany the proportion childless has doubled from comparing the 1960 cohort to the 1940 cohort. Also Finland and the Netherlands show 20 to 22 per cent women who are childless in the 1960 cohort. Table 1.5 shows the proportion women at age 35 who are still childless according to education of the women and for two birth cohorts of women, namely women born during the period 1948-1952 in comparison to women born in the five year period 1953-1957. There are substantially more childless women among high-educated women than among lower educated women in both cohorts and in all countries.

Table 1.4 Estimated proportions of childless women per birth cohort.

Generations		1940	1945	1950	1955	1960
Western Europe	Austria	14.3	15.1	20.6	-	-
	Belgium	13.1	12.8	13.4	19.7	-
	France	8.3	8.1	8.3	8.3	10.2
	West Germany*	10.6	12.7	14.8	20.3	22.9 ¹⁹⁵⁸
	The Netherlands	11.9	11.7	14.7	17.8	19.5 ¹⁹⁵⁸
Northern Europe	Denmark		8.9	10.8	13.7	15.0 ¹⁹⁵⁸
	England-Wales	11.1	10.2	14.0	16.0	18.0
	Finland	15.2	16.5	17.4	19.1	21.2 ¹⁹⁵⁸
	Ireland	19.8	17.3	12.2	13.1	14.5 ¹⁹⁵⁸
	Norway	9.5	9.2	10.0	13.5	-
	Sweden	-	-	10.8	12.6	12.9
	Italy	13.6	11.9	12.2	14.0	-
	Portugal	-	-	11.0	9.7	9.5 ¹⁹⁵⁸
	Spain	12.0 ¹⁹³⁸	11.0 ¹⁹⁴³	10.9 ¹⁹⁴⁸	9.5 ¹⁹⁵³	-
	Eastern Europe	Bulgaria	-	7.3	6.9	6.6
	Czechoslovakia*	7.9	9.2	7.7	7.7	8.2
	Hungary	9.3	10.0	9.6	8.7	8.7
	Poland	-	10.9	9.5	11.4	9.9
	Yugoslavia*	8.9	8.5	8.1	8.7	8.2
	East Germany*	11.3	8.5	7.3	7.5	8.0

Source: Priou, 1993

*Former (Countries with recent border changes).

Bosveld 1996

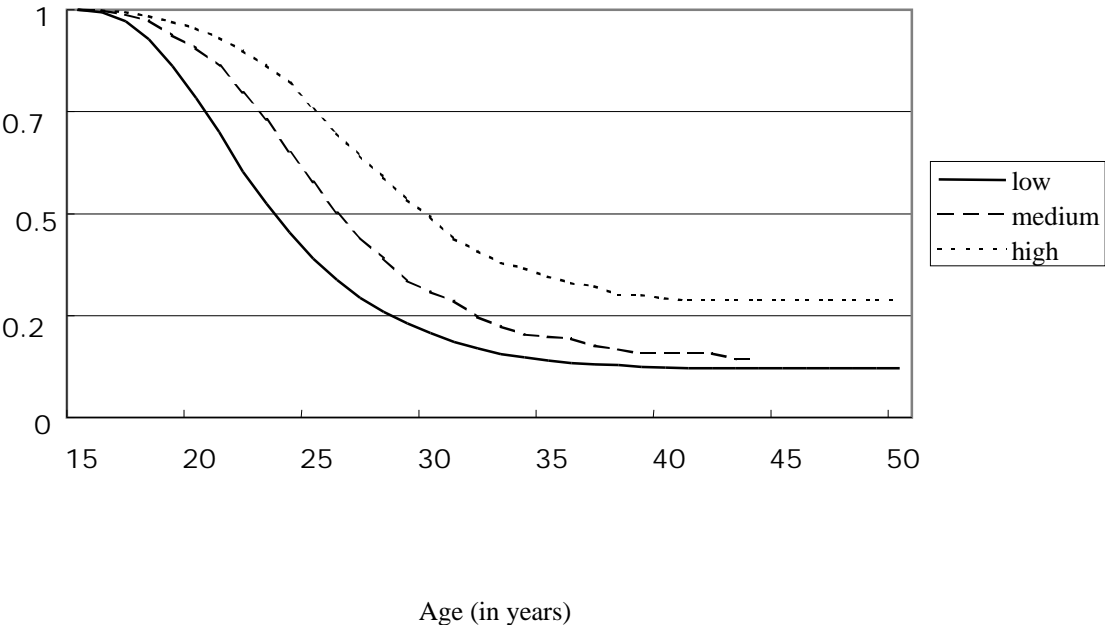
Table 1.5. Percent (still) childless women at Age 35 According to Educational Level and Cohort

Education:	Low		Medium		High	
Cohort:	1948-1952	1953-1957	1948-1952	1953-1959	1948-1952	1953-1957
<i>Northern Europe</i>						
Finland (1989)	14.9	11.8	15.0	19.8	29.1	28.4
Letland (1995)	6.4	14.7	9.5	4.8	11.4	13.4
Lethuania (1995)	15.6	20.0	9.6	5.9	20.3	19.0
Norway (1989)	5.5	3.9	9.9	14.0	19.0	24.9
<i>Eastern Europe</i>						
Hungary (1993)	--	6.5	--	9.0	--	--
Poland (1991)	5.7	6.1	12.1	8.9	20.2	23.3
<i>Southern Europe</i>						
Italy (1996)	7.4	9.5	17.7	15.4	27.6	33.0
Slovenia (1995)	--	2.4	--	7.9	--	3.0
Spain (1994)	9.4	9.1	20.8	19.3	18.2	35.3
<i>Western Europe</i>						
Belgium (1991)	11.0	9.9	13.6	14.9	16.7	12.2
Germany (1992)	--	15.6	--	15.8	--	20.4
France (1994)	7.2	9.5	11.5	11.0	26.0	22.0
Netherlands (1993)	10.6	14.7	16.3	17.8	43.2	37.0
Austria (1996)	17.0	8.7	9.2	10.6	2.4	20.2
<i>Outside Europe</i>						
Canada (1995)	9.0	8.2	14.6	18.8	25.9	37.6

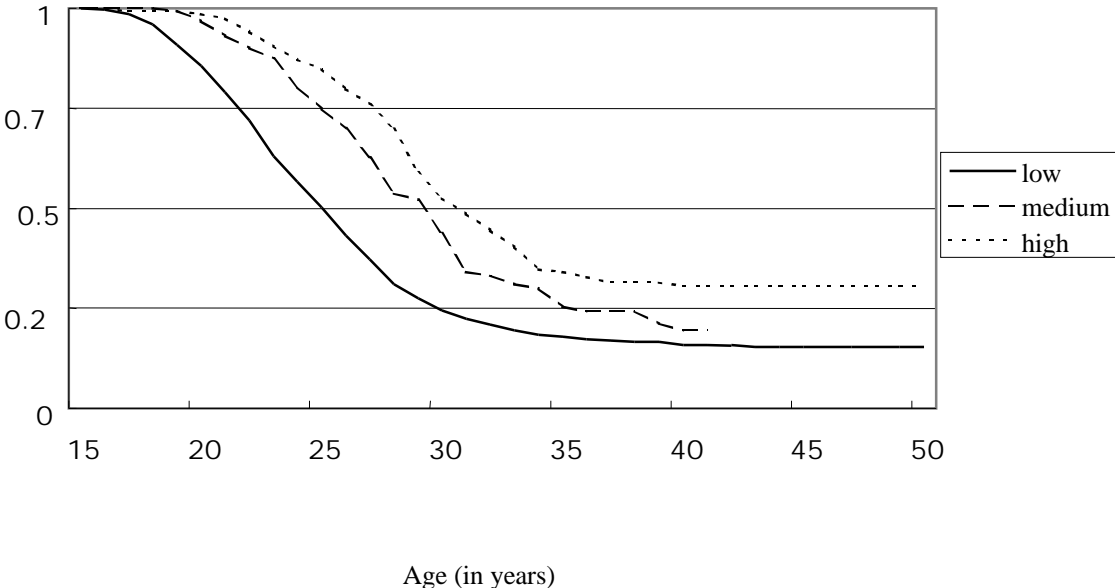
Based on data from the Family and Fertility Surveys of the various countries the FFS-surveys.

Beets, Gijs, 1998, Onderwijs en de geboorte van het eerste kind in Europa: FFS gegevens, Bevolking en Gezin, 27, 2, pp. 99-121.

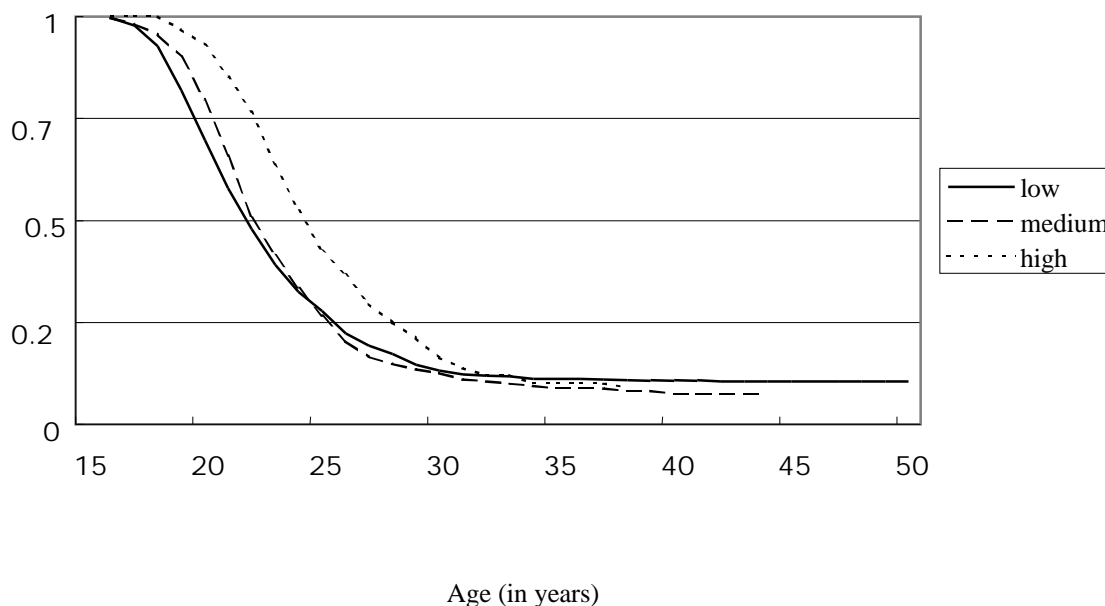
Graph 1.4A. The Kaplan-Meier Estimates of Not Giving First Birth by Educational Groups, Britain.



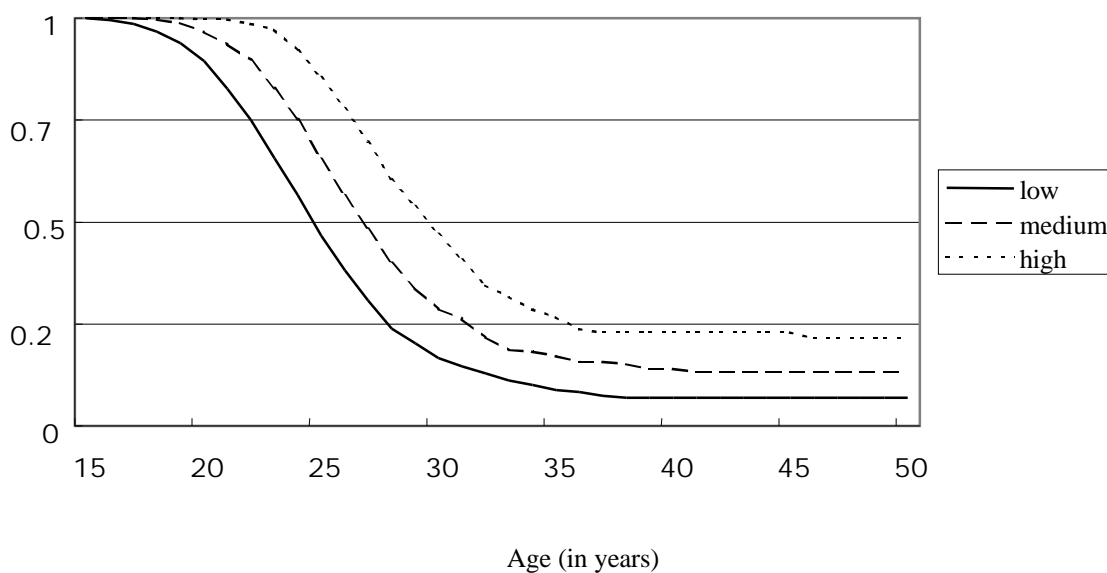
The Kaplan-Meier Estimates of Not Giving First Birth by Educational Groups, West Germany.



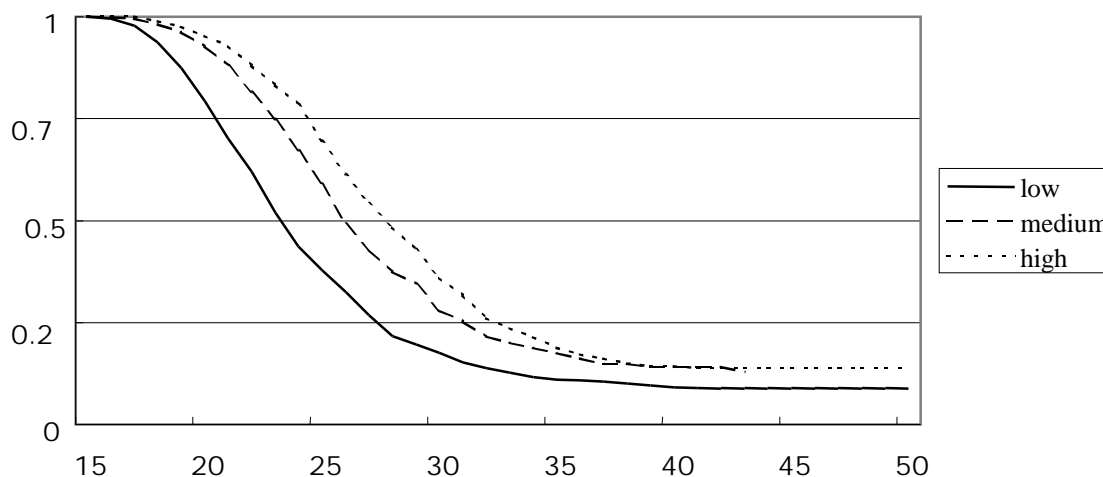
Graph 1.4B. The Kaplan-Meier Estimates of Not Giving First Birth by Educational Groups, East Germany.



The Kaplan-Meier Estimates of Not Giving First Birth by Educational Groups, the Netherlands



Graph 1.4C. The Kaplan-Meier Estimates of Not Giving First Birth by Educational Groups, Sweden.



Among high educated women in the younger cohort more than a quarter of the women are childless in Finland, Norway, Italy, Spain, Netherlands and Canada. Extreme values are found for the Netherlands 43.2 per cent in the older cohort and 37.0 per cent in the younger cohort. The most dramatic increase in childlessness between the younger and the older cohort is found in Spain from 18.2 per cent to 35.3 per cent. Some women, who are 35 years old, may still become mothers at a higher age. However the biological clock has begun to tick (see Box 1.2) and the possibility to have a child at a later age decreases dramatically. In Graphs 1.4a to 1.4c the decrease in proportions childless women from age 15 to age 50 is shown for Britain, Germany, Netherlands and Sweden. These curves have been computed on the basis of household panel data for each country. The German data separates between the Western parts of Germany the former West Germany: Federal Republic of Germany and the Eastern part of Germany, the former East Germany or the German Democratic Republic that was a communist republic. Graph 1.8 does not distinguish between cohorts and includes women born from 1930 to 1970. The pattern from Table 1.5, that higher educated women more often remain childless is reproduced in Graph 1.8 in that the dotted line for high educated women is everywhere at a higher level than for medium and low educated women. The curves show, that not so many women become mothers after age 35 because for all three educational groups the curves flatten out and become parallel to the horizontal axis. If the line is completely horizontal it means that the proportion childless remains at the same level as women age. This

parallel section of the curves is also an estimate of the proportion childless. The biggest differences in childlessness between high-educated women and low educated women are found in Britain, West Germany and the Netherlands and the smallest differences are found in Sweden and East Germany.

1.7. Less than one third of European women have three children

The two-child family is the most common family type in Europe. In Table 1.6 column (1) shows the proportion women who have at least one child at the age 36 in some European countries. This number is the complement of the childlessness numbers in the previous section. For example if 90 per cent of the women have at least one child there are 10 per cent who are childless. The second column shows proportion women who have at least two children. This number in 1989 is between 51 per cent for West Germany and 79 per cent for Czechoslovakia. In 1989 before the fall of the Soviet Union in 1990 and the subsequent partition into the Czech Republic and Slovakia. Fertility patterns in central and East European countries have changed since then. The following countries in 1989 had parity progression ratios to the second child column (4) of 80 per cent or more: Netherlands, Norway, Sweden and Czechoslovakia. This means that 80 per cent of one-child mothers had a second child. At the same time the progression into a third child by mothers of two children was in all these countries less than 40 per cent, column (5).

Table 1.6 Proportions of women having of at least one (1), two (2) or three (3) children at age 36 and parity progression ratios to a second (4) and third child (5) before age 37.

	Year	(1)	(2)	(3)	(4)	(5)		Year	(1)	(2)	(3)	(4)	(5)
Belgium	1979	90	61	28	68	48	Sweden	1979	86	68	25	79	37
	1984	89	58	22	65	38		1984	86	68	24	79	35
	1987	88	56	31	64	38		1989	84	67	25	80	37
France	1979	91	72	34	79	47	Italy	1979	87	69	B29	79	42
	1984	90	69	29	77	42		1984	88	65	23	74	35
	1988	91	69	28	76	41		1989	89	61	20	70	33
Netherlands	1979	89	75	27	84	36	Portugal	1979	93	66	32	71	48
	1984	86	70	21	81	30		1984	91	64	25	70	39
	1989	81	65	22	80	32		1989	88	63	21	72	33

West Germany	1979	86	57	22	66	39	Hungary	1979	90	66	18	73	27
	1984	85	54	19	64	35		1984	90	69	19	77	28
	1989	79	51	18	65	35		1988	90	71	19	79	27
Norway	1979	89	78	39	88	50	Czecho- slovakia	1979	91	75	29	82	39
	1984	90	76	31	84	41		1984	91	79	29	87	37
	1989	87	71	27	82	38		1989	92	79	28	86	35

Adapted from Bosveld, 1996, page

These countries have the “two children family” patterns. Progression rates to the second child are particularly small in Belgium 64 per cent and West Germany 65 per cent, which makes these countries have more one-child families than other countries. The proportion of women who have at least three children is given in column (3) and the progression ratios by two child mothers into becoming mothers of three children is shown in column (5). None of the countries included in Table 1.6 show a proportion of women of more than 30 per cent who have three children. France is particular in that it has relatively low progression ratios into the second child, 76 per cent, and relatively large progression ratios into the third child, 41 per cent. This means that in comparison to other countries there are many “one child families” but also many “three children families”.

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Appendix

Figure A1.1 The Demographic Transition in the Netherlands adapted from *Ouderen voor Ouderen, Demografische Ontwikkelingen en Beleid*, WRR, The Hague (1993)

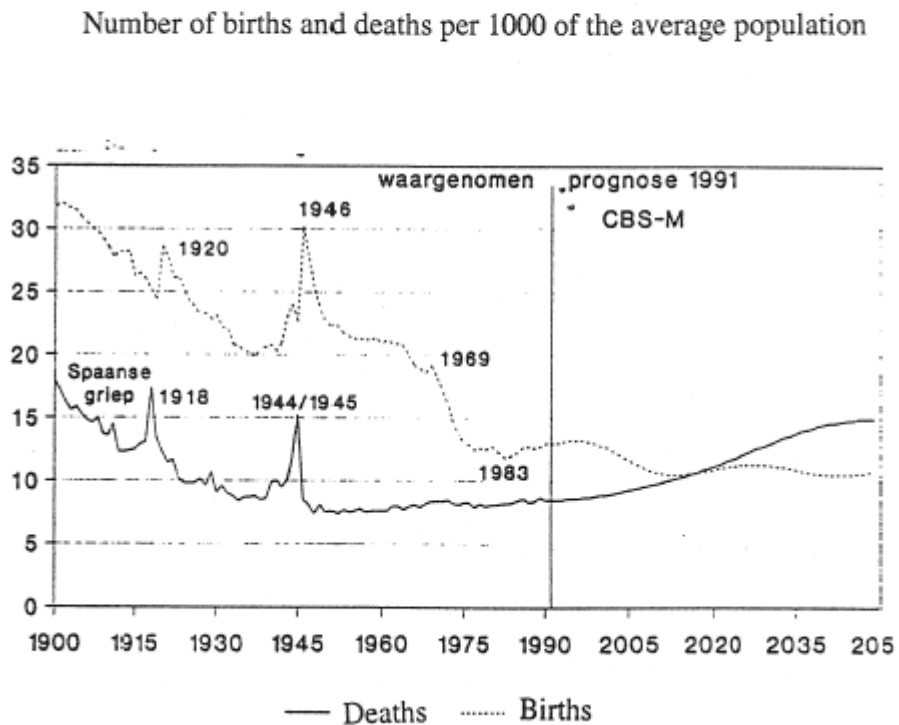


Figure A1.2A Age at which 25%, 50% and 75% of women from a given cohort have had their first child. Adapted from Beets (1997).

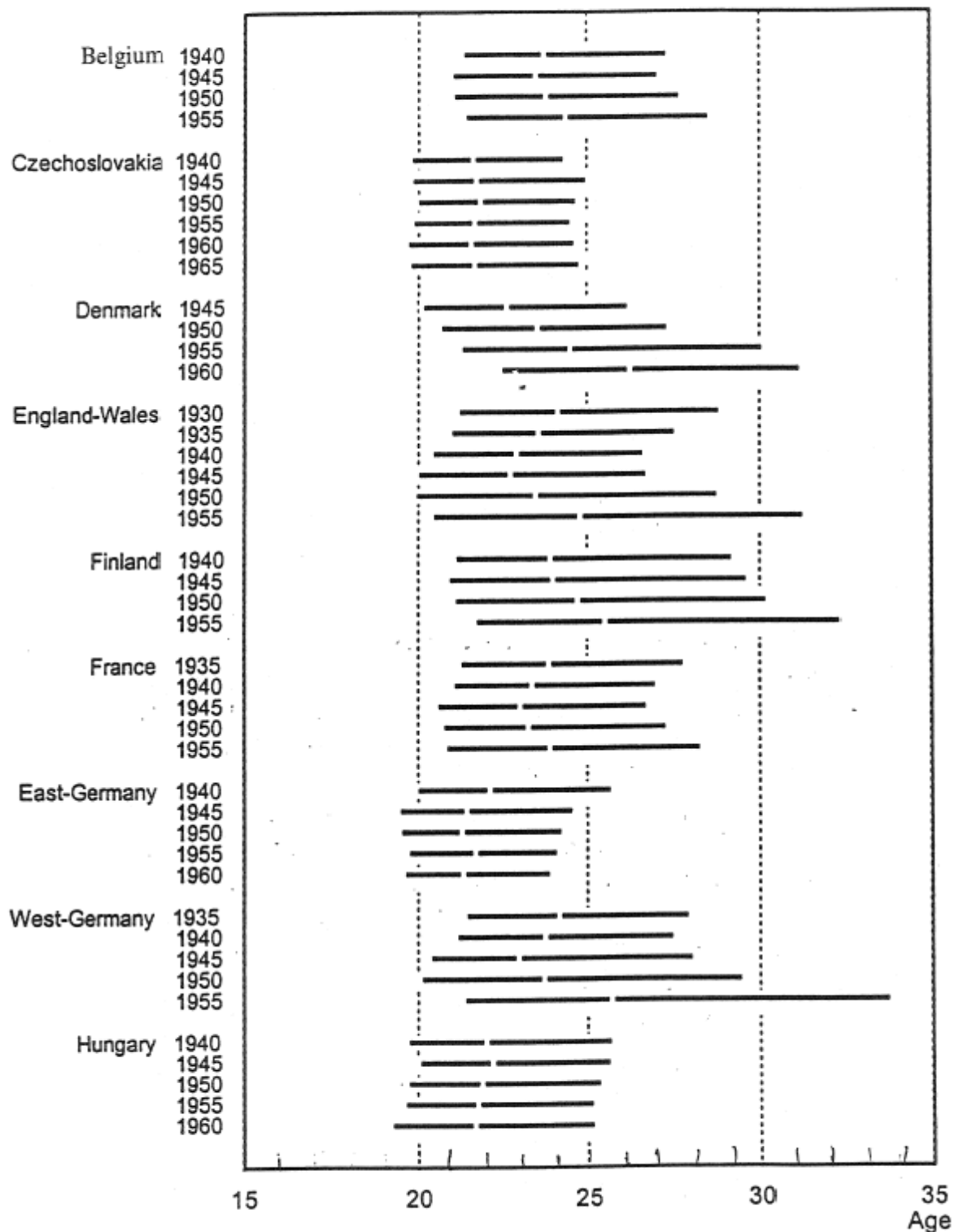


Figure A1.2B Age at which 25%, 50% and 75% of women from a given cohort have had their first child. Adapted from Beets (1997).

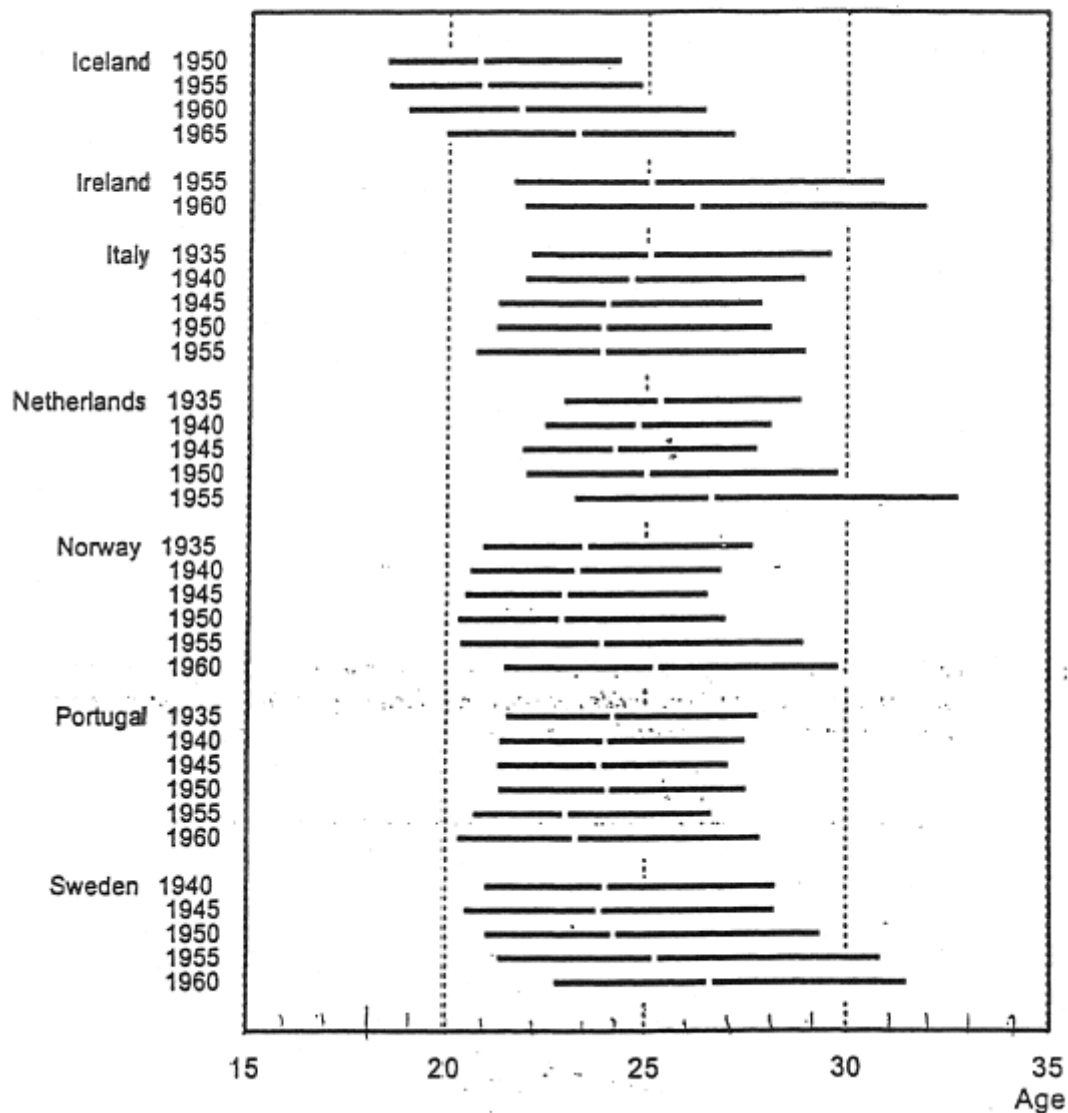
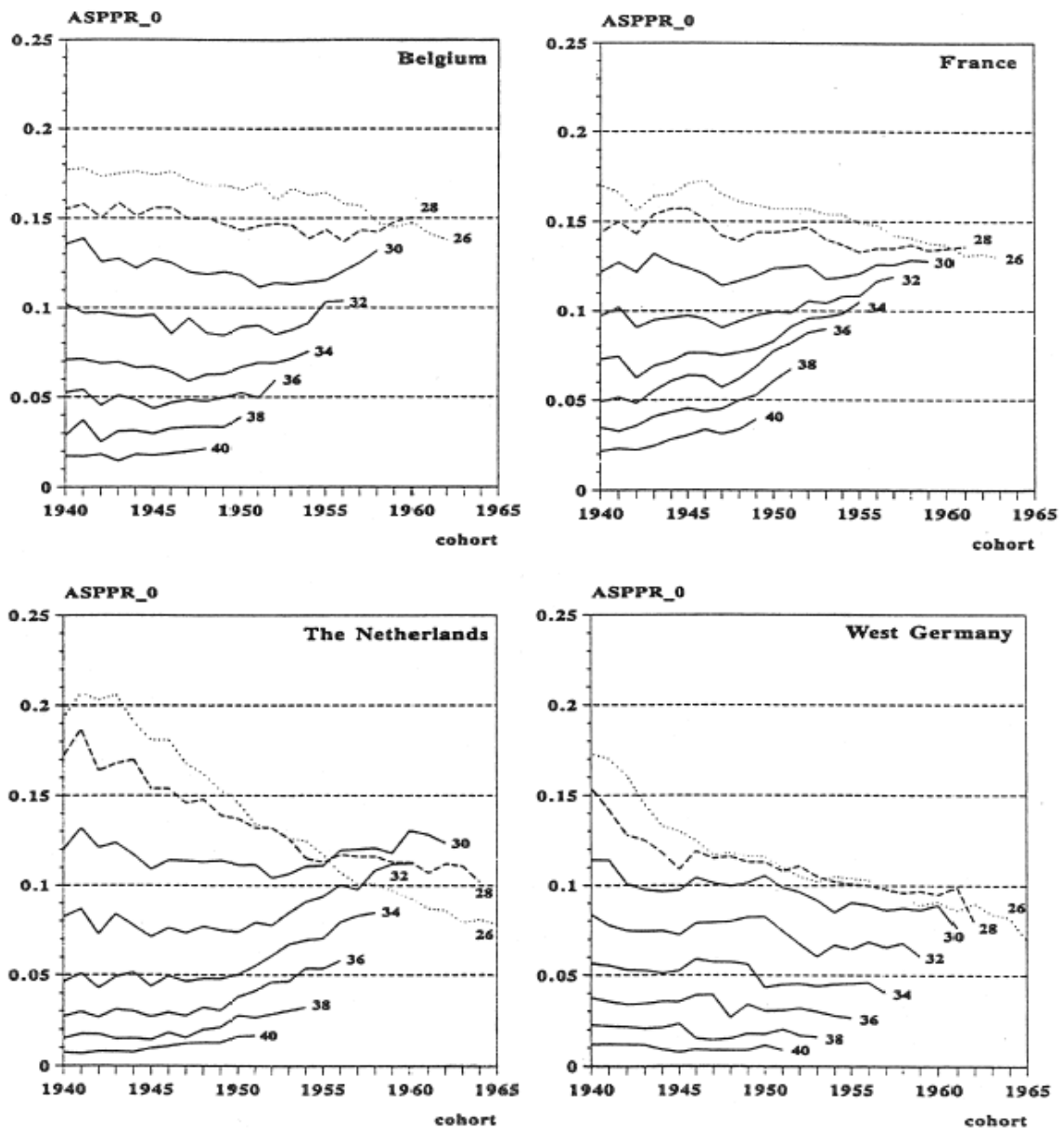
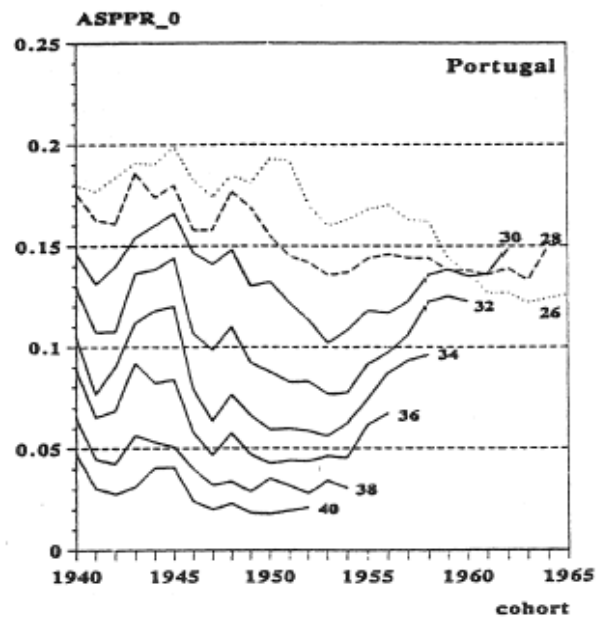
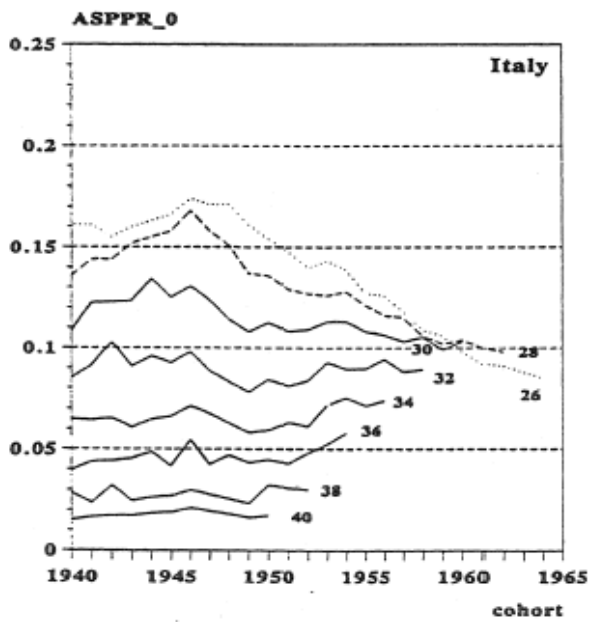
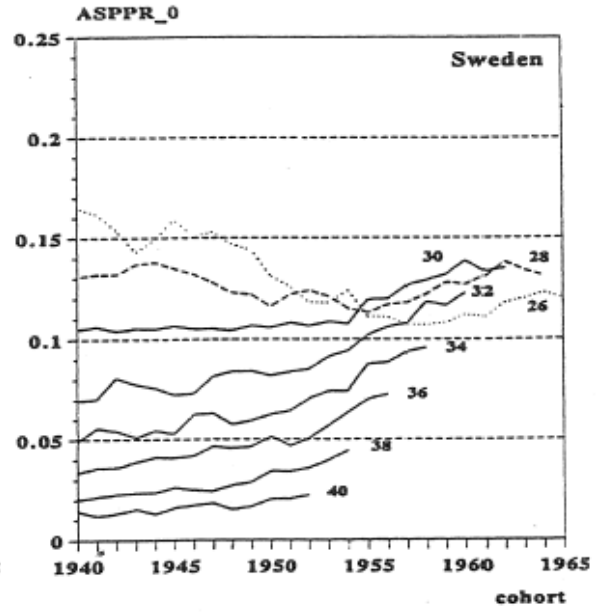
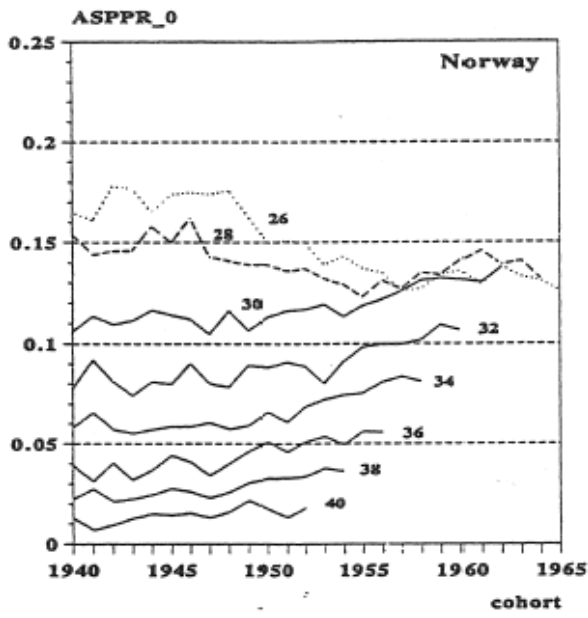


Figure A1.3 Age-specific parity progression rates of nulliparous women. Adapted from Bosveld (1996)





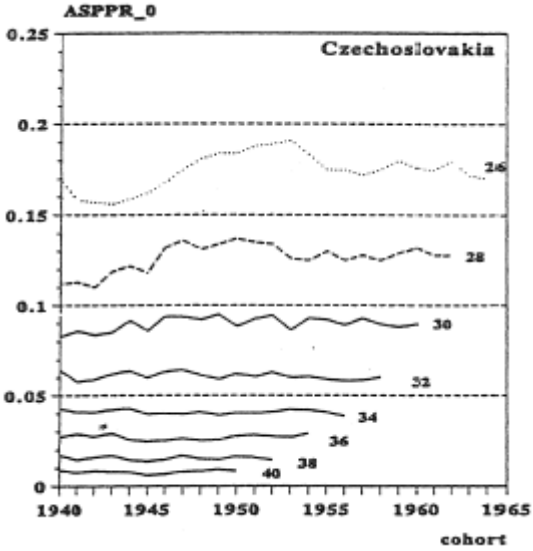
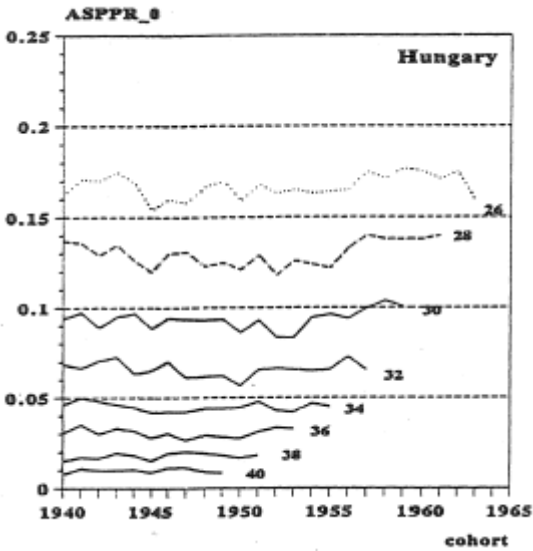
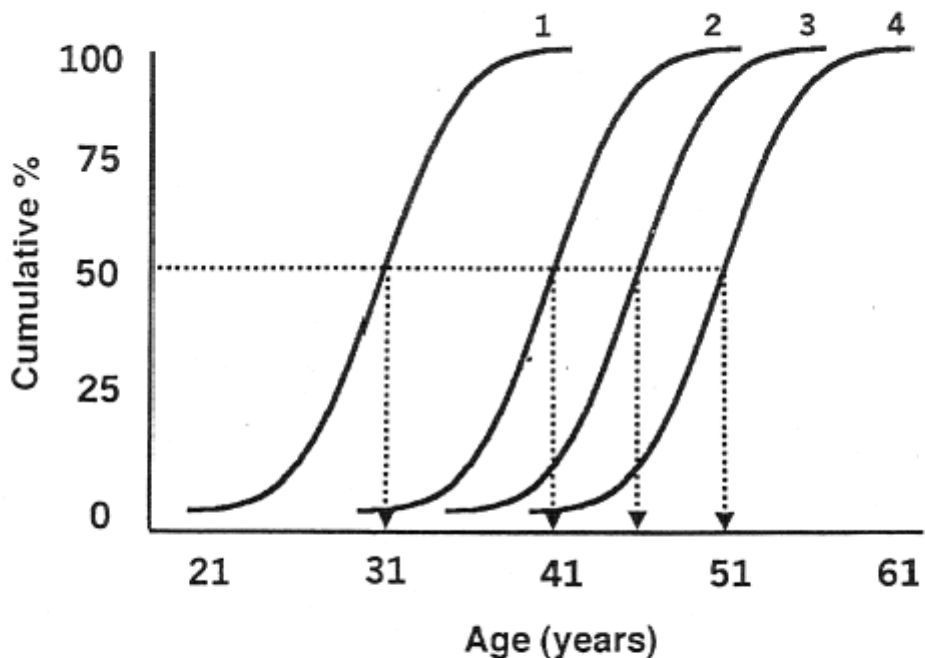
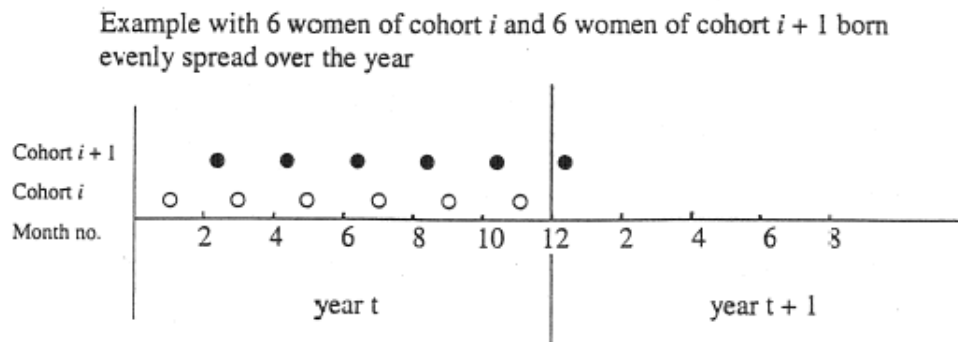


Figure A1.4 Adapted from Te Velde and Pearson (2002)



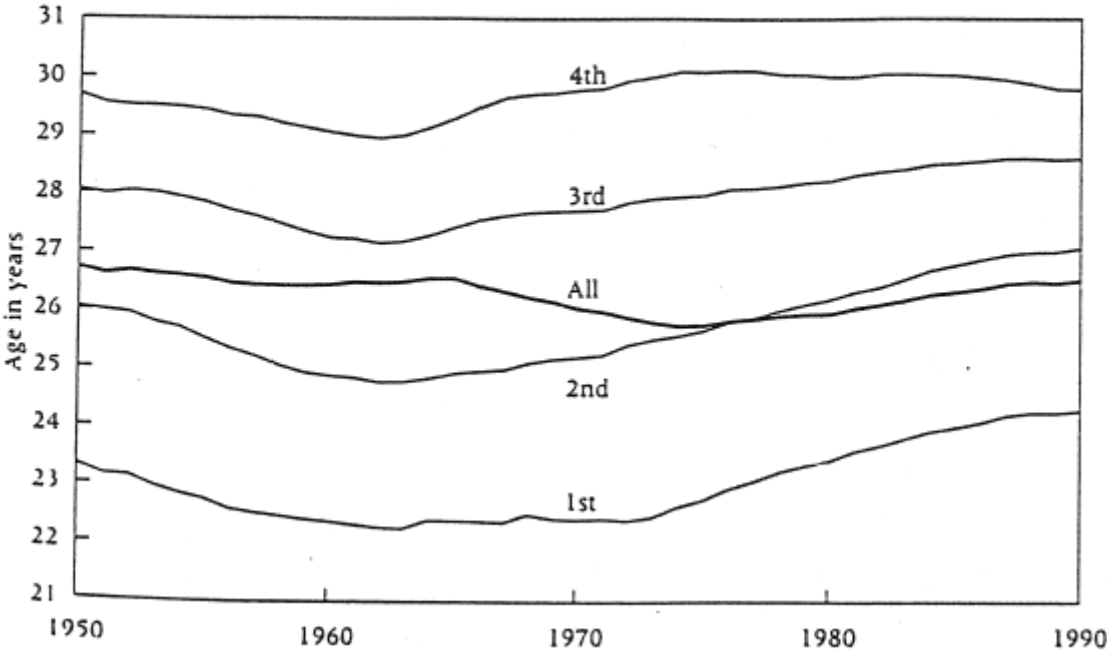
The age variation of the various stages of reproductive ageing depicted in a cumulative fashion. Curve 1: variation in age at the beginning of subfertility (mean age 31 years). Curve 2: variation in age at the beginning of sterility (mean age 41 years). Curve 3: variation in age at the transition from cycle regularity to irregularity (mean age 46 years). Curve 4: variation in age of menopause (mean age 51 years). See text for details on origin of data.

Figure A1.5 Tempo Effect on Fertility



- maternity occurs on 24th birthday for all women of cohort (i)
- maternity is delayed for cohort $i + 1$ in comparison to cohort i . The women are 24 years and 45 days.

Figure A1.6 Mean ages of women at birth by birth order, United States 1950-90. Adapted from Bongaarts and Feeney (1998).



CHAPTER 2: Welfare State Comparisons and Motherhood

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2.1. Introduction

In recent years, a great number of researchers have established different typologies of welfare states. Many have evaluated welfare states using different criteria, starting out from different angles and weighing differently separate features of welfare states. This chapter sheds light on the different existing typologies of welfare states and how they differ in methodology and results. The main finding is that typologies differ only slightly no matter which methodology the researcher used or which features his attention was concentrated upon.

The different typologies presented in this chapter were structured into what we have called four clusters of welfare state typologies.

The first cluster is made up of those comparative analyses in which only one particular variable was looked at to construct the typology. We have presented two examples of such typologies. While Mac Farlan and Oxley (1996) examined the level of transfers as a proportion of GDP, the variable analysed by Adema (1996) was net public social expenditures. It goes without saying that the first cluster of comparative welfare state research is much broader than the two examples we have presented here. The degree of corporatism led Calmfors and Driffill to categorise welfare state regimes in 1988, for example.

We have given more attention to the second cluster of welfare state typologies. As opposed to the typologies of the first cluster, the second cluster typologies rely not on a sole variable but

rather on packages of ideologies and policies. The father of these second cluster typologies undeniably remains Esping-Andersen with his threefold typology of liberal, conservative-corporatist and social-democratic welfare state regimes. Esping-Andersen's work has enormously inspired many researchers. They have either focused on the weaknesses of his work, adopting a critical approach but nevertheless learning from his work to build up their own typologies, or they have focused on the strengths of his work and tried to improve it in their own comparative research.

A third cluster contains those typologies that have categorised welfare states on the basis of their outcomes in terms of poverty relief. This cluster is different from the first cluster in that it is not a sole measure but a sole outcome that is examined, namely the efficiency of social protection systems in terms of poverty. Some have focused on poverty in general, others have distinguished between several vulnerable groups, such as single mothers, single non-mothers, etc.

Finally, we have suggested the appearance of a fourth cluster of typologies. In the second cluster, the gender variable has received its first share of attention in typology-building, chiefly by feminists drawing on Esping-Andersen's work. However, Pfau-Effinger (2000) noticed that feminists have often been blind to the cultural context of gender models. Starting out from this observed gap in earlier typologies of gender regimes, Pfau-Effinger (2000) has constructed a typology of gender cultural models accounting for the cultural constructions of inter-generational relationships and of the gender division of labour that are dominant in different societies. We think Pfau-Effinger might have set an example and cleared the way for a fourth cluster of comparative welfare state research in which not only gender but also the cultural context receive due attention.

In a following section of this chapter we have brought the different clusters together into a summarising table and have commented on how they resemble or differ from one another. Although some countries do not easily fit into one category, it seems true to say that there are no shocking differences between the different typologies.

In the last section we have outlined the methodology we intend to use in order to construct our own typology of welfare state regimes in the framework of the MOCHO project.

2.2. The three clusters of welfare state comparisons

2.2.1. The first cluster of welfare state typologies

A first cluster of compared analysis has focused on one particular variable, be it the proportion of tax receipts to GDP, the degree of corporatism, the proportions of transfers to GDP, the state's level of social expenses, or still other relevant measures of the social protection offered. Two examples of such an approach are presented below.

2.2.1.1. Mac Farlan and Oxley (1996)

First, Mac Farlan and Oxley (1996) examined the level of transfers to the active population as a percentage of tendential GDP. This resulted in the typology of the European welfare states as it is captured in Table 2.1. below.

2.2.1.2. Adema (1996)

Second, Adema (1996) constructed a typology on the basis of net social expenses and observed a great difference compared to a typology based on gross social expenditure as it figures in state budgets. Gross social expenditures overestimate the social effort of countries and their ranking changes when, instead, net expenses are considered²⁵.

Table 2.1.

Mac Farlan and Oxley (1996)	Adema (1996)	
	<i>Gross public social expenditures</i>	<i>Net publicly mandated social expenditures</i>
<u>Transfers around 12% of GDP</u> The Netherlands Finland Denmark Sweden	<u>Above 35.5% of GDP</u> Finland Denmark Sweden	<u>Above 25% of GDP</u> Belgium Finland Germany Sweden
<u>Transfers between 6 and 8% of GDP</u> Belgium Luxembourg United Kingdom Ireland France Austria Spain Germany	<u>Above 30% of GDP</u> Belgium The Netherlands Germany	<u>Above 22% of GDP</u> Denmark United Kingdom
<u>Lowest expenses</u> Portugal Italy Greece	<u>Less than 26.5% of GDP</u> Italy United Kingdom Ireland	<u>Less than 21.5% of GDP</u> The Netherlands (21.5%) Italy Ireland

Source: LUMEN, J., LE CACHEUX, Jacques, MEULDERS, D. *Policy Digest*, 2000.

²⁵ An overview of the adjustments made to transform gross social expenditures into the net social effort is presented in Appendix table 1.

Without wanting to doubt the value of these first cluster welfare state categorisations, the main flaw of this comparative literature focused chiefly on measures of public expenditure or redistribution is that it managed to ignore gender altogether.

2.2.2. The second cluster of welfare state typologies

2.2.2.1. Introduction

The milestone of the first cluster of comparative research on welfare regimes was the concept of social amelioration, focusing on measures of public expenditure and redistribution. In the second cluster, the central object of analysis is broadened to the state-market nexus or the relationship between paid work and welfare. To study this relationship and, accordingly, construct welfare state typologies, a whole range of measures and policies is considered.

Women only enter the analysis as they become more visible as paid workers. Unfortunately, they are just granted a place within the same paid work/welfare schedule that was primarily designed with male breadwinners in mind. To quote Esping-Andersen: “The stable one-earner family is no longer standard but atypical. Cohabitation and single-person households are growing. Childhood today more likely means growing up with parents who both work, or with a single parent. Being a child today also means having few, if any, siblings and a fair risk of seeing one’s parents separate or divorce... Such turmoil signals an emerging welfare deficit: the family that was the model for post-war welfare state reformers is still the linchpin of policy even if it is becoming extinct.” (Esping-Andersen, 1999).

Be it as it may, compared to the first cluster of comparative analysis where gender was completely absent, it is true to say that a major step forward was made in the second cluster where analysis became at least partly gendered.

2.2.2.2. Esping-Andersen (1990, 1999)

The most important example of the second cluster of comparative analysis is Esping-Andersen’s threefold typology of conservative-corporatist, liberal, and social-democratic welfare state regimes based on the criteria of decommodification, social stratification, and the state-market nexus (Esping-Andersen, 1990).

1. *The welfare triad*

A. The Liberal Welfare State Regime

What characterises the liberal welfare regime, according to Esping-Andersen (1990), is the unbounded faith in market sovereignty. In liberal welfare regimes, there is a political commitment to minimise the state, individualise risks and promote market solutions.

Chiefly Anglo-Saxon nations have liberal welfare regimes and this is not in the least so because of the historical weakness, or *de facto* absence, of a socialist or Christian democratic movement in these countries.

The liberal welfare regime has three main features. Firstly, it is residualist in the sense that social guarantees are restricted to 'bad risks'. It favours means or income tests to ascertain desert and need. Targeted social assistance is of far greater importance than are rights programmes. Secondly, the liberal welfare regime is residualist in the sense that 'social' risks are defined very narrowly. A third fundamental feature is the encouragement of the market or the promotion of 'welfare capitalism'.

The United States, Canada, New Zealand, Australia, the United Kingdom and Ireland are denoted as liberal welfare regimes in Esping-Andersen's typology (1990).

B. The Social Democratic Welfare Regime

As opposed to its liberal counterpart, the social democratic welfare regime is characterised by its universalism and comprehensive risk coverage or, what Esping-Andersen refers to as a comprehensive 'socialisation of risks' (1990). Benefits are generous and equal for all. Egalitarianism is another core principle of the social democratic welfare regime. Rights are attached to individuals and based on citizenship. Needs-based assistance plays only a marginal role. Market dependency is minimised or abolished, even. Esping-Andersen refers to this as a high degree of 'de-commodification' of welfare (1990), a concept which we will explain further in the following section. Furthermore, in social democratic welfare regimes there is a tendency to close off private welfare. Finally, there is a strong commitment to realise full employment and, therefore, minimise unemployment.

To sum up, the most important distinguishing features of social democratic welfare regimes are their provision of standard income protection with social services as well as their generous income support for working women. The social democratic welfare regimes identified by Esping-Andersen (1990) correspond to the Nordic countries: Denmark, Sweden, Finland and Norway. These countries can also be denoted as 'servicing' states with their extensive health services and services especially catering to family needs, such as the care for children or the

aged. This generous provision of services has led to a high degree of de-familialisation in the social democratic welfare regimes. De-familialisation is yet another major concept underlying Esping-Andersen’s typology of welfare state regimes (1990) and we have given it particular attention in one of the next sections.

C. The Conservative Welfare Regime

Typical for the conservative welfare states is the blend of status segmentation and familialism (although France and Belgium might be considered as exceptions as far as the degree of familialism is concerned). The bulk of countries analysed by Esping-Andersen (1990) were found to be conservative welfare state regimes. They are chiefly concentrated on the European continent, although Japan is also grouped in this category. The countries are: Germany, Austria, France, the Netherlands, Belgium, the Southern European countries and Japan. These welfare regimes uphold the principle of risk pooling or solidarity. They also tend to provide a privileged treatment to the public civil service. Their systems are characterised by compulsory social insurance complemented with more or less *ad hoc* residual schemes for strata without a ‘normal’ employment relationship. In any case, there is only a marginal role to play for purely private market provision of welfare. The grounding principles of familialism and subsidiarity result in a low provision of care services and family benefits. While conservative welfare states put forward a similar residualism as liberal welfare regimes, it is for completely different reasons. Residualism in conservative regimes aims at compensating for family failure and not for market failure, as it is the case in the liberal welfare state regimes. Finally, social assistance is favoured over rights.

To sum up, the three main features of conservative welfare regimes are corporatism, etatism and familialism.

Table 2.2. summarises Esping-Andersen’s typology (1990) for the European countries:

Table 2.2.

Liberal regime	Conservative-corporatist regime	Social-democratic regime
Ireland United Kingdom	Austria Belgium France Germany Greece Italy Luxembourg Netherlands Spain	Denmark Finland Sweden

Source: ESPING-ANDERSEN, G. *The Three Worlds of Welfare Capitalism*. Cambridge, Polity Press, 1990.

2. The concept of de-commodification

The concept of de-commodification can be seen as one of the basic pillars on which Esping-Andersen has constructed his typology of welfare state regimes (1990). Esping-Andersen understands 'de-commodification' as the degree to which welfare states weaken the cash nexus by granting entitlements independent of market participation. Inherently, the concept presupposes that individuals are already commodified. It may adequately describe the relationship between welfare states and the standard, full-career male worker, but it is not easily applicable to women, considering that their economic role is often non-commodified. The concept of de-commodification is inoperable for women unless welfare states, to begin with, help them become commodified. It is precisely with respect to his concept of de-commodification that feminists have criticized Esping-Andersen. We will try to shed some light on where feminists disagree with Esping-Andersen in one of the following sections.

3. The concept of de-familialisation

The concept of familism has received special attention, particularly in Esping-Andersen's later work (Esping-Andersen, 1999). According to Esping-Andersen (1999), a familialistic welfare regime is one that assigns a maximum of welfare obligations to the household. As a consequence, the concept of 'de-familialisation' is to capture policies that lessen individuals' reliance on the family, that maximise individuals' command of economic resources independently of familial or conjugal reciprocities.

Given that women's, or at least mothers', family responsibilities easily restrict their ability to gain full economic independence solely via work, their de-familialisation depends uniquely on the welfare state. In other words, it was feminist critique that has led Esping-Andersen (1999) to realise that female independence necessitates 'de-familialising' welfare obligations rather than 'de-commodifying' them.

4. The contestable character of Esping-Andersen's three welfare state categories

Before we move on to the specifically feminist criticisms of Esping-Andersen's work, it is important to draw attention to the looseness and disputable character of his groupings of welfare state regimes.

Australia, for example, is certainly a low welfare spender and operates a variety of tough means tests, but on the other hand, one cannot ignore its longstanding commitment to wages-as-welfare, with centralised wage-bargaining machinery that is more reminiscent of post-war Sweden than anywhere else.

Esping-Andersen (1990) situates the Netherlands, as a social-democratic welfare state regime, in the same category as the Scandinavian countries. However, historically, the process of “democratic pacification” (via pillarisation) in the Netherlands has led to tolerance and accommodation, mainly in the public sphere, to basic income policies on the one hand, and to a strengthened idea of family privacy and women homemakers on the other. In many ways the system of the Netherlands resembles a Christian democratic regime. According to Knijn (1991), the Netherlands, like Germany, have a low level of individualisation, no equal access to either the labour market, the polity, or state institutions, and a very low state and market household service profile. Knijn, therefore, groups the Dutch welfare regime with Germany. We could say there is some truth in both arguments. As Gustafsson (1994) has pointed out, Esping-Andersen (1990) is right to denote the Netherlands as a social-democratic welfare regime as far as its outcome in terms of poverty alleviation is concerned, whereas Knijn (1991) was right in pointing out the conservative character of the Dutch welfare state with respect to women’s roles.

Moreover, Leira (1989) has shown that Esping-Andersen’s idea of a Scandinavian welfare regime breaks down as soon as gender is given serious consideration. She found that the Norwegian model, which treated women primarily as wives and mothers, was closer in many respects to that of Britain than it was to the Swedish model. However, with its recent introduction of family-friendly policies, Norway seems to have secured its position in the Scandinavian cluster. Nowadays, Norway does no longer seem very different from Sweden in terms of its welfare state model.

Finally, Ebbinghaus (1998) has not only suggested to move countries from one category to another but, also, he has added a fourth group of countries. He has derived a ‘Latin’ residual welfare state cluster by differentiating some countries from the conservative cluster. What distinguishes those countries is the fact that they are welfare laggards. The principle of subsidiarity prevails in those societies and therefore, there is a more heavy reliance on traditional intermediary institutions such as the church and the family. Their social security system seems to be more fragmented and corporative compared to the Bismarckian model common to the conservative cluster of welfare state regimes. Table 2.3. summarises Ebbinghaus’s typology graphically:

Table 2.3. Ebbinghaus's typology of welfare-state regimes

Welfare-state politics	Scope of welfare state	
	<i>rudimentary</i>	<i>expansive</i>
<i>Class politics vs. citizenship</i>	(A) Liberal universalism	(B) Social-Democratic universalism
<i>State maintenance and subsidiarity</i>	(D) Latin particularistic-clientelist subsidiarism	(C) Continental corporativism

Source: EBBINGHAUS, B. *European Labour Relations and Welfare State Regimes: A Comparative Analysis of their "Elective Affinities"*. Background Paper for Cluster 3: 'The Welfare State and industrial relations Systems, Conference on "Varieties of Welfare Capitalism in Europe, North America and Japan", Max Planck Institute for the Study of Societies, Cologne, June 11-13, 1998.

Esping-Andersen (1999) has taken this claim for a fourth welfare state cluster very seriously. "The case for a unique Southern Europe regime depends ultimately on the centrality of families. This was the weak link in the original 'three worlds' model.....[However,] as far as my choice of attributes and measurements is concerned, a simple 'three worlds' typology may suffice." (Esping-Andersen, 1999)

Esping-Andersen has a very reasonable point there. The question of how to identify and classify welfare regimes will remain open because researchers will always differ in terms of what attributes they consider vital and of how to measure them. If we allow for too many cross-country differences to each give rise to new regime clusters or 'worlds' then we must be aware that the desired explanatory value of our typologies will, at least partially, be sacrificed. We must see to it that the additional value of typologies, as compared to individual comparisons, is safeguarded.

5. *The feminist critique*

Besides having to face critical remarks on the looseness of his groupings' boundaries, Esping-Andersen found himself attacked by feminists criticizing him of neglecting gender. Before paying due respect to the feminist remarks, a quote of Esping-Andersen himself on the subject might be interesting: "[Feminists often argue] that models of welfare regimes that have been specified via a political economy perspective fail to hold up when subject to a gendered analysis. Alternative 'gendered' typologies do, in fact, often contradict 'political economy' typologies. But the contradiction may be spurious because different phenomena are being explained and compared." (Esping-Andersen, 1999) Feminist critique of 'mainstream' male-centred welfare state theory has led Esping-Andersen (1999) to reconsider the family²⁶.

²⁶ Gender under the form of 'family' is present in two of his three categories of welfare state regimes. The corporatist welfare states strongly hold on to the family in its traditional form while individual independence appears as a major goal of the social-democratic welfare state regime.

Nevertheless, many researchers of the feminist league are still not completely in peace with Esping-Andersen's way of accounting for gender. Some of their ideas are presented below in the discussion of other comparative welfare state analyses of the second cluster. Some believe that although Esping-Andersen has tried to broaden his focus beyond men's welfare politics, he still fails to give due attention to one of the most central issues in the structuring of welfare states, namely the way women's unpaid work as providers of welfare (mainly within the family) is valued and is accepted as a legitimate ground for social entitlements. Although he tried, Esping-Andersen has failed to convincingly and successfully replace his criterion of the state-market nexus by that of the state-market-family nexus or the relationship between paid work, unpaid work and welfare. Despite improvements in reducing the unequal division of paid work, the latter nexus necessarily remains gendered and this because the division of unpaid work is still very much gendered. Or, as Esping-Andersen himself states (1999): "Most welfare states are still income transfer biased, and only a handful pursue a *de facto* reduction of the family's welfare burden" (Esping-Andersen, 1999). The unequal division of unpaid work thus adds a gender dimension to the meaning of concepts such as "decommodification" or "dependency".

Recapturing Pateman's arguments (Pateman, 1989) we could state that, in modern welfare states, social rights attach to those who are "independent", and such independence is achieved through labour market integration. Because the division of paid and unpaid work is unequal between men and women, women's social rights become problematic. The comparative literature on welfare regimes has, thus far, failed to integrate the analysis of unpaid work. However, in modern societies, continuous paid work, independence and economic rights are inevitably built on their opposites: unpaid work, discontinuity, dependence, and immobility. Paid, continuously working, mobile men face unpaid or low paid, immobile, caring women, mothers, daughters, and wives.

2.2.2.3. Lewis and Ostner (1994)

Reflections of the above kind have led Lewis and Ostner (1994) to suggest an alternative categorisation of welfare regimes based on the gender division of work and using the strength of the male breadwinner/family wage model as a proxy measure. They observed that, when gender is treated as a full variable in the structuring of welfare regimes, it cuts across established typologies because of the division of paid and unpaid work. In most welfare systems, women's rights to welfare have been indirect, a function of their presumed dependence on a male breadwinner. While potential or actual motherhood has often provided

the continued justification for making the grounds of women's social entitlements different from those of men, it has been as wives rather than as mothers that women have qualified for benefits in most state social security systems. Lewis and Ostner (1994) had to acknowledge that governments have attached greater or lesser entitlements to women as paid workers, but they believe, and hope to demonstrate this in their welfare regime classification, that the tendency has been to make a dichotomous choice between treating women as wives and mothers, or as workers, with the former predominating. According to Lewis and Ostner (1994), this has meant first, that women's substantial contributions to welfare, particularly their unpaid contribution, have been ignored and with them the direct entitlements that should have been their due; and second, that women's needs have been defined in terms of motherhood as a social function rather than on the basis of individual need. Because of the prevalence of the ideal of the bourgeois family form, Lewis and Ostner (1994) have suggested that a majority of modern welfare states may be categorised as exemplars of a 'strong' male breadwinner model. In its ideal form, this prescribed breadwinning for men and homemaking/caring for women. However, they found that, while the vast majority of European countries recognised the male breadwinner role, there were significant differences as to the extent to which women were confined to homemaking and motherhood, or –as married women and mothers- also recognised as workers. This resulted in differing outcomes in terms of women's entitlement to benefits, the level of the social wage, public expenditure for social services, and women's labour force participation. This observation led Lewis and Ostner (1994) to distinguish between "strong", "moderate", and "weak" male breadwinner states. Strong male breadwinner countries like Britain, Germany and the Netherlands all have tended to treat adult women as dependent wives for the purposes of social entitlements. This corresponds to Gustafsson's opinion of the Netherlands as being a conservative welfare regime as far as women's roles are concerned (Gustafsson, 1994). France has continued to recognise and promote women's position as both wives and mothers and as workers and may therefore be categorised as a moderate male breadwinner model. Sweden (or Denmark) is categorised as weak in that, since the 1970s, women have been defined as workers rather than as wives and mothers. However, Lewis and Ostner's gendering of welfare states has turned out to be very preliminary and incomplete.

2.2.2.4. Gornick *et alii* (1997)

Gornick *et alii* (1997) examined child care arrangements, maternity and parental leave provisions in 18 different countries in the early 1990s. They then classified countries according to their score on two indices:

§ The index of policies that support employment for mothers with children under three

§ The index of policies that support employment for mothers with preschool-aged children

Both indices reflected the availability of publicly funded child care, different forms of tax relief, the length of the maternity and the parental leave and the wage replacement rate during each of these leaves as well as whether or not legislation provided for job protection during the time of leave.

Table 2.4.

Gornick <i>et alii</i> (1997)		
<i>High support</i>	<i>Medium support</i>	<i>Low support</i>
Sweden	Austria	Canada
Denmark	Australia	Greece
Finland	West-Germany	Ireland
France	Italy	Luxembourg
Belgium	The Netherlands	Portugal
	Norway	Spain
		United Kingdom
		United States

Source: DALY, M. *Women and the labour market in international comparison: A case of 6 labour profiles*. Periodic Progress Report N°1 of the Thematic Network: "Working and Mothering: Social practices and Social Policies", TSER Programme of the European Commission, Area III: Research into Social Integration and Social Exclusion in Europe, 1st TSER Seminar held in Lund, November 26-28, 1998.

For Italy, it is important to know that, although provisions for children over 3 are very generous, all other aspects of the policies supportive of female employment tend to lag behind compared to the other countries.

Gornick *et alii* (1997) also observed a relatively strong correspondence between the supportiveness of child-related policies of maternal employment on the one hand and women's employment profiles on the other.

Those countries where the age of the youngest child matters (Germany, Ireland, Luxembourg and the Netherlands) are less supportive of employed mothers than those where the number of children is the factor precipitating a change in mothers' labour force participation.

A striking exception to the co-variation between policies and participation rates is presented by the liberal countries, especially the US (low support but high participation). An individual exception is also presented by Portugal (low support but high participation).

2.2.2.5. *Letablier (1998)*

A comparative analysis of family policies across Europe was conducted by Letablier (1998). We would like to present two aspects of her research work. A first grouping of countries was established based on Letablier's analysis of the family-employment relationship (1998). In a second stage, she compared the general context and state of family policies in the different European Union member states in order to build up a typology of family policy models.

In her analysis of the family-employment relationship, Letablier (1998) has devoted a great deal of attention to the different conceptualisations of women's work and the varying degrees of acceptance of early socialisation of children. When the state intervenes in this area, it is not always for the same reasons: in France, it is to protect mothers at work, whereas in the Nordic countries, it is mainly to improve equality between men and women. Letablier (1998) has brought together the different national perspectives which have then served to identify several configurations of the family-employment relationship in the EU member states:

- First group:
 - public policy support makes employment and family life compatible;
 - state support is aimed at improving equality (Nordic states) or family well-being and the situation of women as mothers (Belgium, France).
- Second group:
 - policies help parents to combine paid work outside the home with child-rearing presuming that one parent, most often the mother, ceases or reduces her economic activity in order to return home to raise young children;
 - care work is more or less recognised by the state under the form of paid parental leave and/or access to social rights;
 - this “strong male breadwinner model” holds for, among others, Austria, Germany, Luxembourg and the Netherlands.
- Third group:
 - state support is low and associated with movements in and out of employment;
 - governments are to stay out of private lives except when families fail. Thus, care is seen as a family obligation. In this sense, the UK and Ireland have long opposed the European regulation projects concerning maternity and parental leave because they are considered as limitations to employers' liberty.

- Fourth group:
 - weak state support due to financial constraints;
 - an underdeveloped system of social protection that gives priority to more pressing social problems;
 - family networks substitute state support;
 - young women choose to work, thereby lowering fertility rates;
 - family and employment are in fierce competition.

Letablier (1998) also classified the European countries according to their general family policy models.

- *France, Belgium, Luxembourg*: universal family allowances irrespective of income, policy focused on the family unit (in France until 1997).
- *Denmark, Sweden, Germany, the Netherlands*: less explicitly family-oriented policies.
 - Ø *Denmark, Sweden*: leaders in the provision of child care and parental leave, focus is not on the family unit but rather on the needs of children and on gender equality.
 - Ø *Germany*: state responsibility towards families is formally recognised, focus on the conjugal family.
 - Ø *The Netherlands*: state responsibility towards families is formally recognised, support of conjugal families and their offspring as a fundamental social value. Since the early 1990s, there has been a marked shift towards individualisation, accompanied by a more diversified and pluralistic approach.
- *UK*: small state power, care is a family responsibility, implicit state support.
- *Spain*: rejection of state intrusion into family affairs, the voluntary and the private sector are assumed to support families in the absence of public policies, intergenerational solidarity is still very effective.
- *Italy*: small state power, decision-taking mainly occurs on the local level giving rise to large disparities. Nonetheless, there is a tradition of state policy (legislation) intended to protect working mothers even though women's activity rates are quite low.

In line with Letablier's ideas, Trifiletti (1998) constructed the table below (Table 2.5.):

Table 2.5. The family-employment relationship

	<i>traditional division of care work</i>	<i>shared care work</i>	
<i>supportive subsidiarity</i>	I family-employment alternated (Germany)	II family-employment combined (Sweden but also the Netherlands and France)	<i>time to care public problem</i>
<i>compulsive subsidiarity</i>	family-employment in competition (Mediterranean countries) III	family-employment private matter (UK, Ireland) IV	<i>time to care private matter</i>

Note: The UK gradually moved from I to IV and Ireland from III to IV. Norway falls between II and III. Part-time work is predominant in I and II, full-time female employment in III and IV. Squares II and IV correspond to countries with a strong civic culture and easy labour market access. Squares I and III are countries with a weaker and more locally based substitute for civic culture and especially in III labour market access is more difficult. France lies across II and III while the Netherlands are an intermediate case lying across squares I and II.

Source: TRIFILETTI, R. Comments on « *Comparing Family Policies in Europ* ». Periodic Progress Report N°1 of the Thematic Network: "Working and Mothering: Social practices and Social Policies", TSER Programme of the European Commission, Area III: Research into Social Integration and Social Exclusion in Europe, 1st TSER Seminar held in Lund, November 26-28, 1998.

2.2.2.6. Forssén and Hakovirta (2000)

Another interesting study of family policy systems and their similarities and differences was carried out by Forssén and Hakovirta (2000). They have compared the levels of family policies in 13 countries acknowledging that mothers' labour supply is influenced both by their preferences and labour market conditions but also by family policies. Therefore, the study was focused on direct cash transfers and taxation as well as on social services that enable mothers to be active in the labour market.

Two indices were constructed. The family policy index includes cash transfers for families with children, and taxation and child care arrangements. The index was constructed so as to include two dimensions. First, the *work incentive dimension* which covers those measures encouraging women to participate in the labour force such as separate taxation and child care policies. Second, the *home care incentive dimension* which includes those measures encouraging mothers to stay at home such as paid maternity leave, extended leave and economic support during the extended leave.

Table 2.6.

Forssén and Hakovirta (2000)		
<i>High family policy index (8 or more)</i>	<i>Medium family policy index (5 or more)</i>	<i>Low family policy index (4 or less)</i>
Finland Sweden Belgium Italy	Denmark France Norway Germany Spain	The Netherlands United Kingdom United States Australia

Source: FORSSÉN, Katja; HAKOVIRTA, Mia. *Family policy, work incentives and employment of mothers: Findings from the Luxembourg Income Study*. Paper presented at The Year 2000 International Research Conference on Social Security ("Social security in the global village"), organized by the Finnish Member Organizations of the International Social Security Association (ISSA) and held at Helsinki, Finland on 25-27 September 2000.

The Scandinavian countries as well as France, Belgium, Italy and Spain all have a wide range of family policy legislation.

Nordic states tend to reject special protection for women as mothers in the labour market on the ground of the equality objectives. Therefore, generous state provision of child care, paid parental leave for both men and women and favourable working-time arrangements have to be understood as measures supporting women's access to the labour market.

In France and Belgium, the focus has been on improving the quality of life for working people, on protecting the standard of living of families and on achieving greater equality between men and women in the labour market.

An underdeveloped system of social protection characterises those countries where governments have deliberately abstained from interfering in the private lives of individuals (UK, US, Australia). Public child-care aims at protecting children in need but not at allowing mothers to take on paid employment. Paid parental leave is not a universal right, it is merely an area of negotiation between employees and employers.

When parental leave, leave to care for sick children and child care are considered together, it is clear that the Nordic countries have gone much further than others in helping parents to reconcile employment with family life. The liberal welfare states lack this kind of support almost totally.

It appears that not only the coverage of day care matters but also its cost. The day care fees of single parents in relation to their incomes are highest in the UK (28%) and the US (22%). In Australia, high day care fees have forced women to return or stay at home. In the Nordic countries, day care coverage and state subsidies for day care costs are both very high.

2.2.2.7. Korpi and Palme (1998)

Less well-known but nevertheless a good example of the second cluster of comparative analysis is Korpi and Palme's typology of welfare states based on the institutional characteristics of old-age pensions and sickness cash benefits (Korpi *et al.*, 1998; Lumen, *et al.*, 2000). Three aspects of these benefits are considered: targeting versus universalism, extent of protection, and type of governance of the social insurance program. Their analysis has given rise to the following fourfold typology:

1) *Targeted program*

- Means-tested benefits
- Criteria to determine need may vary considerably across countries
- Low level of payment

2) *Corporatist model*

- Benefits limited to active population
- Eligibility dependent on contributions and occupational category
- Segmentation resulting from the existence of different social insurance schemes for different occupational categories
- Earnings-related benefits
- Coverage only up to a given income ceiling

3) *The basic security model*

- Eligibility dependent on contributions (same scheme for all insured) or on citizenship (universal)
- Flat-rate benefits or earnings-related but with a low income ceiling

4) *The encompassing model*

- Eligibility dependent on contributions and citizenship
- Universal schemes combined with earnings-related benefits for the working population

Table 2.7.

Korpi and Palme (1998)		
<i>Countries</i>	<i>Type of social insurance institutions</i>	
	Pensions	Sickness insurance
Austria	Corporatist	Corporatist
Belgium	Corporatist	Corporatist
France	Corporatist	Corporatist
Germany	Corporatist	Corporatist
Italy	Corporatist	Corporatist
The Netherlands	Basic security Universal coverage Flat-rate benefit	Corporatist
Denmark	Basic security Universal coverage Flat-rate benefit	Basic security Universal coverage Flat-rate benefit
Finland	Encompassing	Encompassing
Sweden	Encompassing	Encompassing
Ireland	Basic security Non-universal coverage	Basic security Non-universal coverage
United Kingdom	Basic security Non-universal coverage	Basic security Non-universal coverage

Source: LUMEN, J., LE CACHEUX, Jacques, MEULDERS, D. *Policy Digest*, 2000.

Table 2.8. establishes some links between different typologies described until now.

Table 2.8. Similarities and differences between the typologies of Korpi, Lewis and Esping-Andersen

Model	countries	characteristics
“dual-earner” (Korpi) “weak male breadwinner / dual-earner regime” (Lewis) “social-democratic” (Esping-Andersen)	DK, FI, SW, N	§ High level of services AND transfers § Extensive “defamilization”
“general family support” (Korpi) “strong male breadwinner” (Lewis) “conservative” (Esping-Andersen)	BE, D, IRL, I, NL, E, FR (Lewis vs. Korpi), AU	§ Moderate to generous transfers § Some tax breaks for housewives § Lack of public services § Little “defamilization”
“market-oriented” (Korpi) “liberal” (Esping-Andersen)	JAP, UK, NZ, AUS, US, CA	§ Low level of services AND transfers § Defamilization through markets in US and CA (Esping-Andersen)

2.2.2.8. Lumen, Le Cacheux, and Meulders (2000)

Sharing a similar underlying logic as Korpi and Palme’s earlier comparative welfare state regime analysis (1998), Lumen, Le Cacheux, and Meulders (2000) drew a welfare state typology based on the analysis of six branches of social protection: maternity, sickness, invalidity, unemployment, pensions, and family benefits. Five aspects of the different programs were examined: the field of application, the kind of payment, the replacement rate

(except for the family benefit of which the amount is expressed in PPP), length of payment, and eligibility conditions. In order to refine the typology, the methods which are used to finance the social protection system and the fiscal pressure have also been taken into consideration.

Table 2.9.

Lumen, Le Cacheux, and Meulders (2000)			
<i>First group</i>	<i>Second group</i>	<i>Third group</i>	<i>Fourth group</i>
United Kingdom Ireland	Sweden Denmark Finland The Netherlands	Austria Belgium Germany France Luxembourg	Spain Greece Italy Portugal

Source: LUMEN, J., LE CACHEUX, Jacques, MEULDERS, D. *Policy Digest*, 2000.

2.2.2.9. Korpi (2000)

Recently, Korpi (2000) categorised “gender policy models” according to the level of public care services on the one hand, and the level of family support through transfers on the other. While services tend to increase female employment, transfers usually have the opposite effect. Korpi (2000) found that the dual-earner model was the most compatible with the gender-egalitarian politics of the social-democratic parties of the Nordic countries. The dual-earner model is characterised by a great number of public services and only few transfers. The centralised state structure and encompassing system of social partnership which are so typical of the Nordic countries have encouraged a well-developed welfare state. While unionisation is equally high and social partnership equally well-developed on the European continent as compared to the Nordic countries, the political context has turned out to be much more conservative. This is the result of status concerns and the strong role played by the church. The presence and activity of unions has contributed to a labour market which is highly regulated entailing extensive protection for workers as opposed to citizens, as it is the case in the Nordic countries. Confessional parties trying to protect “traditional” family relations in the face of capitalist market pressures were considered to strengthen a general family model. Since the general family model involves a lot of transfers and equally small provision of services, it corresponds to the traditional breadwinner model. Finally, his market-oriented model was to represent secular conservative parties which put market forces above gender or family considerations. Compared to the Nordic countries, industrial relations tend to be more decentralised in liberal regimes resulting in more market-friendly but less egalitarian welfare systems. The market-oriented model is characterised by low levels of both transfers and

services resulting in a level of female employment that is situated somewhere between its levels in the two other models.

Table 2.10. Relative strength of different political tendencies in governments, 1946-1985, and gender policy institutions, 1985-1990, in eighteen countries.

Country	Strength of political tendencies ^a			Gender policy institutions
	Confessional	Conservative-centrist	Left	
<i>Ireland</i>	95	0	24	General family support
<i>Italy</i>	86	47	44	General family support
<i>Netherlands</i>	80	41	34	General family support
<i>Belgium</i>	69	38	46	General family support
<i>Switzerland</i>	66	73	55	Market-oriented
<i>Germany</i>	55	57	37	General family support
<i>Austria</i>	48	6	75	General family support
<i>France</i>	22	77	28	General family support
<i>Canada</i>	0	100	0	Market-oriented
<i>United States</i>	0	100	0	Market-oriented
<i>Japan</i>	0	99	3	Market-oriented
<i>New Zealand</i>	0	68	20	Market-oriented
<i>United Kingdom</i>	0	67	42	Market-oriented
<i>Australia</i>	0	60	24	Market-oriented
<i>Norway</i>	14	22	73	Dual-earner
<i>Denmark</i>	4	54	63	Dual-earner
<i>Finland</i>	0	78	56	Dual-earner
<i>Sweden</i>	0	28	80	Dual-earner

^aAverage, 1946-1985, of percent of government seats and percent of time in governments.

Source: ORLOFF, Ann Shola. *Gender equality, women's employment: Cross-national patterns of policy and politics*. Paper prepared for the meeting of the International Sociological Association Research Committee 19, Poverty, Social Welfare and Social Policy "Old and New Social Inequalities: What challenges for Welfare States?", University of Oviedo, Spain, September 6-9, 2001.

2.2.2.10. Walby (2001)

A last but equally interesting analysis of the second cluster is Walby's. Building on a wide spectre of research already accomplished, she further developed the concept of gender regimes encompassing many more relevant aspects than the sole welfare state (Walby, 2001). Starting out from Lewis and Ostner's over-simple distinction between strong, modified, and weak male breadwinner models (1994), she built on previous work by a wide range of authors to add to her analysis new and interesting sources of variation between different countries' welfare, or better, gender regimes. The various perspectives she based her analysis on include the question whether women's family role is considered in terms of their being wives, mothers, or workers, whether care is provided in the form of services, money to purchase services, or money to allow for more time at home, and finally, the actual outcome of different welfare state regimes in terms of women's incomes and well-being.

In line with her predecessors, Walby (2001) acknowledged that the concept of « welfare state », as opposed to « gender regime », does not capture certain areas of state activity that have a significant impact on the balance of women's paid and unpaid work and therefore also on gender relations. She hereby refers to the regulation of the labour market, of marriage and divorce, of abortion and contraception, of male violence against women, and last but not least, education. Furthermore, the concept of gender regime also takes into account the second and often neglected component of women's unpaid labour, that is housework (besides caregiving)²⁷.

The central thesis of Walby's theory on gender regimes is that there is a continuum along which gender regimes move from domestic to public (Walby, 2001). Different countries are at different stages of this continuum and move at different times and rates under the impulse of modernisation and restructuring. The transition from domestic to public takes place through both the state and marketised mechanisms although different countries use both routes to different extents.

In theory, there are three possibilities as to the nature of changes taking place in gender regimes.

First, *gender regimes may change over time but all changes are rooted in national particularities and are therefore confined to a fixed range because of the continued importance of original national differences*. Walby (2001) refers to this scenario as the thesis of “entrenched national differences”.

Second, *changes in gender regimes may result from modernisation. In the strong version of this thesis the processes converge. In the weak version, modernisation causes similar and parallel changes in different countries but initial differences may remain*. Walby (2001) calls this the “modernisation” thesis.

A third possible option is that of *an interaction between a process of major structural change (economic modernisation) and pre-existing differences (political institutions)*. *This interaction is believed to lead to common outcomes in new social patterns which may reverse the rankings of the differences between the countries or create new ones*. Walby (2001) names this the “restructuring” thesis.

²⁷ Too often is the analysis of unpaid work limited to caregiving. Nevertheless, it is true that the extent to which household members' wages are used to purchase care constitutes an important factor of variance in the patterns of gender relations over time and between countries. Countries where domestic labour is socialised through the state suffer less social inequality since there is a more egalitarian provision of child care. On the contrary, socialisation through the market favours the rich and excludes the poor who resort to career breaks since they cannot afford to purchase care on the market and these career breaks in turn have a negative impact on their lifetime earnings.

Her evidence, however, points out the dominance of the latter two theses. Commodification of women's labour is thus proven to be a common stage of development for all welfare state regimes and not just for the social-democratic model.

While gender regimes move from domestic to public along a continuum, the stage they are at at any given moment is determined by their performance in all of four fields that are put forward and analysed by Walby (2001). She tested each of her three preliminary hypotheses in four fields that are constitutive of what she calls a gender regime.

1. Employment

A glance at female employment led Walby (2001) to distinguish between groups of high, mid-level, low and very low participation over time among the European countries. However, women's labour has significantly increased everywhere between 1976 and 1999 and all countries have experienced a shift in women's work from the domestic to the public sphere. This evidence heavily contradicts the first thesis of deeply entrenched national differences. It is surely much more supportive of the second modernisation thesis and, in particular, of its strong version of convergence since a plateau-ing effect can be discerned once the levels of female labour come close to those of men. The fact that processes converge and thus that cross-country differences seem to be transitory is not in line with the third thesis of restructuring. Thus, evidence is strongest for the modernisation thesis

2. Family: divorce rates and births out of wedlock

Divorce rates

A glance at divorce rates led Walby (2001) to distinguish between groups of consistently high, medium and low divorce rates over time among the European countries. However, divorce rates have significantly increased everywhere between 1970 and 1995. This last finding contradicts the first thesis of deeply entrenched national differences. It rather reinforces the second (modernisation) thesis. While convergence is not observed as clearly as in the case of female employment, it seems a fact that divorce rates have increased a whole lot more between 1970 and 1985 than they did during the next decade. A plateau seems to have been reached. The developing pattern of divorce rates provides little evidence for or against the restructuring thesis but, instead, evidence is strongest for the modernisation thesis

Birth rate outside marriage

This indicator captures the extent to which marriage fully encapsulates women's lives. It measures the strength of marriage in domesticating women. The higher the birth rate outside marriage, the more public is the gender regime and the weaker the male breadwinner model. The rate has increased considerably over time but, instead of reaching a plateau, the cross-national differences have increased as well. Therefore, evidence is most consistent with the restructuring hypothesis

3. Fertility

The first thesis of entrenched national differences does not hold since no groups of countries were found to be consistently above or below the EU-averages across the period 1960-1995. In any year, the same clusters tend to stand out but a consistent fall in fertility can be observed over time. This seems supportive of the modernisation hypothesis were it not that the fall has turned out to be uneven. While contradictory changes took place in the different countries, it remains possible to identify approximate country clusters. Therefore, the evidence primarily tends to strengthen the restructuring thesis. The lowest fertility rates and the greatest falls appear in those European countries with the strongest traditions of restriction of availability of abortion and contraception. Over time there has been a reversal in the previous differences between the countries. Another striking observation is that fertility and female employment do not, in any way, seem to preclude one another. All depends on the available package of financial incentives and child care provisions to facilitate women's combination of work and childrearing. In other words, the gendered patterns of welfare provision seem to be decisive. To sum up, the increase in women's paid labour and the modernisation of the economic relations in the gender regime have interacted with prior state institutions resulting in a new restructured set of rankings in fertility rates, or in other words, evidence is most consistent with the restructuring hypothesis

4. Political representation

The period 1970-'95 has witnessed a general transition to higher female political representation. However, the increase has been uneven and no convergence has taken place between the countries (although there may be a plateau at 50%). Different factors seem to affect women's level of representation:

- § Female employment
- § Electoral system
- § Extent of legislature and of party competition
- § Party organisation
- § Process of recruitment of candidates within parties

All of the above factors can potentially increase or decrease women's representation. However, they do not explain the observed increase in the number of women in parliament over time. They are useful for a cross-country analysis but fail to be of value in any analysis over time. For a more elaborate analysis of the importance of political factors in shaping women's employment policies and larger welfare politics, we would like to refer to Korpi's work which we have briefly discussed in the previous section (Korpi, 1983; Korpi, 2000).

To sum up, differences between countries are primarily due to the stage they are at in the transition process. At any moment it is possible to identify clusters of countries with similar patterns of gender relations. The main source of variation is their stage in the transition process from domestic to public. A secondary source of variation is the interaction between deeply embedded social institutions and the restructuring process. Modernisation means that the same changes are replicated everywhere but not in an identical fashion since the interaction with social institutions can lead to the emergence of new patterns.

The commodification of women's labour has thus proven to be a common stage of development for all welfare state regimes and in no way unique to the social-democratic regime.

2.2.3. The third cluster of welfare state typologies

This cluster of comparative analysis has focused on the efficiency of social protection systems in terms of poverty.

2.2.3.1. Hausman (1994)

In 1994, Hausman (1994) analysed the efficiency of various social protection systems by examining the weight of social protection, its effects as well as some methodological elements of the approach to social protection. He distinguished different interventions of social protection and looked at the destination of social transfers in order to evaluate efficiency by

means of the reduction coefficient²⁸ and the reduction rate of the poverty gap²⁹. His study was based on data from the Luxembourg socio-economic panel (PSELL). Table 2.11. presents some of Hausman's numerical results. More poverty reduction analysis was performed in 1995 by Duncan and Gustafsson (Cfr. Chapters 2 and 3 in McFate *et alii*, 1995).

Table 2.11. Hausman (1994): Welfare state and poverty reduction

countries	Poverty rate before transfers	Poverty rate after transfers	Reduction coefficient	rank	Reduction rate of poverty gap	rank
Belgium ('88)	43.3	7.2	83.3	1	94.5	3
Luxembourg ('91)	38.6	7.6	80.3	3	94.6	2
The Netherlands ('87)	43.6	9.9	77.3	4	93.4	4
Sweden ('87)	49.4	8.5	82.8	2	94.8	1
<i>Finland ('91)</i>	28.5	8.2	<i>71.2</i>	8	<i>87.2</i>	7
<i>France ('84)</i>	44.9	12.6	<i>71.8</i>	7	<i>85.8</i>	8
<i>RFA ('84)</i>	40.5	10.3	<i>74.6</i>	5	<i>91.0</i>	5
<i>United Kingdom ('86)</i>	45.1	12.4	<i>72.5</i>	6	<i>87.4</i>	6
<i>Ireland ('87)</i>	44.7	19.6	<i>56.2</i>	10	<i>79.8</i>	10
<i>Italy (86)</i>	41.6	15.8	<i>62.0</i>	9	<i>80.5</i>	9

Source: LUMEN, J., CACHEUX, Jacques Le, MEULDERS, D. *Policy Digest*, 2000.

2.2.3.2. Christopher (2001)

The table below (Table 2.12.) presents some of Christopher's results (2001). She analysed the outcome in terms of poverty reduction of each country's tax and transfer system. As a preliminary note, it is important to know that, in absolute terms, mothers' and single mothers' poverty rates are the lowest in Sweden, Finland, and France, the nations most representative of the "individual" or Parent/Worker model. This model is opposed to the Caregiving model which is dominant in the Netherlands, Germany, and the UK. However, mothers' and single mothers' poverty, in absolute numbers, seems to be quite low in the Netherlands as well. In these nations, it appears that women are most able to form autonomous, non-poor households independent of men. In contrast, mothers' and single mothers' poverty rates and poverty ratios are the highest in the English-speaking countries and in Germany.

²⁸ The reduction coefficient is equal to the poverty rate before transfers minus the poverty rate after transfers, divided by the poverty rate before transfers, and multiplied by a hundred.

²⁹ The poverty gap corresponds to the budget which, in theory, would be necessary in order to raise the income of poor households to the level of the poverty threshold.

Table 2.12. The percent reduction in poverty rates due to each country's tax/transfer system

	AS	CN	FI	FR	GE	NL	SW	UK	US
Mothers	43.3	38.5	79.2	69.2	28.6	53.4	89.8	49.3	13.3
Single Mothers	44.2	31.4	86.3	63.7	28.0	73.2	89.1	56.9	14.0
Female Non-mothers	47.1	41.1	79.4	77.1	47.7	68.3	84.8	60.6	16.3
Men	40.0	39.9	74.7	70.6	34.5	58.3	78.2	48.6	10.8
Single Female Non-mothers	32.1	28.6	74.3	63.6	36.4	70.4	85.7	65.3	6.3
Non single mothers	45.0	42.6	77.2	75.9	40.5	59.6	86.7	51.2	15.0

Source: CHRISTOPHER, Karen. *Caregiving, welfare states and mothers' poverty*. Luxembourg Income Study Working Paper N°287, November 2001.

The German welfare state reduces poverty more effectively among groups other than mothers and single mothers. Overall, we see that the “individual” or Parent/Worker welfare states most effectively reduce mothers’ and single mothers’ absolute poverty rates. Only Sweden is “mother-friendly” when comparing mothers to female non-mothers. Finland is also friendlier to mothers than other welfare states.

Roughly speaking, three groups of countries can be distinguished in Table 2.12. Sweden and Finland stand out as leaders in the reduction of poverty for all categories. France comes very close to Finland with respect to poverty reduction among female non-mothers and non-single mothers. However, it lags far behind for the other categories. The Netherlands is particularly efficient in reducing poverty among single mothers and non-mothers. Finally, the United Kingdom can also be considered a medium performer although it is less efficient over the whole line than the Netherlands and France. A third and final group of countries includes Germany and Austria alongside the English-speaking countries of Canada and the United States. These countries’ tax/transfer systems fail to reduce poverty in a significant manner.

2.2.4. A fourth cluster of welfare state typologies?

Feminist discussion has not been blind to the issue of social citizenship. Feminists have pointed out that in a great many approaches to social citizenship, women’s full integration into waged work or, in other words, full provision of child care is the avenue to full citizenship of women and to gender equality. However, they have rejected a notion of gender equality as resting on women’s employment, arguing that this represents an unacceptable androcentrism and preferring what is often thought of as a strategy of “equality in difference”, by which women’s “traditional” domestic and caregiving activities are valorised and serve as a basis for citizenship rights and political standing. Knijn and Kremer (1997) use the term ‘including’ citizenship to stress the fact that social citizenship should include the right to care, as well as the right to be cared for, as guaranteed and promoted by the welfare state. However,

the feminist forum often neglects the role of cultural values and ideals which are crucial to explain why social citizenship is defined in different ways in different welfare states and why also social practices of citizenship vary. However, exceptions exist. We will here present the ideas of Pfau-Effinger (2000) who has indeed incorporated these differing cultural beliefs into her comparative analysis and classification of Western European gender cultural models.

These models differ with respect to two features :

§ Cultural ideas regarding the gender division of labour, the main spheres of work for women and men, the social valuation of these spheres and the way dependencies between men and women are generated.

§ Cultural construction of the relationship between generations, or in other words, the construction of motherhood, fatherhood, and childhood.

Based on these underlying features Pfau-Effinger (2000) has distinguished six gender cultural models:

- (a) The family economic gender model
- (b) The male breadwinner / female home carer model
- (c) The male breadwinner / female part-time carer model
- (d) The dual breadwinner / state carer model
- (e) The dual breadwinner / dual carer model
- (f) The dual earner / marketised female carer model

These models are not exclusive. In Sweden, the dual breadwinner / dual carer model is combined with elements of private care for children. Mothers tend to work long part-times in the phase of active motherhood. The male breadwinner / female part-time carer model is dominant in former West-Germany while the dual breadwinner / dual carer model prevails in former East-Germany. Finally, the Netherlands seem to be in a transitory phase, the dual breadwinner / dual carer model prevailing at the cultural level while in practice the male breadwinner / female part-time carer model is still dominant.

2.3. Overview of the four clusters of welfare state typologies

The summarising table below (Table 2.13.) shows that two countries are always to be found in the first group : Finland and Sweden.

Denmark usually joins these countries except in three analyses. Firstly, while Denmark was found to belong to the top group in Adema's analysis of gross public social expenditures

(1996), the country's position degraded to the middle group when net expenditures were considered. Secondly, in her analysis of the family-employment relationship, Letablier (1998) found the three Nordic states to be in the top group. With the purpose of achieving gender equality, public policy in the Nordic states is designed to facilitate the work/life balance. However, by focusing on gender equality and childrens' needs, family policy in the Nordic countries is not centred around the family unit, which has led Letablier (1998) to categorise the Scandinavian family policy model as "less explicitly family-oriented" compared to countries such as France or Belgium which make up a first group of countries with policy models focused directly on the family as the central unit. Finally, with respect to Forssén and Hakovirta's family policy index (2000), Denmark's score placed the country in the middle group.

The Netherlands frequently switches places. While transfers amount to a large proportion of GDP (Mac Farlan and Oxley, 1996), net public social expenditures are among the lowest in Europe (Adema, 1996). Esping-Andersen (1990) considers the Netherlands to be a conservative-corporatist welfare state regime and this conforms to Korpi and Palme's qualification of the Dutch sickness insurance scheme (1998). While the Netherlands most often figure among the other continental European countries, it is considered a country more similar to the Scandinavian welfare states by Lumen, Le Cacheux and Meulders (2000), and also by Letablier (1998) who has thought Dutch family policy to be less explicitly family-oriented than in France or Belgium. On the contrary, Forssén and Hakovirta (2000) have put the Netherlands among the liberal welfare states given its very poor score on the family policy index.

Belgium moves from its usual position in the middle group to the top group on four occasions. Gornick's focus on policies supportive of mothers' employment led to a top position for Belgium among those of the Nordic countries (Gornick *et alii*, 1997). When family policy is considered, as was the case in both Letablier's and Forssén and Hakovirta's analyses (Letablier, 1998; Forssén and Hakovirta, 2000), then Belgium seems to come out as a leader once again. Belgium also scores excellently in terms of net public social expenditures (Adema, 1996).

The European representatives of the liberal model, Ireland and the United Kingdom, most frequently feature together among the poor performing welfare state regimes. In terms of transfers (as a percentage of GDP), they seem to perform a bit better (Mac Farlan and Oxley, 1996), and in terms of net public social expenditures (Adema, 1996) the United Kingdom

moves to the level of medium performers while Ireland stays behind among the poor performers.

By contrast, Ireland moves ahead, leaving the United Kingdom behind, in Korpi and Palme's analysis of the relationship between gender policy models on the one hand, and political tendencies on the other (1998). The secular conservative parties which have long been in power in the United Kingdom have reinforced market-oriented gender policy institutions, while confessional parties trying to protect traditional family relations have contributed to Ireland's general family support model.

In terms of their social protection system (Lumen, Le Cacheux, and Meulders, 2000) or their general family policy (Letablier, 1998), both the United Kingdom and Ireland score better than the Southern European countries. Liberalism has resulted in a low level of state support but the situation has not degraded to the same extent as in Southern Europe where state support is at a critical low not for ideological reasons but rather because of extremely harsh financial constraints. Also, the British tax and transfer system seems to be relatively efficient in reducing female poverty rates (Christopher, 2001).

Remarkably, Walby (2001) groups the Nordic and the liberal countries in one category but excludes Ireland which she considers to be more similar to the Southern European countries with respect to the different components of her concept of « gender regime ».

A further three countries that almost always feature together in the middle group of continental European welfare states are France, Austria, and Germany. However, a few minor exceptions can be observed. Germany moves up and away from its partners in terms of net public social expenditures (Adema, 1996) and France seems to be more supportive than the others with regard to mothers' employment (Gornick *et alii*, 1997). Letablier (1998) found French family policy to be more explicit and compatible with female employment than it is in Germany or Austria. The German and Austrian tax and transfer systems perform remarkably less well than the French system with regard to poverty reduction among women, whether they are mothers or not, workers or full-time caregivers, single or married (Christopher, 2001). Luxembourg deviates from this group of countries only in two of the comparative welfare state analyses we have presented. Its policies to support the employment of mothers of small children seem to be less successful than those of the other countries on the European continent (Gornick *et alii*, 1997). By contrast, its family policy seems to be more successful (Letablier, 1998).

A last group of countries deserves to be glanced at. The Southern European countries seem to form a less coherent group than one would be led to believe at first sight. Esping-Andersen

(1990) has qualified these countries as conservative-corporatist welfare state regimes, putting them on the exact same level as those countries that form the bulk of the European continent. Mac Farlan and Oxley (1996) have observed a slightly better relative performance of Spain with respect to the proportion of transfers in GDP. On Walby's continuum (2001), the Southern European welfare states of Spain, Portugal, Italy, and Greece lag behind in the transition from domestic to public. Ebbinghaus (1998) has also considered them to be welfare laggards and has, therefore, differentiated them from Esping-Andersen's conservative-corporatist cluster to form a group on their own which he defined as the latin residual welfare states. Korpi and Palme (1998) found that the Italian system of old age pensions and sickness cash benefits is as corporatist as it is in the main conservative-corporatist welfare state regimes. Unlike other researchers that have often classified the Southern European countries together with the liberal ones, Lumen, Le Cacheux, and Meulders (2000) have created a separate category for Southern Europe, just as Ebbinghaus (1998) did. An important reason for doing so has, undoubtedly, been the very high degree of familialism that distinguishes these countries from all others. While Gornick *et alii* (1997) already separated Italy from the others by moving it up to the level of countries such as the Netherlands, West-Germany and Austria on the ground of Italy's more generous policies to support mothers' employment, Forssén and Hakovirta (2000) went even further in this direction placing Italy alongside Finland and Sweden because of its very high score on the family policy index they constructed. In the latter analysis, Spain also performed better than usual with a medium score on the family policy index comparable to the score of countries such as France, Germany, and Denmark. Remarkably, Letablier (1998) found no such reason for promoting any of the Southern European welfare states when she analysed different models of family policy across Europe.

As a final remark, we would like to draw attention to the fact that, according to the outcome of the very few studies that incorporate Norway, this country does not usually feature together with its Scandinavian neighbours, but seems to be rather more similar to the conservative-corporatist welfare state regimes of the European continent. However, as we have pointed out before, the recent introduction of family-friendly policies in Norway has significantly narrowed the previous gap between Norway and its Nordic neighbours.

Table 2.13. Summarising table of existing welfare state typologies

ANALYSIS	FIRST GROUP	SECOND GROUP	THIRD GROUP
<i>Mac Farlan and Oxley (1996)</i> « transfers as a % of tendential GDP »	The Netherlands Finland Denmark Sweden	Belgium Luxembourg United Kingdom Ireland France Austria Spain Germany	Portugal Italy Greece
<i>Adema (1996)</i> « net public social expenditures as a % of GDP »	Belgium Finland Germany Sweden	Denmark United Kingdom	The Netherlands Italy Ireland
<i>Esping-Andersen (1990, 1999)</i> « decommodification, social stratification and state-market-family nexus »	Denmark Finland Sweden	Austria Belgium France Germany Greece Italy Luxembourg Netherlands Spain	Ireland United Kingdom
<i>Lewis and Ostner (1994)</i> « strong-modified-weak male breadwinner »	Sweden Denmark	France	Germany Ireland United Kingdom The Netherlands
<i>Walby (2001)</i> « gender regimes »	Denmark Finland Sweden United States United Kingdom Canada Czech republic	Austria Belgium France Germany Switzerland Luxembourg	Greece Italy Spain Portugal (Ireland)

	Hungary Poland		
Letablier (1998) « family policy models : explicitly family-oriented, less explicitly family-oriented, implicit state support »	France Belgium Luxembourg	Denmark Sweden Germany The Netherlands	United Kingdom Spain Italy
Korpi and Palme (1998) « old age pension and sickness cash benefits »	Finland Sweden (Denmark) (The Netherlands)	Austria Belgium France Germany Italy (The Netherlands)	Ireland United Kingdom
Korpi (2000) « gender policy models (services/transfers balance) and political tendencies »	Norway Denmark Finland Sweden	Ireland Italy The Netherlands Belgium Germany Austria France	Switzerland Canada United States Japan New Zealand United Kingdom Australia
Gornick et alii (1997) « policies supportive of the employment of mothers of small children »	Sweden Denmark Finland France Belgium	Austria Australia West-Germany Italy The Netherlands Norway	Canada Greece Ireland Luxembourg Portugal Spain United Kingdom United States
Christopher (2001) « poverty reduction due to tax and transfer system »	Finland Sweden	France The Netherlands United Kingdom	Austria Germany Canada United States

<i>Forssén and Hakovirta (2000)</i> « family policy index »	Finland Sweden Belgium Italy	Denmark France Norway Germany Spain	The Netherlands United Kingdom United States Australia	
	FIRST GROUP	SECOND GROUP	THIRD GROUP	FOURTH GROUP
<i>Lumen, Le Cacheux, and Meulders (2000)</i> « maternity, sickness, invalidity, unemployment, pension, and family benefit »	Sweden Denmark Finland The Netherlands	Austria Belgium Germany France Luxembourg	Ireland United Kingdom	Spain Greece Italy Portugal
<i>Ebbinghaus (1998)</i> « subsidiarity and familism »	Denmark Finland Sweden	Austria Belgium Germany France Luxembourg The Netherlands	Ireland United Kingdom	Greece Italy Spain
<i>Letablier (1998)</i> « family-employment relationship»	France Belgium Sweden Denmark Finland	Austria Germany Luxembourg The Netherlands	Ireland United Kingdom	Italy Spain Portugal Greece

2.4. MOCHO's contribution to the comparative literature on welfare states

In this section, we will attempt to draw on the existing typologies of welfare state regimes, the different methodologies underlying them, as well as on their pros and cons to present and defend our own way of constructing a new typology of welfare state regimes in the framework of the MOCHO project.

With respect to the first cluster of comparative literature, we stated that its major flaw was the total neglect of gender. Moreover, a focus on social transfers fails to shed any light on what is much more important in classifying welfare states, namely services. Later on in this section it will become clear how we have tried to take into account both of these critical points in the development of our own methodology for comparing welfare regimes.

To account for the gendered relationship between paid work, unpaid work and welfare, we will try to build on Walby's analysis (2001) rather than following Esping-Andersen's model for the state-market nexus, which takes too little account of the family (1990). For our typology in the framework of MOCHO, we will, for example, try to address the question of care: While some countries provide for care in the form of services, others prefer to offer money allowing for the purchase of care services on the market and still others, and this is particularly important, offer money not to allow for the purchase of care services but to allow for more time to be spent at home to personally care for children or elderly people within the family.

In line with the work previously accomplished by Lumen, Le Cacheux and Meulders (2000) and mentioned above, we will select a number of branches of the social security system which are most relevant to us from the point of view of the MOCHO project. These branches will be covered by four main functions which we will first analyse separately: the Family function, the Maternity function, the Parental function, and the Taxation function.

For each function we will select a number of legislative and statistical criteria. For example, a legislative criterion under the Family function might reveal information as to whether or not an income ceiling is considered to compute family allowances in the country in question. A statistical criterion might then be the average monthly allowance for a family with two children.

In a next stage, we will follow the example of Gornick *et alii* (1997) but also of Forssén and Hakovirta (2000) to attempt to construct indices that summarise the information regarding each function and country. Our aim is first to compute a synthetic index for each of the

functions and for each of the countries, and then to aggregate the function indices so as to end up with one synthetic index per country revealing the generosity of its public policies in favour of women and mothers. We will, of course, ensure that the countries' indices are comparable among each other so that a genuine typology of countries is possible.

In a final stage, we will make use of a software package entitled Decision Lab. This program allows us to change our aggregation method. Changing the weight attributed to each of the criteria we selected in our 4 functions, might result in a significant change in the typology of welfare regimes as well. By means of an example, let us start out from Korpi and Palme's research on how gender policy models differ according to the level of public care services on the one hand, and transfers on the other (1998). Since the effect of both types of family support, services or transfers, on women's employment is quite different, this should be taken into consideration when evaluating the performance of different welfare regimes. In our analysis, we will be capable of doing this thanks to the Decision Lab program, given that it enables us to use a different weighting factor for transfers and for services.

2.5. Conclusion

The existing literature suggests that the development of modern welfare states can be described as an incremental process from socio-economic equality, which denotes "equality of exchange conditions", to socio-economic security. The latter is believed to have led to an equalisation in the disposal of resources, a "redistribution according to needs" and, thus, to what is commonly called an "equality of results". Empirically, security meant integrating the working classes into the market economy without challenging the functioning of the market. Yet, "social citizenship" has by no means automatically changed the unequal gender division of labour and the differing work and life prospects for women. On the contrary, one could argue that, because of its male bias, the incremental extension of forms of social rights led to a fuller social inclusion of men by restricting women at least part-time to the private (domestic) sphere. Therefore, we are well aware that the value of any typology of actual welfare state regimes lies in the extent to which women's unpaid work is taken into account. Obviously, our analysis will integrate the family component of the state-market-family nexus, in particular, through a very cautious selection of the statistical criteria in each of the four functions we intend to examine.

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Appendix table 1: Adjustments between gross and net expenses: overview

+/-	Item
	Gross direct public social expenditure
-	Direct taxes and social contributions paid out of public cash benefits
=	Net cash direct public social expenditure
-	Indirect taxes on private consumption financed by net cash transfers
=	Net direct public social expenditure
+	Tax breaks for social purposes (e.g. : tax advantages given to families with children)
=	Net current public social expenditure (1)
	Gross mandatory private social expenditure
-	Direct taxes and social contributions paid out of mandatory private cash benefits
-	Indirect taxes on consumption purchased out of net mandatory private cash benefits
=	Net direct mandatory private social expenditure (2)
(1)+(2)=	Net publicly mandated social expenditures

Source: Labour market and social policy-occasional papers n°39: Net Social Expenditure, Willem Adema, OECD, 1999.

CHAPTER 3: Women's Employment and Public Policies

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3.1. Introduction

At the Lisbon summit (March 2000), the Council re-emphasised the gender dimension of employment:

Member States should strengthen their efforts to include and make visible a gender perspective across all the pillars (OJEC, 24.01.01).

For the first time, the Council stated that Member States should each set quantitative targets for higher employment rates in line with EU targets. These were set at 70% for all employment and 60% for women, to be reached by the year 2010. At the subsequent Stockholm meeting in 2001, intermediate targets of 67% (total) and 57% (for women) were set to be reached by 2005, as well as an additional employment target of 50% for older men and women (55-65 years old) to be achieved by 2010.

In the report given to the Belgian Presidency of the European Union (September 2001), Gosta Esping-Andersen focuses on the fight against child poverty. This must be the main objective of the European Social Model. In order to do so, it is necessary to favour mothers' employment. Several means to encourage female labour can be identified: job security, job flexibility and job quality. Despite some contextual improvements and their strong willingness to work, women still have to face up to the famous challenge of reconciling work and family life.

This chapter looks into the details of female employment and public policies. In the first section, we have focused on the participation of women in Europe's labour market. We have described what are the main trends in each country. To get an idea of women's participation in the labour market, it is not sufficient to look at female employment rates. It is necessary to also consider actual working time. In some countries, while the activity rate is high, women tend to work essentially part-time. This implies different careers and a weaker investment of women in the labour force. Therefore, we have also described female working time in Europe. In a next stage, we have explored the issue of gender discriminations on the labour market in terms of wages and career development. Finally, we have presented a variety of public policies that affect female employment, specifically focusing on taxation policy. Tax provisions may be such as to discourage the worker with the smallest wage in the couple (unfortunately, often the woman) to take on a paid job or to work more.

In the second section, we have analysed the more specific problem of female employment and family life. First, we have described, for Europe, the trend in mothers' employment according to the number of children. Second, we have studied the gender divide between paid and unpaid work within the household. Finally, we have presented a range of European family policies and their effects on mothers' employment, while trying to compare those policies from one country to another.

3.2. Women and labour market in Europe

In this section, we have first drawn the general picture of female employment in Europe from a quantitative point of view : What are the differences across the countries with respect to women's participation in the labour market ? Which European countries have the most active women? What is there to say about their working time?

In a second point, we have approached female employment from a qualitative perspective. As far as working women in Europe are concerned, we have tried to address the following questions: what kind of job do they have? What are their possibilities in terms of career development? Are discriminations between men and women on the labour market still relevant?

The third point introduces the topic of taxation policy and female employment. Which taxation system is most encouraging for female employment?

3.2.1. Female participation in the labour market in Europe*3.2.1.1. Female labour force*

Since the 60's, there has been a strong and persistent growth in female activity in all European countries while male activity rates have stagnated or decreased. This persistent increase in the participation of women is fundamental. In fact, during recession periods, when women were expected to withdraw from the labour market and return home, female activity has kept increasing, and this all through the 80's and 90's. Women no longer constitute the so-called "workers reserve", to use a term of Margaret Maruani (2000), or in other words, precarious workers that are called upon during economic expansion periods and periods of lacking labour supply and removed from the labour market during crises and periods of unemployment. On average, 4 women on 10 were active in Europe in 1996. However, there are a lot of disparities among the different European countries. The following table shows the trend in the participation of women in the labour market across Europe. The activity rate is known to be the ratio of the female active population to the whole active population.

Table 3.1:

**Evolution of the proportion of women in the active population between 1983 and 1996
(in %)**

	1983	1987	1991	1992	1993	1996	2000*
Germany	39.1	39.5	40.9	42.6	42.5	43.1	43.8
Austria	-	-	-	-	-	43.4	44
Belgium	36.9	38.5	40.0	40.6	41.2	41.5	43.4
Denmark	45.5	46.0	46.6	46.8	46.9	45.7	46.6
Spain	-	32.9	35.3	36.1	36.6	38.5	37.3
Finland	-	-	-	-	-	47.8	47.4
France	41.9	43.3	44.3	44.6	45.0	45.5	44.8
Greece	34.1	35.8	36.8	37.0	37.3	38.7	37.7
Ireland	31.1	32.8	34.1	35.4	36.6	38.4	40.7
Italy	34.1	35.6	37.1	36.8	36.7	37.8	36.8
Luxembourg	33.5	35.2	35.6	37.2	36.4	37.0	39.4
Netherlands	33.8	37.6	39.5	40.4	40.6	41.8	42.8
Portugal		41.8	43.8	44.4	44.7	45.2	45.1
Sweden	-	-	-	-	-	47.7	47.5

Chapter 3: Women's employment and public policies **MOCHO State of the Art**

UK	40.3	40.4	43.3	43.7	43.7	44.0	44.8
EU 15	-	-	-	-	-	42.5	-

* The source is not the same for the year 2000 which may explain the unusual differences.

Source: Eurostat, *Labour Force Survey*; for the year 2000 : Moreno D., Escobedo A. and Moss P. (2002).

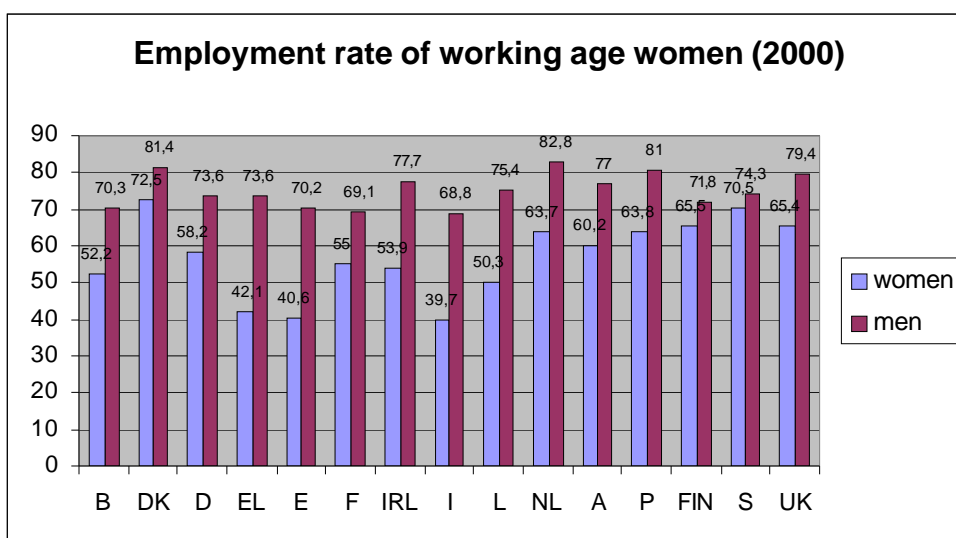
In terms of activity rate, France is part of the leading group composed mainly of Nordic countries: women represent almost half of the active population. Then come the UK, Germany, Austria, Belgium and the Netherlands with an activity rate around the EU average (42,5%). The Mediterranean countries (Italy, Spain and Greece), Ireland and Luxembourg form the last group with a rate below 40%.

Let us now look at the female employment rate, that is to say the ratio between the population of women in employment and the female working-age population. In line with Daly (1998), it is possible to distinguish between four clusters of developed countries as far as female employment is concerned. Daly (1998) established the following classification:

- ü A group with a high female employment rate: Denmark, Finland, Sweden, France, Portugal, Norway, United States, Canada;
- ü A group with medium to high activity: United-Kingdom, Australia;
- ü A group with medium activity: Belgium, Germany, the Netherlands;
- ü A low activity group: Ireland, Italy, Spain.

The following graph shows slight differences in the classification:

Graph 3.1:



Note: When comparing the above data with the results of Rubery *et alii* (2001), major differences were found for Ireland, Portugal and the Netherlands. For these three countries, Rubery *et alii* (2001) states total female employment rates of 53.24%, 60.36% and 63.39% respectively. These rates are between 2.9 and 6.3 percentage points lower than the rates provided by Care Work. On average, the Care Work statistics lie at about 0.46% higher than the employment rates calculated by Rubery *et alii* (2001).

Source: Moreno D., Escobedo A. and Moss P. (2002).

Amongst the European countries, labour force participation of working-age women ranged from a high of 72.5% in Denmark to a low of 39.7% in Italy in 2000. In other words, the 60% Lisbon target for female employment was easily surpassed in Denmark. Besides Denmark, five other Member States met the target in 2000, the UK, Portugal, Finland, Sweden and the Netherlands. Austria was very close.³⁰ The second group's rate ranged between 50% and 60% with Germany on top with a rate just below 60%, followed by France and then by Ireland, Belgium and Luxembourg, countries that will have to make a stronger effort in order to reach the European goal. The last group (Italy, Spain and Greece) lags behind with an employment rate of around 40%.

3.2.1.2. Extent of women's participation in the labour market

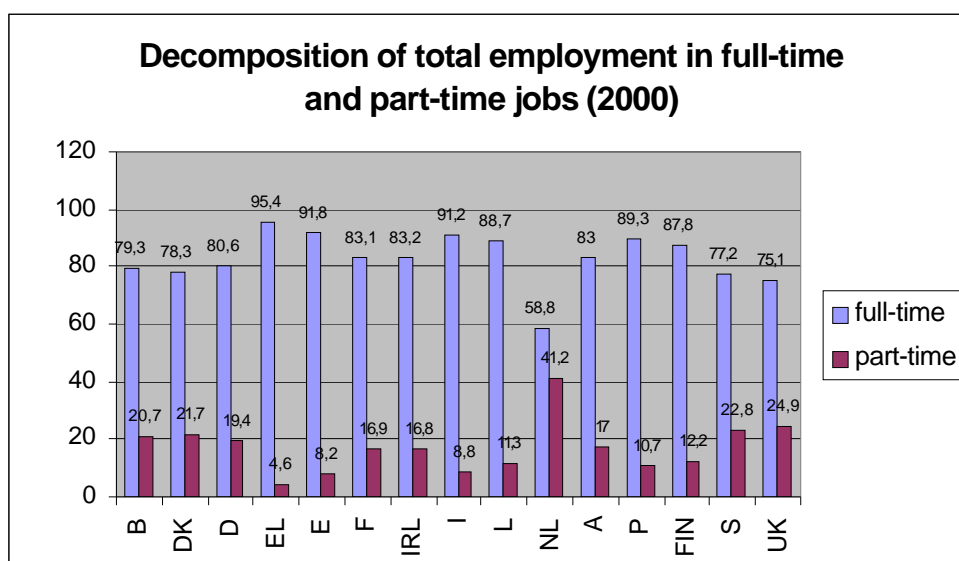
Participation rates *per se* or employment rates are relatively poor guides to the extent of women's involvement in and nature of their relationship to the labour market. How many hours they work each day is a more interesting measure of their actual attachment to the labour market. Only from this point of view is a European target of 60% for female employment relevant. Therefore, the European target, in the vague manner in which it is currently set, seems to be a way too poor indicator to produce information on female employment. Only by integrating a working time component can it be made really useful.

In real life, part-time work can cover a range of very different realities: part-time can be freely chosen; or, one can be forced to reduce one's working hours to part-time (in which case it is a form of unemployment); or, it can be shattered time; or, a form of flexible under-employment; or, a way to adjust the working time. In the southern European countries, part-time work is not very developed (if women work, they tend to work full-time). In countries such as Germany, the Netherlands, and the UK, part-time work is a way for women to have access to the labour market, but their professional life is interrupted when they have children. On the contrary, in the Scandinavian countries (Sweden, Finland, Denmark), part-time has been very widespread since quite some time now, and it seems perfectly compatible with very high

activity rates (close to those of men), and with a strong career continuity. France is a particular case. In France, part-time work developed in a period of economic recession to slow down the rise in unemployment, it was considered as a solution to the unemployment problem. In France, it also seems that part-time work in no way precludes a high activity rate among women and a strong continuity in their careers. Whilst before the economic crisis, French women were massively entering the labour market and engaging in full-time employment, they now primarily opt for part-time activities. Eventually, in France, the development of “part-time jobs” has had the effect to remove women from the labour market, or, to put it more exactly, to make them reduce their working time.

In the following graph, total employment has been decomposed in full-time and part-time.

Graph 3.2:



Source: Moreno D. Escobedo A. and Moss P. (2002).

In the EU, part-time work has been central to any growth in employment, for both men and women. During the year 2000, 40% of net job growth for women was in part-time work³¹ (although this is down on the 1999 trend when part-time jobs made up 47% of net job growth). For men, part-time work plays a weaker role. Just 10% of net job growth was in part-time work³².

³⁰ Austria was at 59.64% in 2000 according to Rubery *et alii* (2001).

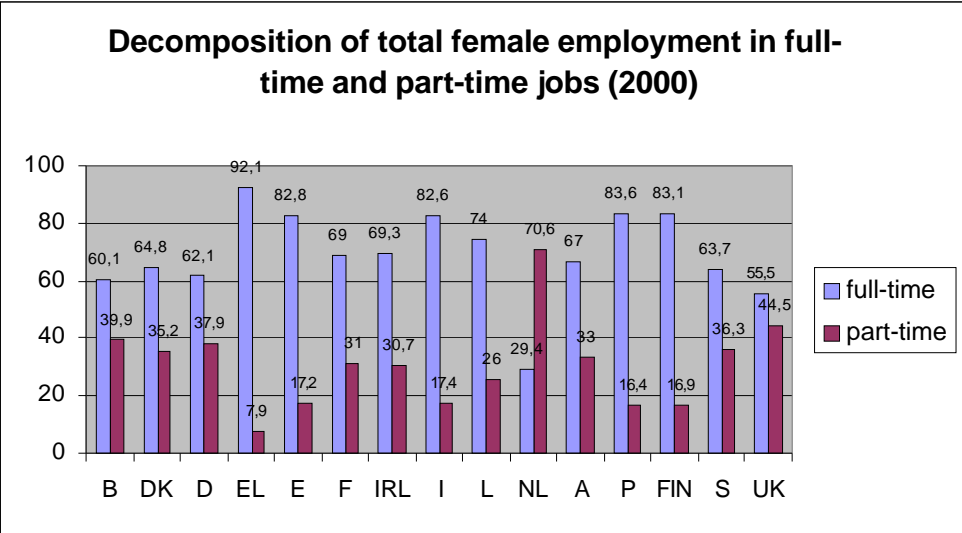
³¹ This corresponds to an increase of 0.7 million part-time jobs compared to 1.0 million full-time jobs.

³² This corresponds to an increase of 0.1 million part-time jobs compared to 1.2 million full-time jobs.

The Netherlands springs out with 41.2% of all jobs being part-time in 2000. This trend seems to affect particularly women. In 2000, the Netherlands witnessed a growth of female part-time work of 144,000 and a drop in the number of full-time jobs by 12,000. To quote Plantenga “this trend suggests that the one-and-a-half earner model has become firmly established into Dutch society and there are no reasons to expect that this will change very rapidly” (Rubery et alii, 2001). Furthermore, Scandinavian countries (except Finland) tend to have a high proportion of part-time work in contrast to Mediterranean countries with small part-time sectors. Liberal nations, Ireland excepted, tend towards the Scandinavian model with more than one fifth of all employment being organised on a part-time basis. Continental Europe is somewhere in between although the proportion of part-time is on the rise there.

The graph below shows how female employment is decomposed in full-time and part-time in Europe in 2000:

Graph 3.3:

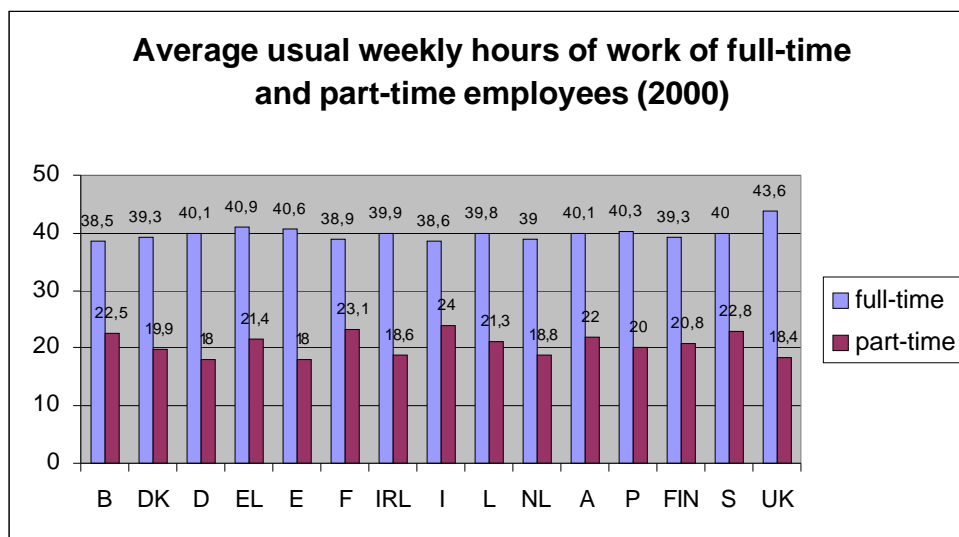


Source: Moreno D. Escobedo A. and Moss P. (2002).

Part-time work is a very important form and component of female employment. The sex imbalance among part-time workers is the largest in Continental Europe. A first phase of rapid and steep growth in part-time work among women occurred between the 1950s and the 1970s. The second phase was one of more modest growth (apart from the Netherlands) and began in the late 1970s. Finally, some parts of Europe (Denmark, Norway and Sweden) have experienced a decline in part-time recently while in others the growth in part-time jobs has remained steady or has increased even further. However, Southern European countries, as

well as Finland have not witnessed the general growth in part-time employment since the 1970s. Denmark, Sweden, the Netherlands, and the UK are high part-time work countries. Beneath these variations lies a further set of differences in the hours worked (long, medium or short part-time). Information on the number of hours worked is presented in the following graph:

Graph 3.4:



Source: Moreno D., Escobedo A. and Moss P. (2002).

Interestingly, when participation rates are standardised by the hours actually worked by women, Portugal and France emerge as leading countries levelling the Scandinavian countries. To clarify the information summarised in the table below (Table 3.2.), let us take France as an example. For France, the total number of people employed was multiplied by a certain factor to obtain the corresponding number of full-time employed. This number is given in the first column of the table below. To put it in a very simplistic way, we could say that two women in part-time correspond to one FTE although actual computations are a little more subtle. To obtain the numbers in the second column, the same procedure is followed but for employed women. The first two columns are now adjusted for the number of hours actually worked. The third column presents the ratio of the previous two and, thus, corresponds to the actual share of female employment on the French labour market. For France, this means that women's actual participation rate is 40%.

Table 3.2:

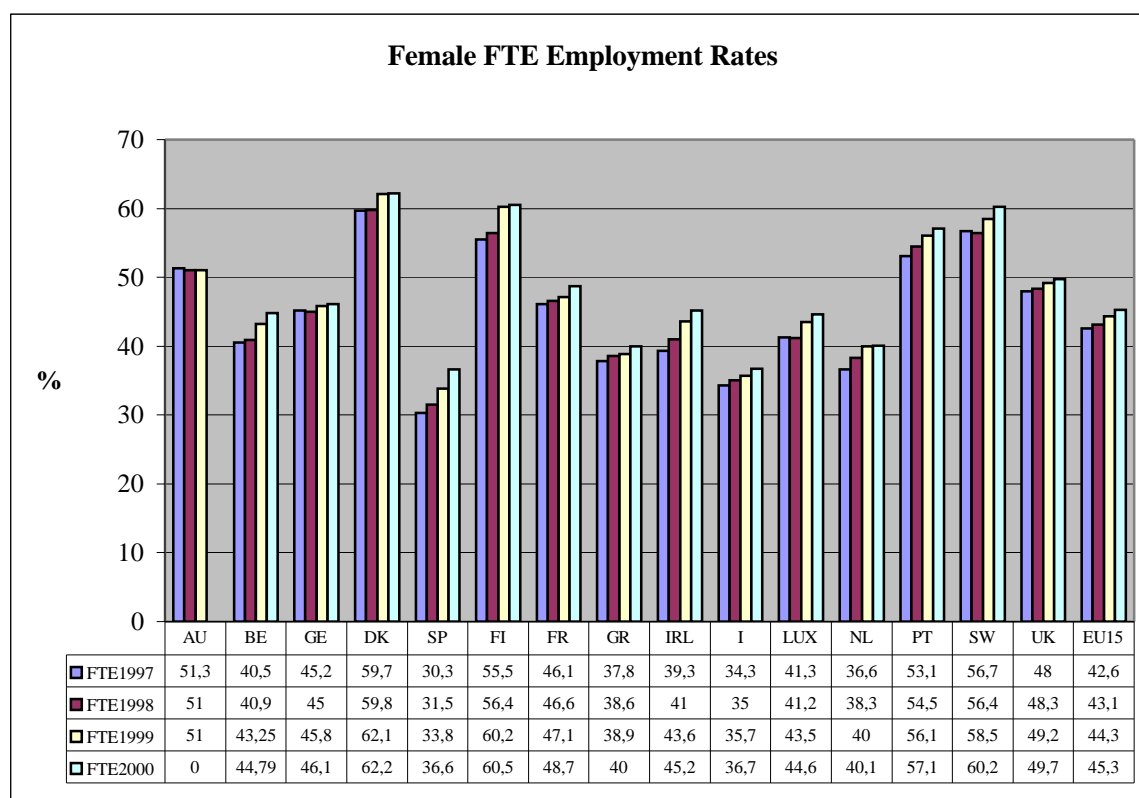
	Total employment FTE* (a)	Female employment FTE* (b)	(b)/(a)
Belgium	3444,2	1299,6	38%
Denmark	2066,5	871,3	42%
Germany	32539,7	12077,5	37%
Greece	3983,9	1436,2	36%
Spain	13169,3	4574	35%
France	20920,1	8412,1	40%
Ireland	1546,7	538,7	35%
Italy	20272,3	6968,3	34%
Luxembourg	171,5	61,1	36%
Netherlands	5705,7	1848,3	32%
Austria	3366,8	1284,8	38%
Portugal	4531,2	1952,8	43%
Finland	1929,7	849,8	44%
Sweden	3338,2	1420	43%
UK	20567,4	7970,1	39%

* in thousands of people

Source: Moreno D., Escobedo A. and Moss P. (2002).

The graph below shows the full-time equivalent female employment rates. With this measure, only three EU member states meet the 60% target: Denmark, Finland and Sweden.

Graph 3.5:



Source: Rubery J. Grimshaw D., Smith M. and Figueiredo H. (2001).

Table 3.3. (Rubery *et alii*, 2001) groups the EU member states according to divergent trends in headcount employment rates. When the headcount measure is used instead of the FTE measure, then four countries have reached or even surpassed both European targets, the target of 70% for total employment and that of 60% for female employment. These countries are Denmark, the Netherlands, Sweden and the United Kingdom. Two more are quickly moving closer to the targets, Spain and Ireland. While Finland has no more catching up to do in terms of female employment, efforts are still to be made in order for total employment to rise to the targeted level. In a similar position to that of Finland, but lagging further behind in terms of the general employment target, are Austria and Portugal. The remaining countries have not yet reached either one of both European targets. Belgium and Luxembourg are getting there rather quickly as far as the target for female employment is concerned but are moving at a much slower pace towards meeting the second target. Germany, France, Greece, and Italy still have a long way to go before reaching either one of the targets.

Table 3.3:

Divergent paths in meeting Lisbon targets (headcount measure)

Female 60% target				
		<i>At or above target</i>	<i>Quickly closing gap</i>	<i>Slowly closing gap</i>
All 70% target	<i>At or above target</i>	Denmark The Netherlands Sweden UK	--	--
	<i>Quickly closing gap</i>	Finland	Spain Ireland	--
	<i>Slowly closing gap</i>	Austria Portugal	Belgium Luxembourg	Germany France Greece Italy

Source: Rubery J. Grimshaw D., Smith M. and Figueiredo H. (2001).

3.2.2. Quality of female employment in Europe and gender discrimination

3.2.2.1 Work/life cycle

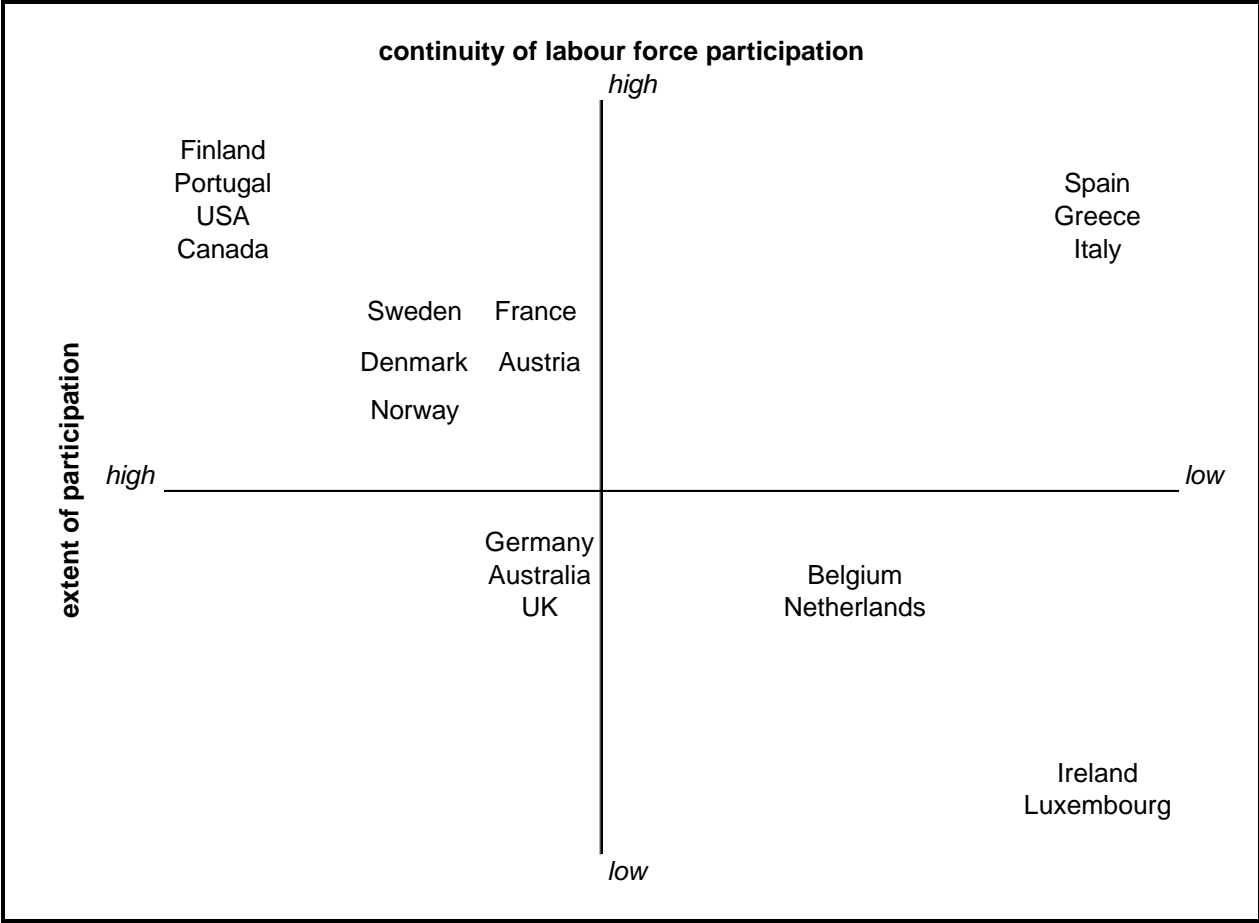
Female employment, unlike male's, has a stop and start character with 'dips' in the years of early family formation. Nations are at their closest and labour force participation in general at its highest for the cohort of women in their mid-twenties. Viewed over the life cycle, the pattern of female employment varies a great deal across countries. In France, Finland, and Sweden, the participation pattern of women in the labour market remains close to that of men over their whole life: it first increases and then decreases with age (inverse U shape). In Germany and the Netherlands, the pattern of female participation shows a peak at the left: female employment is high until they are 25 years of age and then decreases progressively. In the UK, the female employment pattern has a U shape with an increase in employment up to the age of 25 approximately, and then it falls during the childrearing period to increase again, once children are older. The last two patterns are very different from men's. Female behaviour on the labour market varies in reaction to the presence of children.

Across Europe, Daly (1998) has distinguished three patterns of age-specific female labour force activity :

- a) Continuous participation rates over the life-cycle (inverted U-curve, typical male pattern): Scandinavian countries;
- b) More or less permanent exit from the labour market during child-bearing years (left-handed peak): Ireland, Luxembourg, Spain;
- c) High but declining participation for the older age-groups: France, Portugal, UK and Germany (with a sharper decline in the latter two countries), Greece and Italy (stability over the life course but a lower overall rate and a faster decline from the mid-40s onwards).

She also set forward six profiles for women's labour and therefore six corresponding clusters of countries :

Graph 3.6:



Source: Daly M. (1998.)

1st cluster

Finland, Portugal, the USA and Canada are in the high/high part of the graph. Therefore, gender equality seems to be the greatest in these countries.

2nd cluster

The Scandinavian pattern is the one displayed by Denmark, Norway and Sweden. Female participation rates are high but women’s actual presence in the labour market is lower since many are engaged in part-time work. The public strategy in these countries is to encourage short full-times and long part-times.

France and Austria tend towards the Scandinavian pattern although they have far fewer women in part-time employment.

3rd cluster

Australia, the UK and Germany fit yet another pattern of lower participation (largely due to a greater volume of part-time work) and a more interrupted career.

4th cluster

The Netherlands and Belgium are characterised by moderate participation rates and relatively high discontinuity. The volume and concentration of part-time work among parents in the Netherlands distinguishes this country from any other.

5th cluster

Spain, Greece and Italy have a profile of low but relatively continuous employment. The female employment pattern in those countries is bipolar: continuous full-time employment versus inactivity. Part-time work is rare.

6th cluster

Women in Ireland and Luxembourg participate rarely in the labour force and, if they do, their career path seems to be highly discontinuous, child births leading to a total drop-out among older women and to temporary career interruptions for the younger generations. Part-time employment is not very widespread.

Beside these trends, it is interesting to take a glance at the unemployment rates in the female labour force. Women are still more affected by unemployment than are men. Their employment seems to be more sensitive to the economic cycle and they usually have more precarious jobs than men which means that when the economy gets sluggish they are banned from the labour market quite easily. Table 3.4. shows that the unemployment rate of women aged between 15 and 64 years is higher than that of men in the same age category.

Table 3.4:

Unemployment rate in Europe by sex in 2000 (people aged 15-64) and by level of education in 1999 (people aged 25-64)

Country	Men				Women			
	all	0	1	2	All	0	1	2
Austria	4.8	8.0	3.4	1.8	4.6	6.0	4.0	2.2
Belgium	5.3	10.0	4.6	2.4	8.3	15.6	8.3	3.9
Denmark	4.0	6.8	3.3	2.6	5.0	7.2	5.1	3.5
Finland	9.2	12.0	9.3	3.3	10.6	14.4	9.8	5.9
France	8.5	14.1	7.2	5.3	12.0	16.7	12.0	7.1
Germany	7.7	17.7	8.4	4.4	8.7	14.1	9.4	5.8
Greece	7.5	5.5	6.6	5.3	16.9	13.7	17.3	10.3

Ireland	4.5	11.7	4.2	2.7	4.2	11.4	4.8	3.4
Italy	8.4	7.8	5.7	4.9	14.9	16.6	11.1	9.3
Luxembourg	1.8	2.8	0.8	0.6	3.2	5.0	1.7	1.8
Netherlands	2.2	3.6	1.4	1.4	3.5	6.7	3.6	2.1
Portugal	3.2	3.9	4.1	3.0	5.1	4.6	6.2	2.1
Spain	9.7	10.5	7.8	6.9	20.6	22.8	19.8	16.0
Sweden	6.3	8.5	6.7	4.7	5.4	9.7	6.3	3.1
UK	6.1	12.7	5.3	3.0	4.8	7.3	4.1	2.4
15-UE	7.3	9.8	6.3	4.2	9.9	13.8	8.3	6.3

Note: 0, 1 and 2 represent educational attainments that are, respectively, 'less than upper secondary education', 'upper secondary education' and 'tertiary education'.

Source: OECD, *Employment Outlook*, 2001.

The less educated people are, the higher is the level of unemployment, regardless of sex. But whatever the level of education, women have a higher and sometimes much higher unemployment rate (except for Austria and Ireland).

3.2.2.2 Gender discrimination and wage gap

Despite the fact that female employment opportunities have risen, 'informal' barriers still prevent their formal equality from transforming in substantive equality in the labour force. Those 'informal' barriers are, for example, the lack of good-quality care services, glass ceilings, etc. As long as women remain pressured to scale back their economic activities and as long as care-giving remains predominantly women's work, there will continue to be a gender division of labour. However, the above discussion on part-time work has shown that gender differentiation is increasingly based on working time as women concentrate on part-time employment and domestic work and men engage in full-time jobs.

The fact that women mostly work part-time also explains existing gender differences in annual earnings even where part-timers are not discriminated against on the basis of their status. Of course, occupational sex segregation, and particularly the wage penalty associated to "women's jobs", also plays a major role in creating those gender differences in annual earnings.

Expected earnings are an important determinant of the decision to return to work. Women's average earnings are lower than men's in all European countries, and sometimes by a large amount, though the difference has been tending to decline slightly in most countries. Thanks

to the OECD's earnings database, several interesting results with respect to the gender wage gap in developed countries and its evolution have been put forward (OECD, 2001, p.139). The gender wage gap is defined as the ratio of difference between median male earnings and median female earnings, to median male earnings. The largest gap was observed in Portugal, Spain and the UK, and the smallest one was found in France, Belgium and Denmark. But it must be noted that the comparison does not take into account the differences in types of job performed by men and women. As it is stressed in the OECD study, the wage gap tends to be larger between the earnings of fathers and mothers of young children than between men and women in general. Mothers are more likely to hold part-time jobs in which wages are lower, whereas fathers of young children tend to work more than other men and earn higher wages. Some employers may discriminate against mothers because they expect them to have a lower commitment to their jobs. Indeed, according to the OECD study (2001), in some Anglo-Saxon countries, the wages of mothers with children are found to be lower than those of women (non-mothers) working in similar jobs (Harkness and Waldfogel, 1999). However, Datta, Gupta and Smith (2000) found that this does not apply to Denmark. They have suggested the reason for this to be the generous parental/maternity leave benefits, taken up by virtually all Danish mothers. As a result, potential discrimination against mothers has been transferred to women in general.

We have seen that the proportion of part-time work is high in the Nordic countries (except Finland). The longer women work, the more they are paid, and the smaller the earnings gap tends to be. Therefore, occupational sex segregation is high since women remain the primary caregivers. In recent years, these countries have witnessed a decline in part-time as more and more young women engage in full-time employment but no change has occurred as to the high feminisation of the take-up rate of maternity and parental leaves.

According to the 2001 Employment Guidelines³³, the Council made a number of recommendations to individual member States for the year 2001. And once again Denmark, Finland, and Sweden were requested to consider ways of reducing levels of occupational and sector-level segregation. For example, in Denmark, the wage gap between men and women is still large: in 1999, this gap was 17% (EIRO, 2000). A study published by The National Institute for Social Research in May 2000 showed that of those 17%, 12% cannot be explained by differences in educational attainment, work experience, age or competence

³³ More specifically, in the context of the guidelines relative to Pillar 4 "Strengthening equal opportunities for women and men".

(EIRO, 2000). One of the most common explanations for this wage gap is the long and repeated interruptions of women's activity in the form of maternity and parental leaves.

By contrast, French women tend to have rather continuous employment patterns mainly by working long and well-protected part-times. While part-time employment is equally widespread in the rest of Continental Europe, women's labour continuity tends to be low and wage gaps high.

Portugal forms an exception to the Mediterranean group with a high female participation rate. Part-time employment is not very popular and women enjoy continuous employment patterns. In the other Mediterranean countries, female participation is much lower and thus the Council has called for improved female employment rates but it stays a fact that women either not work at all or in full-time jobs. The result is a small earnings gap.

British part-time jobs involve only short hours and are badly protected. Women are likely to drop out of the work force for childbearing and -rearing thus jeopardising the continuity of their work pattern. While the wage gap remains on the small side in the UK, women are exposed to relatively high occupational sex segregation. That is why the Council commissioned the UK (and Germany) once again to take action to reduce the gender pay gap and improve the quality of child-care provision.

While Ireland is part of the low activity group, part-time employment is more widespread than in the other countries of that category. Nevertheless, the wage gap is very high even among Irish women working on a full-time basis.

In sum, each European country has still some way to go in strengthening and encouraging full-time female employment. Income taxation is often accused of being counter-productive in this sense.

3.2.3. Public policies and female employment in Europe

Of all public policies, taxation is one very important tool to either promote or discourage female employment (family policy is another means but it will be developed in the next section).

The general trend in taxation systems today is away from privileging the one-earner households towards individualised taxation of spouses/partners. Tax systems also tend to become more neutral towards employment on the part of the second spouse/partner.

Taxation of dual-earner couples may take various forms: separate, joint or quotient. The basic difference is whether the amount of taxes due is calculated on the basis of the sum of the two

earned incomes or on the basis of the two incomes separately. In a system of joint taxation, regardless of its exact form, there is, in principle, a reduced incentive for the partner with the lower earnings (or lower potential income) to increase his/her earnings, since they will be subject to higher marginal tax rates, at least within a progressive taxation system. On the other hand, it is only by using a system of joint taxation that it is possible to achieve equality in the taxation of two couples with the same total income but a different distribution of that income. However, the type of taxation is only part of the story. The effects of family-related tax reliefs and benefits can be of considerable importance in terms of incentives for the partners to work. The right-hand side of the Table 3.5. illustrates this point.

Table 3.5

Developments in personal income tax systems, 1970-1999, and relative incomes of two-earner couples with different employment patterns, 1997

Country	Type of taxation system			After-tax income levels, relative to AWP level, by employment pattern of household*		
	1970	1990	1999	Full-time employed/non-employed (100/0)	Full-time employed/part-time employed (100/40)	Full-time employed/full-time employed (100/100)
Denmark	Joint	Separate	Separate	100	130	172
Finland	Joint	Separate	Separate	100	142	186
Sweden	Joint	Separate	Separate	100	131	183
Greece	Separate	Separate	Separate	100	133	183
Italy	joint	Separate	Separate	100	137	183
Portugal	Variable	Joint	Joint	100	139	188
Spain	Joint	Optional	Separate	100	137	188
Ireland	Joint	Joint	Optional/joint	100	135	179
UK	Joint	Separate	Separate	100	141	192
Austria	Joint	Separate	Separate	100	135	178
Germany	Joint	Joint	Joint	100	126	163
Netherlands	Joint	Separate	Separate	100	132	176
Belgium	Joint	Joint	Separate	100	120	154
France	Joint	Joint	Joint	100	127	179
Luxembourg	Joint	Joint	Joint	100	135	172
USA	Joint	Joint	Optional/joint	100	143	199

AWP: Average Production Worker.

* 100/0 refers to a situation where one member of the couple works full-time and the other one does not work at all; 100/40 refers to a situation where one works full-time and the other at 40% of a full-time.

Source: OECD, *Employment Outlook*, 2001.

In absence of any tax benefit system, the figures of the three last column of Table 3.5. would be respectively: 100, 140 and 200. In this sense, the closer to 140 the figure in the second column, the more the system is supportive of the second worker taking on a part-time job. However, for European countries, this figure is usually low.

The figures on the right-hand side of Table 3.5. thus demonstrate that the type of taxation system does not necessarily determine the level of incentives in the sense used here: on average, the figures for countries where there is separate taxation are similar to those for countries with joint taxation.

Indeed, Dingeldey (2001) has recently confirmed the non-existence of a clear “shaping effect” of tax systems on family employment patterns. She stressed the importance of other factors in determining these patterns: labour market regulation, family policy, childcare supply, families' preferences, and so on. The co-variation between the overall orientation of the tax system and female labour force participation is much weaker than the co-variation mentioned above between public caring policies and women's employment.

While Gustafsson (1996) has confirmed that units of taxation defined in the various national systems have a major influence on the division of labour between marriage partners, it does not seem to be this simple. In splitting systems with a high rate of progressiveness, not only is one partner encouraged to withdraw from the labour market but the attractiveness of the part-time option relative to full-time employment is also enhanced.

The full-time/part-time combination as a family pattern of labour force participation attracts tax relief in all countries, particularly in those with splitting systems or systems with a transferable tax allowance with a high rate of progressiveness, so in those countries in which sole earners also benefit from considerable tax relief.

The majority of tax reliefs for the sole earner model are more or less in line with the principle of progressiveness. The ‘family subsidy’ increases with income. However, in countries with only ‘formally individualised’ systems, like Denmark, Belgium, and the Netherlands, sole earner households and households with a full-time/part-time combination and low income benefit most from transferable tax allowances.

3.3. Female employment and family life

Two main results concerning mothers' employment have derived from the labour supply theory. First, “having children” affects women's decision of whether or not to engage in paid

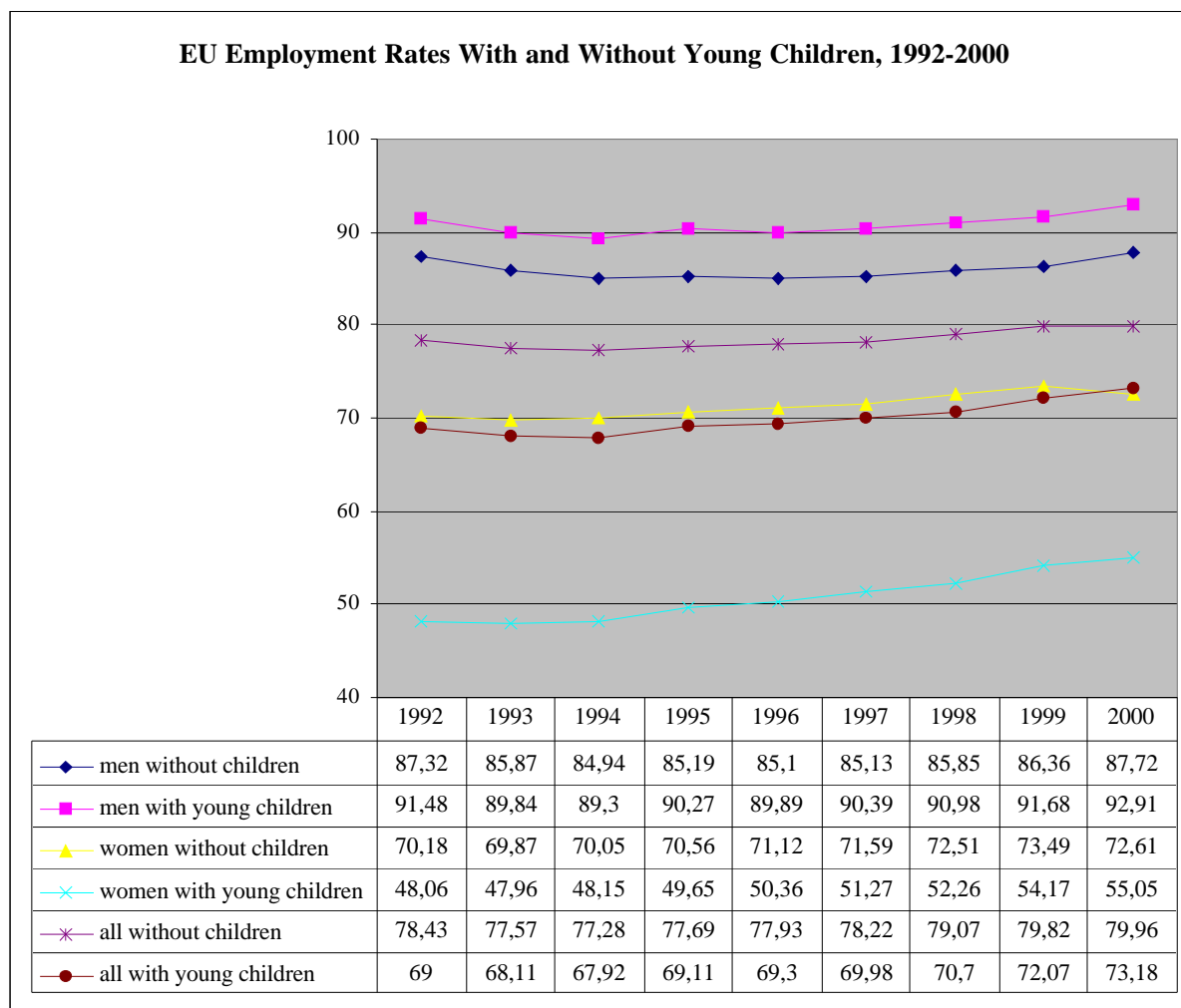
work and, if yes, for how many hours. A child increases the value of time spent out of the labour market and affects women's preferences. The presence of a child also decreases the real wage women obtain in the market given the cost of child-care. Second, governments can take specific measures to decrease the pressure on female labour supply generated by "having children": child-care support, parental leaves, and so on. More recently, some studies have even analysed the relationship between school time (opening hours) and mothers' employment.

In this section, we specifically focus on mother's employment. We have first turned to the employment rate of women according to the number of children they have and we have tried to point out the differences that exist across European countries. Then we have attempted to analyse the gender share within households of paid and unpaid work. The gendered division of work might explain the weak employment rate of mothers because of the double charge (work and family) they have to face. In the third part of this last section, we have presented the family policies in European countries in order to show how they can help or discourage mothers to work.

3.3.1. Mothers' employment in Europe

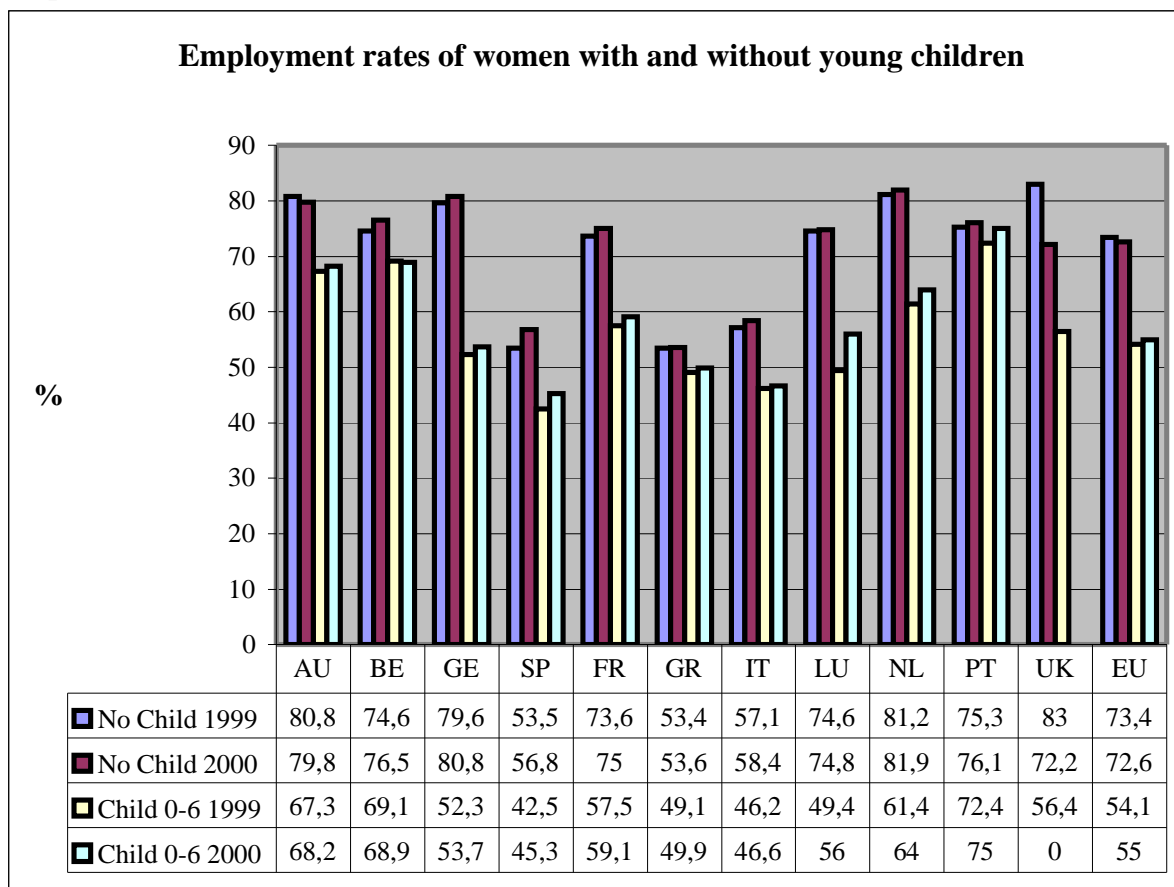
De-segregation of workforce groups by parenthood reveals important disparities in the working patterns of men and women. Across the EU, men with children are more likely to work than men without children, but the reverse is true for women, leading to very wide gender gaps among parents of young children. The impact of children's presence on female employment rates is high in Germany, Luxembourg and the Netherlands, but smaller in Portugal and Greece, despite these two countries displaying widely different patterns of female employment rates.

Graph 3.7:

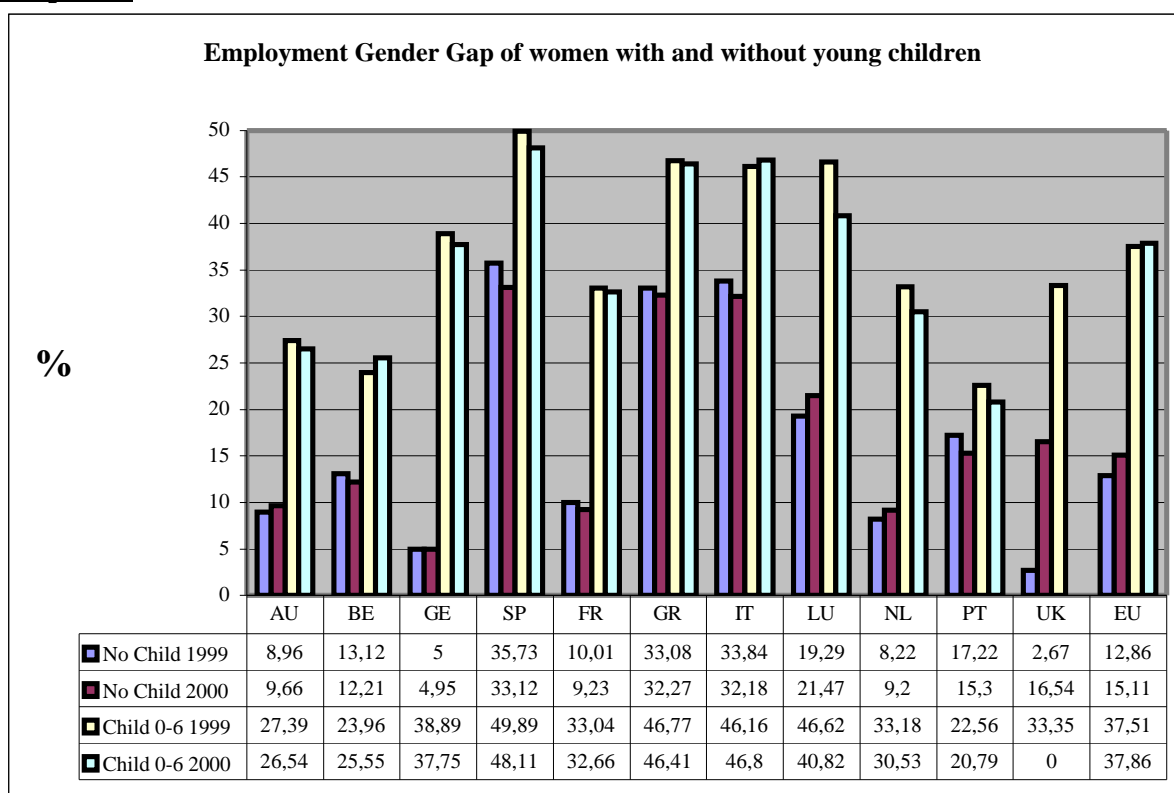


Source: Rubery J. Grimshaw D., Smith M. and Figueiredo H. (2001).

Graph 3.8:



Graph 3.9:



Source: Rubery J. Grimshaw D., Smith M. and Figueiredo H. (2001).

Table 3.6. shows the activity rate of mothers when the number of children is taken into account.

Table 3.6:
Activity rates of women between 25 and 49 years old according to the number of children under 15 years old in the EU, in 1996 in %*

Country	0	1 child	2 children	3 children and more
Germany	84.5	74.1	60.9	42.6
Austria	81.9	76.5	66.6	57.8
Belgium	74.7	75.5	77.0	55.6
Spain	58.5	56.1	52.2	43.8
Finland	87.3	84.1	82.1	65.8
France	85.6	82.8	75.0	50.1
Greece	58.9	57.9	55.6	46.8
Ireland	72.6	56.6	52.2	40.0
Italy	59.2	56.6	48.2	36.9
Luxembourg	70.1	55.6	42.9	29.1
Netherlands	79.2	65.5	61.3	48.6
Portugal	78.2	80.2	77.0	59.9
UK	86.5	73.1	67.0	48.8

* Data are not available for Sweden and Denmark.

Source: Eurostat, Labour Force Survey, 1996.

In France, for example, the majority of mothers does not interrupt their career when having children. Therefore, the activity rates for women with one or two children and for childless women are very close. The sociological gap seems to appear after the third child, but this obviously concerns only a minority of women. Nevertheless, since the beginning of the 80's, a growth in the activity rate of mothers' of three children and more has been observed. This trend seems to be set in all European countries but with different degrees and at different rhythms (Maruani, 2000).

3.3.2. The family pattern of paid and unpaid work in Europe

Dingeldey (2001) studied national profiles of family patterns of labour market behaviour in 1996 on the basis of the ELFS³⁴. Rather than concentrating on women's and men's employment situation separately, she provided interesting information on the distribution of

³⁴ European Labour Force Survey.

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couples (with and without children) in dual and single earner situations. She also examined couples in terms of each partner's working hours. Table 3.7. summarises her results.

Table 3.7:

National profiles of family patterns of labour market behaviour in 1996

Types	Dominance of the dual-earner model Tendency towards egalitarian patterns of labour market behaviour					Dominance of the male breadwinner model Continuation in modernised form					
	Countries	<i>DK</i> (‘94)	<i>SWE</i>	<i>P</i>	<i>D</i> (East)	<i>F</i>	<i>A</i>	<i>GB</i>	<i>B</i>	<i>NL</i>	<i>D</i> (West)
Household types (as % of all households of couples/of all households of couples with children (younger than 15 years))*											
Dual-earner	68.9	74.3	60.4	60.0	58.6	59.5	67.2	56.0	56.4	55.8	31.1
Single earner (male)	-	21.1	21.1	23.4	28.5	28.2	19.6	31.9	32.3	31.4	52.2
Dual-earner with children	-	71.1	67.1	64.0	57.3	60.6	61.0	61.6	52.4	50.8	32.7
Full-time profiles (as % of all households of couples)**											
Both full-time	43.0	38.3	53.3	45.2	38.9	37.0	33.8	36.3	13.4	30.2	25.3
Both full-time (only households with children)	-	38.3	59.7	45.8	35.7	33.0	20.5	36.3	3.9	20.8	26.5
Part-time profiles (as % of all households of couples/of all households of couples with children)**											
Men full-time, women part-time	24.0	31.1	5.8	14.0	20.5	20.5	31.6	18.7	37.6	24.2	5.1
Men full-time, women part-time (only households with children)	-	31.1	6.3	17.6	20.2	25.7	39.3	24.4	43.5	28.8	5.5
Convergence/polarisation of working times						D, total					
Share of marginal part-time employment among women	9.5	4.5	2.6	-	4.3	3.5	14.4	3.7	23.0	7.7	5.6
Share of long working hours/ concentrated among men	mod. yes	mod. yes	high no	-	mod. yes	low yes	high yes	low yes	low no	mod. yes	low yes

* *Households of couples (aged 20-59 years) sum up to 100% only with households of single-earner (female) and households without earners.*

** Percentage points add to the respective number of dual-earner households only with households of women full-time/men part-time and women and men part-time; marginal part-time is defined with less than 15 hours per week; long working time is more than 40 hours a week; it is supposed to be 'high' if at least more than a third is used to work long hours; concentrated among men refers to significant differences in the share of long working hours between men and women.

Source: Dingeldey I. , (2001).

Unpaid household labour includes both domestic chores and care work. Traditionally, mothers tend to spend more time than fathers on child-care and unpaid household work. Becker (1965) and Gronau (1977) explained this in terms of their assumed comparative advantages in both spheres. These explanations are now rejected by most economists (Brusteel, 2001). In more recent models (bargaining models and so on), individual earnings are set as a factor determining within-household allocation of time. Lower labour market wages for women lead to lower incentives for women to engage in paid employment, which in turn leads to relatively high levels on unpaid work, and again, lower wages. Besides, employers tend to expect that mothers will invest relatively heavily in their child-care role. This results in mothers and potential mothers having to meet tougher promotion standards than fathers, again a tendency towards confirming the traditional pattern of specialisation (Lommerud and Vagstad, 2000).

A team of researchers at the University of Essex have made more comparable and harmonised a number of budget time surveys that cover 12 OECD countries (Fisher, 2000). The data shed information on the time use of individuals in households of a given type. The main results are the following:

- ü Full-time working mothers spend just over twice as much time, on average, compared to fathers, on child-care (housewives spend over three times as much);
- ü Full-time working mothers spend about twice as much time on other unpaid work compared to fathers (housewives spend around two and half times as much);
- ü On average, the total number of hours spent on paid and unpaid work is highest for women in full-time work, at around 10 hours per day, one hour more than the average for all men. Women working part-time have an average total of around nine and a half hours.

The time men spend on child-care has tended to increase in all the countries. However, these figures apply only to men in couples, and, thus, exaggerate the increase in the amount of child-care that is taken on by men. An increasing proportion of children are in lone-parent families headed by women. They often see little of their fathers (Dex, 1999).

International comparisons of time budget data must be made with considerable caution. Nevertheless, it appears that Canadian and Swedish men contribute the most to unpaid household work, though still performing less than their spouses.

3.3.3. Family policies and female employment

As the last section has shown, the presence of children constitutes a slow-down factor for female activity. The reconciliation of family and professional life is and remains a women's problem. Family policy is a means to help mothers to keep working while they have children, even it is not sufficient on its own: a growing participation of men in unpaid work would be a much more efficient way to support female employment.

Family policies have many different components, all directed at two main objectives. The first one is to cover the cost of having children in order to maintain the living standard of families with children relative to those without. With respect to this objective, the most relevant component of family policy are cash transfers such as family allowances. We have chosen not to develop this aspect of family policy here because it does not directly concern mothers' employment. Transfers in kind, such as child-care provision, constitute a more important aspect of family policy from our point of view. These transfers in kind are likely to have a significant impact on mothers' employment, especially since the 'burden' of children is still mainly carried by women. First, we have compared the different European child-care systems in terms of convenience, generosity and quality. Second, we have focused on maternity and parental leaves that are fundamental in shaping mothers' attachment to the labour market. However, there remain a lot of different aspects of family policy that we have not approached in this chapter, either because they do not directly affect female employment or because it is just too onerous to develop each and every public measure implemented in each of the countries.

3.3.3.1. Child-care provisions

Female labour is highly influenced by public services. Indeed, the effects of child-care can be analysed in two ways. First, the presence of children affects mothers' preferences with respect to non-market time and market time. The more satisfactory the provisions for childcare, the more the preferences of mothers for time spent at home relative to time spent at work are weak, *ceteris paribus* (Blau and Ferber, 1992). Second, children affect the budget constraints of mothers (Connelly, 1992). The cost of child-care can be considered as a tax on mothers' hourly wage. A high child-care cost will have the same effect as a decrease in the net wage and will, therefore, result in a decrease of mothers' employment and working time. It follows that, in theory, every improvement in child-care conditions and prices will favour

female employment. Schmidt (1992) has shown that the increase in child-care possibilities from 1961 to 1980 is positively correlated to the increase in employment rates of women in 18 OECD countries.

The attitude of governments towards families varies across countries and thus, public support appears to be quite different across the European arena. For example, in the UK, the choice of having children is considered a private one, one which has to be made by all parents, in general. As a result, family support is mainly targeted at poor or single parents. In other countries, the role of the government in providing support to families is, traditionally, much larger. When children are considered a public matter, public policies are supposed to cover the cost of children regardless of family income. In France, the “Duty of the Nation” towards families is embedded in the French Constitution.

Gornick *et alii* (1997) compare the family policies of 14 OECD countries in order to construct an aggregated indicator. The high diversity across countries implies that it is difficult to conclude on the intensity of public support regarding mothers' employment. A composite indicator is, nevertheless, a means to measure each country's effort.

The provision of public services reflects the “dual-earner” gender ideology. Nordic countries are the most evident adherents to this ideology. Their official gender-equality policies led them to support dual-earner families and female employment. In practice, this ideology has been translated into extensive public care services. Possibly, an exception can be made for France but in the rest of Continental Europe, official policies, while mentioning gender equality, fail to increase the level and quality of female employment. Child care is largely left to the private sector to provide. Nonetheless, general support to families with children tends to be high.

Child-care arrangements can take one of four main forms:

- ü Group care in child-care centres (nursery, kindergarden, play-school)
- ü Residential care, including specialist services such as care for disabled children
- ü Childminders, based in their own home, looking after one or more children.
- ü Care provided by a carer who is not a family-member but frequently lives in with the family.

Generally, countries that have a high level of public funding, spend a large part of it to the first two types of child-care. Most governments provide special support for children who are considered to be at risk of abuse or neglect and for children in lone-parent families. Some governments offer arrangements for child-care in others ways. For example, Austria and France require home-based childminders to be registered. In France, the *Allocation de Garde*

d'Enfant à Domicile (AGED) supports parents who employ a person at home to take care of their children (50% to 75% of the employer's charges can be deducted from taxable income).

Table 3.8. shows the proportion of children under three who benefit from one of the four formal child-care arrangements described above. Nordic countries (Denmark and Sweden) have the highest proportion (above 40%). A much lower proportion of children benefit from formal provisions in Southern European countries. For children above three years old, the coverage tends to be much higher, reaching 90% and more in several countries. The share of above 3s in formal arrangements is also more uniformly distributed across countries. Nordic countries and other European countries mainly rely on publicly financed centres for this age group, whilst in Ireland, the UK, and the Netherlands formal child-care is primarily provided by the private or commercial sector.

OECD studies tend to explain the lower provision of child-care services for children under 3 in terms of the higher cost involved in caring for very young children. Adema (2002) shows that the average proportion of children covered in countries relying mainly on public expenditure is only slightly higher than in those countries that rely on private expenditure (some non-European countries, Canada and the US, with mainly private funding also have a high rate of coverage).

Finally, a number of countries (Denmark, France, Finland...) provide subsidies to parents looking after their own children at home. The application rules differ a lot from one country to another. These systems are closer to parental leaves and are, therefore, also developed in the following section. However, unlike parental leave provisions, systems relying on such subsidies do not necessarily guarantee the right to return to one's previous job.

Firms' contribution to the reconciliation of work and family life is also crucial. We have not developed this point but it is important to draw attention to it. Family-friendly arrangements by firms can take several forms: leave from work for family reasons, changes in the work arrangement for family reasons, practical help with child-care and provision of training and information.

Table 3.8:

Summary indicators of formal child-care coverage

Country	Proportion of young children using formal child-care arrangements			Daily Hours of child-care coverage*	
	Year	Aged under 3	Aged 3 to mandatory school age	0 to 3 years	3 to 7 years
Denmark	1998	64	91	10 to 12	8
Finland	1998	22	66	8 to 10	4 to 10
Sweden	1998	48	80	5	6
Greece	2000	3	46	na	na
Italy	1998	6	95	9 to 11	8
Portugal	1999	12	75	4 to 11	8
Spain	2000	5	84	na	na
Ireland	1998	38	56	na	na
UK	2000	34	60	na	5 to 8
Austria	1998	4	68	8	8
Germany	2000	10	78	9	8 to 9
Netherlands	1998	6	98	8	5 to 6
Belgium	2000	30	97	8	4
France	1998	29	99	8	8
Luxembourg	-	-	-	8	4 to 6
USA	1995	54	70	na	na

Note : Data were provided by national authorities.

* For some countries, the coverage was not given by a number of hours but by "full time" or "part time", then we have considered that a full time day was 8 hours a day and a part time day 4 hours.

Source: OECD, *Employment Outlook*, 2001; Adema, 2001.

In conclusion, three groups of countries can be distinguished according to Gornick *et alii* (1997). France, the Nordic countries (Finland, Denmark and Sweden), Belgium and Italy offer the highest support to mothers' employment. The second group is composed of Luxembourg, Canada, Germany, the Netherlands and Norway, followed by the third group that is mainly made up of Anglo-Saxon countries (UK, US and Australia).

The most generous countries specifically target families with pre-school children. Conversely, Anglo-Saxon countries are least generous for these families. Their systems inadequately protect mothers' employment during the maternity period, and during the first months after birth, they offer only limited access to public child-care.

Within each group, a classification of countries can be made. France offers the largest support to families with preschool-aged children thanks to a rule that says children can enter school (*école maternelle*) at 3 years of age. However, French support for infants (children under 3 years of age) is still limited. In Finland, the situation is inverse: support goes mainly to infants, not to preschool-aged children.

3.3.3.2. Maternity and parental leave policies

A European Union directive mandating a paid 14-week maternity leave was adopted as a health and safety measure in 1992 and a directive mandating a three-month parental leave was enacted in 1998. The critical cross-national difference in policy is philosophical, and has to do with the extent to which policy is designed

- To support family work and child-rearing and to create an incentive for women to leave the labour force when children are very young;
- To facilitate women's work outside the home and help reconcile work and family life, by protecting and promoting the well-being of children while their parent(s) are in the labour force.

In sum, maternity and parental leave policies provide for almost a year of fully job-protected leave and are targeted on parents with strong prior labour force attachment. Payments received during this leave are close to full wage replacements. These policies also guarantee a place for children in good-quality, affordable, out-of-home care. Therefore, they appear to be supportive of both "parental choice" and child well-being. On the other hand, policies providing more extended leaves, but associated with low-level benefits, limited job protection, and with insufficient places for toddlers in care, are likely to create an incentive for women (in particular, wives) to leave the workforce and remain at home. It follows that the duration of the leave and the level of the benefit received during the leave are both key issues. Research suggests that there have been no negative consequences of leave policies for women or for employers where short and intermediate leaves are concerned; but there may be negative consequences for women who take extended leaves (e.g. three years) in particular, if they go on multiple sequential breaks. Parental leaves are usually associated with increases in

women's employment; but if the leaves are extended, they are associated with stereotypical roles for women and with reductions in their relative wages.

The cases of France and Denmark are illustrations of how parental leave can have a negative effect on female employment. In France, the parental leave, associated with a benefit called the *Allocation Parentale d'Education* (APE), has had a strong negative effect on the employment of women in precarious situations. It strongly encourages them to leave the labour market because the expected low wage of these women is very close to the benefit they would receive if they went on leave (APE). If they opt for the APE, they are allowed to stay inactive for 5 years. Women who were at the fringe of the labour market before taking up the allowance or whose job was a precarious one thus got stuck in an inactivity trap which it was impossible to get out of by themselves in order to re-enter the labour market. Viewed from such an angle, the full-rate APE can be considered as a kind of mother's wage but with a temporary character since it only applies until the youngest child reaches the age of 3. The APE has had positive consequences for most women who have taken it up at a partial rate or who have chosen the full-rate but could fall back on a secure job. Usually, these women are skilled. However, it has had the strong perverse effect of removing from the labour market those women who, generally speaking, were unskilled. Once the three years of entitlement to the APE had expired, these women were generally no longer able to find a job because of the training opportunities foregone and their inactivity during too long a period. In conclusion, it has encouraged unskilled women to return home and has strengthened the disparity and inequality, that were already strong to start with, between skilled and unskilled women.

We have already described the situation in Denmark. A very recent law, adopted in March 2002, has increased the parental leave from 32 weeks to 52 weeks. This seems to be a good measure in order to facilitate the reconciliation of family and working life. However, in fact, this measure could result in an increase in gender discrimination. Indeed, the law contains two specifications that could have huge consequences: 14 weeks of the 20 extra weeks must be taken up by the woman and of the 32 weeks of parental leave that already existed, fathers are no longer obliged to take almost 4 weeks, but instead, only 2. Therefore, all the law has really done is increase the maternity leave. This often implies a long withdrawal of mothers from the labour market, a situation that could translate into a penalty for their future career and working life. This is a women's problem since most often it is women who take up the parental leave rather than men : in 2001, according to the Danish Statistics Institute, only

5000 men were on a parental leave against 44 000 women. On average, in 1999, men took up only 2.2 weeks of parental leave (4% of their right) against 44.8 weeks taken up by women (including the maternity leave). It follows that such generalisation of parental leave among women reinforces employers' beliefs that women constitute an unstable labour force.

Gornick *et alii* (1997) have observed some changes in the relative score of two countries: Italy and Norway. In Norway, by the end of the 80's, maternity leaves were generous but were associated with weak child-care support, poor public investments to the benefit of preschool-aged children, and a high age for compulsory school attendance to begin at. Italy offered a different mix of support to families : weak support to families with very young children but more generous support for those with preschool-aged children. From the end the maternity leave until the child reaches the age of 3, Italian mothers face strong barriers to enter the labour market.

Table 3.9. summarises the European members' maternity, paternity and parental leave schemes at the end of the 1990s.

Table 3.9: Leave arrangements in Europe

<i>Countries</i>	<i>Maternity leave (weeks)</i>	<i>Replacement rate (in % of earnings)</i>	<i>Paternity leave</i>	<i>Parental leave</i>	<i>Parental leave allowance</i>
<i>Austria</i>	16 (8+8)*	100%	None	Per family: 24 months	Flat-rate (13.48 €per day), paid until child is 18 months if only mother takes leave, until 24th month if father takes some leave as well.
<i>Finland</i>	18 (6+12)	70% (except for high earners)	6-12 days (paid as for maternity leave)	Per family: 26 weeks + 10 weeks for multiple births; followed by care leave (child rearing leave) until child is 3 years	Paid as for maternity leave; low flat-rate if child not in publicly funded child care (252 €month + 84€month for each child under 3 + FIM 50.5 €month for each child over 3 + supplement by local authorities of 168 €month on average)
<i>Greece</i>	16 (8+8)	70% if the woman worked more than 200 days in the 2 years preceding birth (in fact this two-year period ends 3 months before birth)	1 days for men in the private sector	3.5 months/parent	none ³⁵
<i>Luxembourg</i>	16 (8+8)**	means-tested cash benefit if not 100%	None	6 months/parent	One parent can opt for a flat-rate benefit (412.5 €month for 22 months) without guarantee of re-employment or for a flat-rate benefit (1.5 €month net of tax for 6 months) with guarantee of re-employment
<i>Spain</i>	16 (6+6)***	100% (up to a maximum)	2 days (paid at 100% of earnings)	Per family: 36 months by mother OR father	None but with job protection during the leave.

³⁵ Working parents have the right to take an additional paid parental leave (family leave) to care for an ill child under age 16 at home. For one-child families, this leave corresponds to 6 days a year, families with 2 children are entitled to 8 days and in case there are three or more children 10 days can be taken. Furthermore, working parents have the right to take 4 days a year to visit the child's school.

Belgium	15 (1+8)	82% first month, then 75% (up to a maximum)	Private sector: 3 days (paid at 100% of earnings); public sector: 4 days (paid at 100% of earnings)	3 months/parent (in addition, career breaks of 3 to 12 months up to a total of 5 years can be taken)	Flat-rate benefit of 496 € on average (during the career break: flat-rate benefit of 297 €/month on average)
France	16-26 (6+10/20)*****	84% (not taxed) ³⁶	3 days	Per family: 36 months by mother OR father	None if parents only have one child, flat-rate income-tested benefit of FF 3,024/month if they have two or more children
Ireland	14 (+ 4)*****	70% (not taxed)	None	14 weeks/parent	None ³⁷
Netherlands	16 (4-6 + 10-12)	100% (up to a maximum)	None	6 months/parent only if parents continue to work part-time (20 hours)	None
Sweden	14 (6+8) see: note Sweden	lower benefit for unemployed mothers	10 working days (paid at 80% of earnings)	18 months/parent plus an extra 6 months per child in the event of multiple births; 6,5 €/day for 90 days; an upper limit exists around 72 an extra 30 days must be taken by father or else they are lost	Per family: benefit at 80% of earnings (100% for civil servants) during 360 days and flat-rate benefit of SEK 6,5 €/day or SEK 290315 €/year ; the last 3 months are unpaid but job-protected. ³⁸
Denmark	18 (4+14)	Flat-rate benefit = unemployment benefit (about DKK 2,846/week in 2000)	10 days (paid as for maternity leave)	Per family: 10 weeks Parental leave + 2 weeks for the father; 13 weeks Child-Care leave for each child under the age of 8 extended to 26 weeks if child is under 1 or recently adopted;	Parental leave: (paid as for maternity leave); Child-Care benefit (about 230 €/week in 2000) + possible supplement by local authorities up to maximum of 4712 €/year*****
Germany	14 (6+8)*	100%	None	per family: 36 months by mother OR father	Flat-rate income-tested benefit of 307 €/month until child is 2 if household income is under a certain level; some Länder pay benefits for at least 6 months during

³⁶ In other words, 100% when included in taxable income.

³⁷ However, Irish parents are entitled to 3 days of paid family or emergency leave.

³⁸ In Sweden, parents are entitled to take 60 days of paid leave a year to care for an ill child or in case the usual caregiver of the child is ill.

<i>Italy</i>	5 months (2+3)	80%	None	10 months if only mother takes leave; 11 months if father at least takes 3 months (more than 2 months in a row)	the child's third year. 30% of earnings for the 6 months of parental leave that can be taken before the child reaches 3 years of age. The rest of the leave has to be taken before the child's eighth birthday and is unpaid except for low-income families. ³⁹
<i>Portugal</i>	6 months (?+60 days)	100% (not taxable)	None	6 months/parent; in the case of the birth of a third or higher order child, 2 years can be taken when there are two children and 3 years when there are 3; 60 days adoption leave until the child is 3	None (a benefit is paid during the adoption leave) ⁴⁰
<i>UK</i>	18 weeks if not 1 year with same employer; 40 weeks (11+29) if 1 year with same employer	Flat-rate payment; 90% earnings for 6 weeks and flat-rate payment for up to a further 12 weeks	None	13 weeks/parent/child but max. 4 weeks/year	None
* plus an extra four weeks after birth for multiple or premature births					
** plus an extra four weeks for multiple births					
*** plus an extra 2 weeks for multiple births, 4 weeks of the leave are transferable to the father					
**** 16 weeks for first and second order births and 26 weeks for third or later order birth; first child: plus an extra 2 weeks for twins, plus an extra 12 weeks for triplets; second child: plus an extra 12 weeks for multiple births, plus another 2 weeks for multiple births if mother already has two or more children.					
***** plus an extra 4 weeks if the mother requests but not paid					
***** children under 3 cannot at the same time be in publicly funded child care, children aged 3 to 8 may attend on a part-time basis.					
<i>note Sweden: 60 days leave before birth if woman cannot continue ordinary job and cannot be transferred to alternative duties. Maternity allowance covers 50 days and parental leave allowance the other 10 days. Alternatively, women can take up to 60 days of parental leave before birth paid at 80% of earnings.</i>					

³⁹ In Italy, parents can take unlimited unpaid job-protected sick leave to care for an ill child under 3.

⁴⁰ Portuguese parents have the right to take 30 (15) days per year for each child under (over) 10 to take care of an ill or disabled child at home.

3.4. Conclusion

Female employment is still too low in many European countries. Having children and caring for them remains a major problem for women, far more than for men. Reconciling work and family life has also kept a predominantly female character.

The international perspective has led to a number of findings of policy relevance. The first is that, in countries with relatively well-developed systems of work/family reconciliation policies, women tend to have higher employment rates in their thirties. Both formal child-care coverage of young children and paid maternity leave policies appear important from this viewpoint. For all countries, it is an issue of major importance to increase the possibilities for child-care and to improve their quality in order to generate a strong effect on mothers' employment. A lot of European countries still have a long way to go if they want to reach the EU target by 2010. However, even if they succeed, there will still remain a lot to be done. Indeed, the EU target lacks sense in that it is not sufficient to increase female employment rates if women keep having mainly part-time, less paid, or less protected jobs. If such remains the scenario, then gender equality will not be achieved. A target such as the European one must, therefore, be specified more precisely by integrating a range of "job quality" measures, related to working time, wage, promotion, etc.

Finally, sociological and psychological factors have a great role to play: as long as women are considered the most competent to fulfil domestic tasks, caring for children included, and as long as women consider themselves to be so, it will be difficult for them to conquer a place equal to that of men on the labour market. Nevertheless, public policies can significantly improve their situation and their independence in many ways.

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CHAPTER 4: Motherhood and Wages: Reviewing the effects of “time-out for child-care”, working part-time and children

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4.1. Introduction

Motherhood and wages, the topic of this chapter, has a long history in human capital studies (Mincer and Polacheck 1974, Gustafsson 1981, Mincer and Ofek 1982). Mothers run the risk of building less stable human capital during life time. Some studies have focused on analyses of women's before and after birthgiving labour market behavior and wages (IZA workshop Bonn May 2002 www.iza.org, Wetzels 2001 chapter 5). But most studies have analysed the gender wage gap in pay, in which motherhood plays a role (AEA 2002 conference (see also the special issue on gender wage gaps in Cahiers d'Economiques de Bruxelles), ESPE 2002 conference (see sessions on wage differentials including a meta-analyses of the gender wage gap studies by the Austrian research group), and the EALE 2002 conference).

This chapter will however focus on the earnings gap between childless women and mothers, a topic that has recently gained significant attention from researchers. This is no doubt due to the striking changes that have occurred in many countries with respect to increased educational levels and labor force participation rates of women as well as equal pay legislation that was put into force in the 1970s and 1980s. However, gender wage equalization has stagnated after a sharp improvement in most countries (Datta Gupta and Smith 2001). Therefore, there is an increasing focus on the effects of family responsibilities on women's wages as one of the explanations of the apparent paradox of this stagnating gender wage equalisation. Most of the studies on the family gap in pay among women have been conducted in Britain and the United States (Waldfogel 1994,1995,1997, 1998, Joshi, Paci and Waldfogel 1999) and in Scandinavian countries (e.g. Datta Gupta and Smith 2001). This chapter examines mothershood and wages by reviewing the literature on the child gap in women's wages, defined as the observed difference in wages between childless women and mothers. In

the British and American studies the exogenous effect of children on women's wages is called the child gap.

Four major groups of explanatory variables for the child penalty can be distinguished. The first group relates to child-related career breaks with or without continuous employment relation, thus referring to human capital accumulation. The second group relates to labour market selection, that may change once women have given birth, among others a preference for part-time jobs. The third group relates to energy to work, assuming that the increased household work because of children reduces the energy for work. The fourth group relates to attitudes, assuming that women with children have different attitudes and therefore different behaviour compared to childless women. Yet, the causal relationship is complex because these attitudes may also influence women's decisions with regard to family formation. In economic research, the first and the second group have received far more attention than the latter two groups.

The chapter reviews a number of international publications on women's wage structure. In line with most of the research on human capital the scientific contribution of the articles is new empirical findings (Oosterbeek 1992:12). The empirical models on women's wages differ in focus because the countries analyzed, mostly United States, United Kingdom, Scandinavian countries and a few other industrialized countries, differ in policies on women's employment during the life cycle, mostly related to combining work and family, and therefore they differ in policies to accumulate human capital and women's labour market productivity.

The chapter starts in section 2 with a review of explanations for pay differentials between mothers and childless women. Section 3 summarizes the studies reviewed. This summary leads to the conclusion that the focus is primarily on two explanatory groups, notably the career break and the selection into part-time work. The major findings are presented in Section 4 (wage effect of time out), respectively Section 5 (wage effect of working part time) and 6 (wage effect of children). Section 7 presents remarks on estimation of empirical age models. It reviews what the literature has found on bias in estimation models of women's wages. Section 8 ends with a conclusion.

4.2. Pay differentials between mothers and childless women

4.2.1. Investments and return to investments in labour market productivity: participation, time out and type of job

The human capital theory assumes that educational choice is based on the idea of investment: refraining current earnings for future higher earnings net of the cost of education. Education enhances the market wage but has also been found to increase the positive effect that young children have on the reservation wage by enhancing the family's demand for (or ability to produce) child quality (Gronau 1973). Furthermore education induces investments in pre birth human capital and leads to postponement/refrainment of maternity (Gustafsson and Wetzels 1997, Gustafsson, Kenjoh and Wetzels, 2002). Moreover, tenure on the most recent job is found to have a stronger positive wage effect than pre-employer experience. This is a reflection of the value of information accumulated through the job match (Concoran 1983). Wage deterioration during career break is greater for women with more experience (Mincer and Polacheck 1974). Beyond the human capital accumulation forgone and tenure forgone, while having a career break, human capital depreciates during time out (Mincer and Polacheck 1974), although empirical evidence on human capital depreciation is not unambiguous (Datta Gupta and Smith 2001). Furthermore, Albrecht et al (1999) cast doubt on depreciation as the sole explanation of the negative coefficient on time out in earnings functions as they estimated for Sweden. If human capital depreciates during home time then the effect of time out for different types of unpaid household work should be similar. In the cross section the effects of time out vary both by type of time out (formal parental leave has no effect on women's subsequent wages, whereas other types of time out have negative effects), and by gender (the effects are stronger for men than for women). Panel estimates with controls for individual fixed effects eliminates most of the difference in effects across different types of time out but the difference across genders in the effects of time out remains. Therefore, Albrecht et al (1999) conclude that the human capital depreciation interpretation of the negative coefficient on total time out in earnings functions estimates does not explain the entire effect of time out on wages: employers may use leave taking behavior as a signal of future career commitment.

Motherhood is associated with time out of the labor market. Anticipation to future career break(s) leads to choosing (or to be assigned to) careers with less potential for training and hence flatter earnings experience profiles (Gronau 1988). On average young Dutch women invest longer in education, postpone or refrain (involuntary) from children, and therefore have

shorter career breaks or at least postpone career breaks compared with their mothers. The choice of a flat career path in the beginning of career, more and more, only concerns women who are solely in favor of motherhood, a limited group in the Netherlands by 2001. However, after a career break due to children, mothers return to jobs which can be combined with their time consuming care tasks (reduced working time, shorter commuting time etc). See for the shift to work part time after the birth of the first child (Gustafsson, Wetzels, Vlasblom and Dex 1996, Gustafsson, Kenjoh and Wetzels 2001a and 2002) and for the change in employment status and industry (Wetzels and Tijdens 2001). The latter study on re-entrants in the Netherlands shows that only one third of women work in the same industry before and after a career break.

This leaves employers the possibility of filling jobs for lower wages if they offer non-pecuniary amenities that some workers, e.g. mothers, will trade off against wages. The reduced mobility and the increased costs of any potential search which are associated with family responsibilities may reduce the elasticity of supply and make workers more vulnerable to monopsonistic behaviour of the employer. Such mechanisms lowering the relative pay of mothers would be additional to those operating through the effect of motherhood on experience and might work through the division between full time and part time work.⁴¹ Rather optimistic Joshi et al 1999: 546 say that this can be a temporary phenomenon: only when children are young or parents depend on help.

Since part-time work is not restricted to a particular group of workers we do expect to find less effect of working part-time on women's wages than was found in the United Kingdom (Waldfogel, Joshi et al, Gustafsson, Kenjoh and Wetzels 2002), and Canada (Budig and England (2001). In the Netherlands the wage effect of working part time compared with fulltime is even found to be positive (Maassen van den Brink 1994, Zorlu 2002). Maassen van den Brink (1994: 91): "An average female part time worker earns 49% more then she would have earned if she had a fulltime job. A woman working fulltime however earns almost 57% less then she would have received if she had a part time job. This suggests that women trade lower wage rate for more hours of work. Females pay for working fulltime.". Furthermore Dekker et al (2000), find the education premium for full-time working women to be half of the premium for women working in part-time jobs. The wage effects of working in the public

⁴¹ The study by Budig and England (2001) includes e.g. variables measuring how demanding the job is in terms of working hours, effort, cognitive skill, authority, time spent commuting, and shows that working part-time is the only "mother friendly" characteristic of the job that explains some of the child penalty.

or private sector has been researched in Denmark and Sweden. (Simonson et al, etc. Datta gupta and smith 2000)

4.2.2. Effort per hour

The role overload due to the extra burden of “the second shift” (Hochschild 1989) may limit the effort mothers are able to put into their jobs- or optimally allocate into market work (Becker 1985). “Tiredness from home duties” or “storing” energy for anticipated work at home, “worries” about children’s illnesses, may lead to less stay in focus on the job. The assumption is that mothers spend more of their non-employment hours in childcare or other household work instead of in leisure as childless women do and that leisure takes less energy thus leaving more energy for paid work. But, it is true that “No study has directly measured the effort or productivity of mothers versus non-mothers or men versus women; prior research has approached these questions only indirectly.” (Budig and England 2001: 207).

The latter study finds the return to women’s human capital less with each subsequent child, and that children reduce women’s pay more if women are married or divorced relative to when they were never married. They explain that part of these family status effects must be related to “energy”, because employers do not have a reason to discriminate against the number of children or marital status per se. On the other hand Waldfogel (1995) does not find a different effect of children for lone mothers and married women. And also Baxter (1992) found that the number of hours expended does not affect Australian women’s wages. It is still astonishing how much more time mothers devote to their children compared to men. In a most recent study in The Netherlands by Kluwer (2002), which investigates the combining work and care strategies of couples before having first birth and thereafter by a sample of women having a first birth in three provinces of the Netherlands, it is clear that even if couples discussed and agreed upon the equal sharing of paid work and care tasks before the child is born, the after birth situation is that women end up with more of the care tasks and less paid work than was agreed upon by both partners before the child is born. As far as involuntary childless women in “fertile ages” are concerned I would like to mention that “worrying” might also be related to hospital checkups and infertility treatments that are also time consuming and coincide with business hours.⁴²

⁴² Wetzels 2002: 1 out of 100 births per year (the total of live births in 1995: 190,500) in the Netherlands are born out of In Vitro Fertilization, Fauser 1998). The chance of successful treatment decreases with age at treatment. For women below age 30 the change on successful IVF treatment is 14 per cent, for women between 35-39 the probability of a life birth due to IVF is 7 per cent. Health care insurance reimburses three treatments per women, and before treatment the diagnosis and preparation takes one year at a minimum.

4.2.3. Further investment in productivity

Besides energy to work productivity differentials may occur due to differences in unmeasured quality such as ‘motivation to work’ or ‘commitment to work’ (Hakim 1991). Persons not having a regular continuous fulltime full year work schedule may be (thought of as) less committed or motivated for paid work. On the other hand, these workers may be (seen as) more satisfied with individual arrangements that better suits their life. It is not researched yet whether this work pattern behavior leads to higher energy, higher motivation per hour paid work. The legal choice of changing contractual work hours enables/induces this criticism on number of hours spend in the market.

4.2.4. The exogenous child effects

To estimate the effect of children beyond the effect of less human capital accumulation due to children and time out to care for children, studies report on the wage effect of one or more dichotomous variables that take up the independent wage effect of children. Some authors report only child effects with controls for experience, others do not control for actual experience and some report both (see Table A in Appendix Table 1). The studies in the United Kingdom and United States do find a negative effect of children, e.g. after controlling for human capital (Jacobson and Levin 1992, Baxter 1992 Waldfogel (1995, 1997, 1998) and Joshi et al (1999)) and for unobserved heterogeneity (Neumark and Korenman 1992, Korenman and Neumark 1992). However the effects differ in magnitude by method used and measurement of human capital.⁴³ In the Scandinavian countries this child gap is not found clearly.

There is no information yet on the effect of children on Dutch women’s wages when analyses include actual human capital accumulation.

4.2.5. Differential remuneration of given productivity

In a labour market with imperfect information employer’s expectations of the worker’s productivity may be negatively affected by her being a mother (statistical discrimination). A possible cause of statistical discrimination is uncertainty surrounded the reliability of child care and schools. In recent years Dutch parents make use of a combination of different types of formal and informal care (Dobbelsteen, Gustafsson and Wetzels 2001). There is no formal

⁴³ For example: Neumark & Korenman (1994) estimate child penalties by analysing how differences in sisters’ wages are related to fertility differences assuming that the relevant sources of heterogeneity that bias models seeking to estimate child penalties are held constant within pairs of siblings. They estimate the wage penalty to motherhood in the United States 7%, which falls to 4 to 5% when job experience was controlled for.

child care when children are ill, and schools have increasingly less formal school hours, and shortage of personnel. School schedules in most countries do not fit working schedules of mothers, except for the school schedules in Scandinavian countries (Wetzels 2002).

4.3. Review of studies

Appendix Tables 1 to 3 review a number of recent studies on women's wage structure. Appendix Table 1 (Source: Wetzels 2002b), summarizes the studies on data used, age of the sample and measure of experience. The data used are collected in the UK, US, Canada, DK and Sweden, and one study gives a 7-country comparison. The datasets used in the studies are primarily cross-sectional, representative large-scale survey data. A few studies use administrative data, some use panel data. The multiple country-comparisons use data that are harmonized across countries either by the authors or by Eurostat. From the Table follows that almost all studies conducted in the United States and United Kingdom employ data that cover fairly young women e.g. age 33 or younger in Waldfogel (1994a,b, 1995, 1997, 1998a,b). This age group in the Netherlands has not yet reached completed fertility and actually is in the very process of family formation. In the Netherlands due to postponement, the mean age of giving birth to the first child is 29. The studies analysing Nordic countries and the Netherlands mostly cover women aged 15 or 18 to 65.

The measurement of employment experience is important, since it captures past part time experience, and career break effects. Table 1 shows that most British, American and Nordic studies include actual experience. The Dutch studies reviewed have not yet been able to include actual experience. Also in the 7 country comparison this variable does not hold information on the actual experience in the labour market. The measurement of actual experience differs among the studies in Appendix Table 1. In the study by Albrecht et al (1999), experience is calculated in fulltime equivalents, and their data is based on more detailed information than in the other studies reviewed, namely monthly reports. In their analysis the effect of past work being less than fulltime but more than 15 hours per week is included indirectly by calculating actual experience in full-time equivalents. Measuring experience in full time equivalents like in Albrecht et al (1999) is not an appropriate measurement of improvements in productivity by training on the job in the Dutch part time economy (Visser 1999, Wetzels 2002). It seems not appropriate to calculate 10 years part time work as 5 years of actual experience, because a person experienced organizational and work

changes for 10 years. However the experience will also not be equal to a person working fulltime. Which recalculation is the best needs more research.

Past studies are unclear about what part of the (exogenous) child penalty is explained by accumulated years of employment experience, because some authors report only penalties with or without controls for experience.

Other explanatory variables not included in Appendix Table 1 are part time working hours and the measurement of children. The calculations in the studies concerning women's wages in the United Kingdom, United States and Canada explicitly use the information on fulltime and part time experience to test for the effect of working part time. One study (Waldfogel 1995) reports that employment experience includes being on paid leave. The Danish and Swedish research in Appendix Table 1 has not included part-time work in their analysis of women's wages. Datta Gupta and Smith 2000 cite a study by Naur et al (1994) that has shown that part-timers tend to have the same wage functions as full-timers in Denmark. In addition Datta Gupta and Smith (2001) argument for excluding part-time in their analyses because earlier studies based on Danish longitudinal data have shown that there are measurement errors for part-time workers. The Swedish study (Albrecht et al 1999) does not have information on short part-time work in their data.

Most studies control for number of children, but it is not always clear whether this refers to children living at home or also includes children not living at home. Phipps et al 2001 explicitly looked at the different effects of including a 'child ever dummy' instead of a 'child now dummy'. But they did not find a change of the results. By including number of children, it is assumed that each additional child increases household time, and thus influences negatively the energy to work, which may affect both wages and participation. The age of the children also may influence the energy to work, assuming that younger children are more time-consuming than older children. Therefore dummy variables are included measuring the presence of a child in age categories related to age at which children enter childcare centers, primary and secondary schools.

The countries analysed vary with respect to the wage dispersion, the leave regulations for women when giving birth, the availability of part-time jobs, the need for families to have a dual income, etceteras. Thus, whereas the Scandinavian studies investigate the impact of the duration of the maternity leave, the focus in the US/UK studies is on the impact of a career break, as the latter two countries do not have these generous leave regulations. Furthermore, they explain mother's wage gap primarily by focusing on the wage effects of part-time versus

full-time jobs. Studies of the mother's wage gap in the Netherlands are likely to focus on the wage effects of a career break and of part time work. The Netherlands developed from a society in which a breadwinner's wage relieved the wife from paid work, to a society in which couples choose for a one and a half earner model. Women's own hourly wage rate played a role in the participation decision of Dutch women in the 1970s (Hartog and Theeuwes 1985, 1986). In recent years the proportion of reentrant women with a long career break is growing. Women who re-entered the labour market in 1999 after a career break of at least one year, on average had not participated on the labour market for 11 years (Allaart en de Voogd 1994, Wetzels and Tijdens 2001).⁴⁴ Furthermore, the young generations of mothers are studied since public policies aim at long part time jobs for each parent and continuous work careers. Recent studies by Wetzels 2002a and b estimate for female workers the effects of selection into motherhood (2002a), and the effect of having a career break and the length of career break on Dutch women's wages (2002b).

Appendix Table 2 compares specifications and estimation methods used in two Nordic countries. The Table illustrates the methods used in all studies reviewed. Mostly OLS estimations are performed, and if possible the results are compared with panel estimation results.

Appendix Table 3 presents most of the studies of Table 1 and gives the focus and results.

4.4. The impact of a time-out on mothers' wages

British and American studies estimate the effect of time out on women's wages by inclusion of actual human capital accumulation, since leave arrangements are not very generous in these countries. One Study by Waldfogel (1998) however explicitly accounted for maternity leave

⁴⁴ For all re-entrants in a Dutch survey on Female Re-entrants (FNV-data) it appears that 35% to 40% re-entered when the first child was ten years old. 25% of the re-entrants re-entered or wished to re-enter when the first child is seven or eight years old; 50% took the step of re-entering when the first child was 12 years old and 75% of the women wish to re-enter or did so when the first child was 16 years old. Women with an education to intermediate secondary/lower vocational level re-enter the workforce less quickly, and are more likely to exit on the birth of the first child in comparison with intermediate and highly educated women. Of the highly educated women, 55% exited when the first child was born (70% of women with a low educational level) and 75% of the women educated to an intermediate level re-entered when the first child was 12 years old (50% women with a low educational level). Comparisons of the cohorts of re-entrants born in 1940-1949, 1950-1959 and 1960-1969 shows that women in the 1940-1949 cohort are the slowest to leave work (50% exited in the year of the child's birth, compared with 70% in younger cohorts). The re-entrants in the 1940-1949 cohort re-enter less quickly after a work break than women in the younger cohorts. Only when the first child is 14-15 years old do these women wish to return to work or do they become successful re-entrants. By contrast, 25% of the re-entrants born in the period 1950-1959 have already re-entered when the first child is nine years old. Of the re-entrants born in 1960-1969, 25% are re-entrants by the time the first child is five years old.

coverage and found that women who had leave coverage and returned to work after childbirth received a wage premium that offset the negative wage effects of children. Some Dutch studies have taken the effect of time out into account, since paid leave arrangements are also quite limited in the Netherlands compared with Scandinavian countries. Dekker et al (2000) without controlling for actual experience find a strong negative effect of previous non-participation or unemployment on women's wages. Wetzels and Tijdens do find an additional effect of time out on Dutch women's wages after controlling for human capital.

Regulations on maternity leave imply that the employment relation is not broken, and therefore there will be no searching for a new job, particularly important as women have high job demands with regard to working hours, timing and work place. Studies of the women's wages in the Nordic countries are likely to focus on the wage effects of these (parental) leaves. The Swedish "working women's right to have a family" has from the 1930s on led to high female labour force participation rates. In general, Sweden is a full-time economy, and the income dispersion is small. A high proportion of Swedish mothers have continuous careers in full-time employment, except for taking long maternity leaves with high compensation based on previous earnings, and working part-time when their children are less than 8 years old.⁴⁵ Also in Denmark, the female part-time rate has been steadily declining from 40% in 1980 to 20% in 1997. Therefore Scandinavian research analyzing the effect of time out on wages, disentangles the effect of actual experience, and time out, even more specific, the effects of different types of time out on wages. Albrecht et al (1999) analyze career interruptions and subsequent earnings in Sweden. In the cross section the effects of time out vary both by type of time out (formal parental leave has no effect on women's subsequent wages, whereas other types of time out have negative effects), and by gender (the effects are stronger for men than for women). Panel estimates with controls for individual fixed effects eliminates most of the difference in effects across different types of time out but the difference across genders in the effects of time out remains. According to Datta Gupta & Smith (2001) analyzing the family gap in Denmark, the main effect of children seems to be loss of human capital accumulation during childbirth periods.

We wish to mention a Canadian study here because of the generous leave arrangements and high labor force participation of women in Canada. Phipps, Burton & Lethbridge (2001) show that full-time female workers experience no income penalty associated with time out without

⁴⁵ The Scandinavian countries are known for their subsidized public day care for children and generous leave arrangements. Mothers with children below the age of 15 months make use of paid maternity leave. Mothers with children below the age of 8 make use of the right to do their work in 6 hours per working day.

job change, but a significant penalty is associated with time out followed by a job change. Even for women who have always worked full-time after their interruptions, switching jobs following a child related interruption has significant negative consequences for current income. In addition current weekly hours of unpaid work are negatively associated with women's current incomes. Controlling for unpaid work hours as well as career interruptions substantially lowers though still not generally eliminates the family gap. It is housework rather than childcare that is negatively associated with women's current incomes.

4.5. The impact of part-time work on women's wages

The research on the child gap in pay in the United Kingdom and United States stresses the effect of mothers being more likely than childless women to work in part-time jobs that earn lower wages in these countries.⁴⁶ British empirical literature identifies differences in the payment of full-time workers and part-time workers (Ermish and Wright 1993). American literature complements on the pay penalty to part-time work by Jones and Long 1979, Blank 1990, Corcoran et al 1983). Gustafsson et al.(forthcoming) do find a significant negative effect of part-time work on hourly wage in Britain, Germany and Sweden, and no significant effect in the Netherlands.

Also studies of the mother's wage gap in the Netherlands are likely to focus on the wage effects of a career break and of part time work. The Netherlands developed from a society in which a breadwinner's wage relieved the wife from paid work, to a society in which couples choose for a one and a half earner model. Recently more women re-entry the labour market after a longer career break. Wetzels and Tjzens (2001) found that women who re-entered the labour market in 1999 after a career break of at least one year, on average had not participated on the labour market for 11 years.⁴⁷ There are no studies known which analyse the effects of career breaks on Dutch women's wages by birth cohorts.

⁴⁶ Besides these lower paid jobs, The United States and the UK are known for the retention part-time jobs, which are created to keep a company's valued, mostly skilled employees, whose life circumstances prevent them from working full-time, generally includes women with young children.

⁴⁷ For all re-entrants in a Dutch survey on Female Re-entrants (FNV-data) it appears that 35% to 40% re-entered when the first child was ten years old. 25% of the re-entrants re-entered or wished to re-enter when the first child is seven or eight years old; 50% took the step of re-entering when the first child was 12 years old and 75% of the women wish to re-enter or did so when the first child was 16 years old. Women with an education to intermediate secondary/lower vocational level re-enter the workforce less quickly, and are more likely to exit on the birth of the first child in comparison with intermediate and highly educated women. Of the highly educated women, 55% exited when the first child was born (70% of women with a low educational level) and 75% of the women educated to an intermediate level re-entered when the first child was 12 years old (50% women with a

Gustafsson et al (forthcoming) compare women's wage estimations in the Netherlands, Germany, Sweden and the United Kingdom.⁴⁸ Their OLS wage equations control for employment status, education, age, marital status, industry and occupation. Their wage estimations show that in the Netherlands working part-time in comparison to working in a full-time job does not have a negative effect on women's hourly wage. In Britain, however a negative effect of working part-time was found in their study. In Sweden the effect of working part-time showed even a positive significant effect on women's hourly wages in comparison to full-time jobs. In addition Zorlu (forthcoming) does not find a negative effect of working part-time in The Netherlands. Furthermore, according to Dekker et al (2000), for women employed in full-time jobs the education premium is about half of the premium for men in full-time jobs. The education premium for full-time working women is also half of the premium for women working in part-time jobs.

4.6. Exogenous child effect in women's wages?

Waldfogel (1994, 1997, 1998), Joshi et al (1999), Budig and England (2001), and Neumark and Korenman (1994) controlling for actual experience in wage estimations show a child penalty⁴⁹. Waldfogel (1997) estimates a 6% wage penalty for mothers with 1 child and 13% for mothers with two or more children in the United States for young women (not older than 33). Waldfogel (1998) analyzing the effect of maternity leave for young women in the United Kingdom and United States finds that, although controlling for actual experience was important in reducing child gap, the majority remained. Women who had leave coverage and returned to work after childbirth received a wage premium that offset the negative wage

low educational level). Comparison of the cohorts of re-entrants born in 1940-1949, 1950-1959 and 1960-1969 shows that women in the 1940-1949 cohort are the slowest to leave work (50% exited in the year of the child's birth, compared with 70% in younger cohorts). The re-entrants in the 1940-1949 cohort re-enter less quickly after a work break than women in the younger cohorts. Only when the first child is 14-15 years old do these women wish to return to work or do they become successful re-entrants. By contrast, 25% of the re-entrants born in the period 1950-1959 have already re-entered when the first child is nine years old. Of the re-entrants born in 1960-1969, 25% are re-entrants by the time the first child is five years old. The average length of career break due to motherhood or care for the household in the Netherlands is found to be 11 years (Wetzels and Tjijdens 2001, Allaart en de Voogd 1994).

⁴⁸ All regressions controlled for education, age, marital status number of children in the household, age of the youngest child in the household, industry and occupation.

⁴⁹ Two U.S. studies controlling for actual experience did not find a child penalty in wages. First, an earlier study, Hill (1979) concluded that controlling for actual experience and tenure, explained all the negative effect of children on women's pay. This study did not control for unobserved differences. Second, Korenman & Neumark (1992), found no difference in wage change across the two year period between women who experienced a birth during the period and those who had not regardless of whether women's work experience during that interval was controlled wage penalty. However this is a short period for an analysis of a change over time.

effects of children. Budig & England (2001) analyzing American women not older than 28-35 in 1981 find a wage penalty of 7% per child without controlling for experience (Lundberg & Rose (2000) found 5% for first birth, Waldfogel (1998) finds 20 percentage points in the United Kingdom and the United States). After controlling for experience 5% remains. Per child the child gap is estimated to be: for only one child 2%, 13% for 2 children and 22% for 3 children, controlling for human capital accumulation the penalties are 5,11, and 15 respectively. Neumark & Korenman (1994) analyse how differences in sisters' wages are related to fertility differences assuming that the relevant sources of heterogeneity that bias models seeking to estimate child penalties are held constant within pairs of siblings. They estimate the wage penalty to motherhood in the United States 7%, which falls to 4 to 5% when job experience was controlled for.

Waldfogel (1995) finds that the wage penalty for one child declines to 4% if controls are added for whether the current job is part-time and how much of past experience was part-time. Harkness and Waldfogel (1999) comparing seven industrialised countries find the child gap to be the largest in the UK. They explain this out of the higher propensity of British mothers to work in low paid part-time jobs but also because even among full-time working women, mothers are lower paid relative to other women than are mothers in other countries. They conclude that the variation in family gap in pay across countries is not primarily due to differential selection into employment or to differences in the wage structure. Budig and England (2001) find that part-time is the only "mother friendly" characteristic of the job⁵⁰ that explains some of the child penalty. They suggest that a portion of the unexplained motherhood penalty probably results from the effects of motherhood on productivity and/or from discrimination by employers against mothers.

A most recent study by Avellar (2002) which explicitly tests the relationship between motherhood and wages across two cohorts, finds that even after controlling for unobserved heterogeneity and myriad human capital variables, mothers in both cohorts tend to earn less, compared to when they did not have children, but that this association has weakened across cohorts, to the point that in the recent cohort, women with only one child do not experience any significant penalty. This is in line with the results in the Scandinavian countries reviewed in this Chapter, but also with the results found by Wetzels 2002b, that does not find a child gap in The Netherlands when is controlled for human capital accumulation.

⁵⁰ Other job characteristics, included in their research, that might connect to mother friendliness e.g. variable measuring how demanding the job is in terms of effort, cognitive skill, authority, time spent commuting are not found to explain the child penalty.

Previous studies on women's wages in the Netherlands (Dekker, Muffels and Stancianelli 2000, Gustafsson, Kenjoh and Wetzels forthcoming, Zorlu 2002) all do not control for actual experience. Dekker et. al (2000) find that the child wage penalty for women in full-time jobs is 17%, whereas the child penalty for women in short part-time jobs (<12 hours per week) is 23%. The effect is insignificant for long hours in part-time jobs (>12&<32 hrs pw). Every extra child lowers women's gross wage by 4% and 7% in long part-time jobs and in full-time jobs. There is no effect of children on wages in short part-time jobs. Gustafsson et al (forthcoming) compare women's wage estimations in the Netherlands, Germany, Sweden and the United Kingdom.⁵¹ Their OLS wage equations control for employment status, education, age, marital status, industry and occupation. They do not find a significant child gap by including controls for number of children less than 11 years in the household (no children, one child, 2 or more children), nor by age of the youngest child in the household (0-2, 3-5).

4.7. Bias in estimation models of women's wage

Past research on women's wage equations has considered three principal sources of potential bias: 1) heterogeneity bias, 2) endogeneity bias, and 3) bias from selection into employment. First, unobserved heterogeneity among women's productivity can bias OLS wage regressions. If OLS estimations find an effect of children on women's wage in addition to actual experience then panel estimations which correct for unobserved heterogeneity can sort out whether the child penalty falls to zero, becomes larger or is not affected.⁵² Waldfogel (1998) controlling for unobserved heterogeneity did not find significant reduction of the estimated child penalties. Budig and England (2001) estimate OLS models and person specific fixed effects (FE) models like Korenman and Neumark (1992), Lundberg and Rose (2000) and Waldfogel (1997). Comparison of OLS and person specific FE models only including a continuous variable indicating the number of children, shows a child gap of 7% per child in FE and 8% in OLS (only slight negative selectivity into having (more) children on unmeasured pay relevant characteristics). Controlling for reduced experience lowers the child gap from 7 to 5% under FE; in OLS the reduction is from 8 to 2%; including corrections for

⁵¹ All regressions controlled for education, age, marital status number of children in the household, age of the youngest child in the household, industry and occupation.

⁵² Three possible effects can occur: 1) if women with lower unobserved earning power are more likely to have children, the child penalty will fall close to zero; 2) if women who have children and are observed working are those with higher unobserved earnings power, the child penalty larger; and, 3) if having children is uncorrelated with unobserved earning ability, the child penalty might be unaffected by controlling for fixed effects.

job characteristics reduces the child gap to 4% in FE and in OLS the further reduction is even smaller.

Wages and time out may both correlate with an omitted variable (wages positively, time out negatively). If this is so, this could lead to the negative coefficient on time out. Fixed effect (FE) panel estimates, which correct for the omitted variable problem (assumed that the omitted variable is individual specific and constant over time) do not support an omitted variable explanation (Albrecht et al 1999). In addition, the absence of any significant change in the coefficient on experience in cross section (CS) to FE panel estimates suggests that there is no omitted variable bias in the cross section estimates in returns to experience. Substantially more negative coefficients on the components of time out especially parental leave suggest a positive correlation between the omitted individual FE and the time out variables. In the FE panel estimates the coefficients on all time out variables for women become more negative.

Secondly, endogeneity may bias wage models if children, experience or time out are not exogenous. Browning (1992) and Joshi et al (1999) found number and age of children to be endogenous to the model. The problem of endogeneity bias can be handled by instrumenting the child variables, or by estimating separate wage functions and controlling for the selection into the group of mothers and non-mothers (Joshi et al 1999). The data used by Datta Gupta and Smith (2001) do not give possibility to use valid instruments (variables that affect the choice of having children but not the human capital and earnings capacity of women). However, Korenman and Neumark (1992) and Waldfogel (1994a, 1994)⁵³ show that the exogeneity of children in wage equation is not rejected. Similarly Waldfogel (1994a), employs a Hausman test, using having a working partner and partner's pay as instruments, which did not reject exogeneity of experience in the wage equation.

Albrecht et al (1999) refer to Gronau (1988) using United States data and Edin and Nynabb (1992) using Swedish data as studies that did not find support for the hypothesis that low wages cause individuals to take (future) time out of their careers.

Finally, women's wage estimations may be biased because wages are only known for workers, who may be more productive than women not employed. The standard method to correct wage estimation models for selection into employment is laid out in Heckman (1979). In the studies reviewed some employed the standard Heckman method (Datta Gupta and Smith 2001, Harkness and Waldfogel 1999, Waldfogel 1994, Waldfogel 1995), while others

⁵³ She uses the Hausman test of exogeneity of children (number of children) by use of the instrument marital status. The test did not reject exogeneity of children in the wage equation. If they were endogenous, the correction for this would result in larger child penalties than those estimated.

did not (Albrecht et al 1999, Budig and England 2001). Datta Gupta and Smith 2001 did find a selection effect.⁵⁴ Harkness & Waldfogel (1999)⁵⁵ found the selection correction term only significant, and positive, in United States, and not in the other 6 countries in their analyses. Selection bias was not found by Waldfogel (1994, 1995⁵⁶).

According to Budig and England (2001: 207), no study has directly measured the effort or productivity of mothers versus non-mothers and prior research has approached these questions only indirectly. Mothers may be less productive on the job than non-mothers because they are tired from home duties or because they are “storing” energy for anticipated work at home. The assumption is that non-mothers spend more of their non-employment hours in leisure instead of in childcare or other household work and that leisure takes less energy thus leaving more energy for paid work. Becker argues that even if women had equal amounts of human capital, their ‘energy’ for work would be diminished by the greater energy demanded by their household tasks relative to the energy men devote to their leisure activities. Baxter (1992) found that the number of hours expended does not affect Australian women’s wages. Role overload which may limit the effort they are able to put into their jobs- or optimally allocate into market work (Becker 1985). Women who differ in family status may also differ in some unmeasured quality such as ‘motivation to work’ or ‘commitment to work’ see f.e. Hakim (1991).

4.8. Conclusion

The chapter on motherhood and wages has reviewed the recent publication on determinants of lower earnings among mothers compared to childless women with a special attention to career discontinuities and the allocation to jobs particularly suited for women’s demands to reconcile work and family life. From the theory the following hypotheses could be formulated:

1. Mothers are more likely than other women to take time out of the labour market to care for their children and hence will have acquired less human capital than other women;

⁵⁴ Datta Gupta & Smith (2001) used occupational categories in the wage function but not in the probit, estimating labor force participation. The probit includes household wealth, household non-wage income and ownership of house or apartment. Experiments with other exclusion restrictions showed that the results are fairly robust with the choice of excluded variables.

⁵⁵ The following variables were used for identification: age structure of children in household, the amount of other family members’ earnings, and the amount of other family income.

⁵⁶ Probit estimation included marital status and partner’s pay as identifying variables.

2. Women may choose jobs that are more mother friendly but that pay less, e.g. part-time jobs or jobs that involve less commuting time;
3. Extra household production and caring activity associated with motherhood leave mothers with less energy to spare their paid work making them less productive on the job than other women;
4. Both motherhood and lower pay may be a result of some unobservable difference between mothers and non mothers such as career motivation;
5. Mothers may face discrimination in the labour market because employers may believe that they are less productive even though this is not actually the case.

Hypotheses 1 and 2 have been studied far more extensively than hypotheses 3 to 5.

The review has shown that the studies of women's wages in the Scandinavian countries are likely to focus on the effects of leaves, both parental leave and other leave arrangements. The research analyzing data on the United Kingdom and United States includes also the effect of women being concentrated in part time jobs which appear to be paid less in the United Kingdom and the United States. Sweden and Denmark have not included part time work as an explanation of differences in pay between mothers and childless women. The empirical results mostly on the United Kingdom, and the United States, found a wage penalty on working part time.

The studies reviewed are unclear about what part of the child penalty is explained by accumulated years of employment experience, because some authors report only penalties with or without controls for experience. The studies on the United Kingdom and the United States did find an exogenous effect of children in women's wages after controlling for actual human capital. However a most recent study doesn't find this child gap for the younger generation in the United States (Avellar 2002). In the Nordic studies no additional effect of children was found after controlling for actual human capital.

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Appendix Table 1: Summary of Research Explaining Women's Wage: Country & Data

Research	Country	Data	Age of women in the sample	Wage (if not earnings from employment current job)	Measure of Experience
Waldfogel 95	UK	NCDS in 1981 & 1991	23 & 33		Actual: working at a job or on paid leave from a job; Sum of ft and pt Actual
Joshi, Paci & Waldfogel 99	UK, US	MRC 1978 and NCDS 1991	33		Actual
Waldfogel 94	UK, US				Actual
Waldfogel 98	UK, US	NCDS 1991; NLSY in 1991	UK:33; US:1981:18-25 1991:26-34	NCDS wage from current job at the age of 33 interview in 1991, if available, for the late wage; if not, I work backward to find the most recent wage. For this reason not all women are age 33 at the time of the late wage. For the early wage, I use the current job at the age 23 interview in 1983, if available,; if not I work backward to the most recent job, or if none is available in 1983, I use an intermediate wage from the period between 1983 and 1991. Thus not all women are age 23 at the time of the early wage.	Actual NCDS: pre 1981 from 1981 survey 1981-1991 from the 1991 survey NLSY: sum of actual exp. from 1978 as recorded plus potential exp. for pre 1978 period for those who left school before 1978
Avellar 01	US	NLS-YW (women 14-24 in 1968) NLSY women and men 14-21 in 1979 1968-1985 and 1986-1998	NLS-85:31-41 From 14- 41	Restriction observed wage for at least two years.	Actual Work exp is dummy var.1=if worked>=26 weeks a year; 0=otherwise; in the pooled models these dummies are summed across the waves; in ft and pt*** Actual + tenure in ft and pt (in yrs)
Budig & England 01	US	NLSY 1982-1993	1981: 17-24 1993: 28-35		Actual + tenure in ft and pt (in yrs)
Hill 79	US	PSID 1976	PSID 1976		Actual + tenure
Korenman & Neumark 92	US	NLS-YW 1980-1982	1980: 15-22 1982: 17-24		Actual + tenure
Lundberg & Rose 00	US	PSID 1980-1992			Not included.
Neumark & Korenman 94	US	NLS-YW 1982 (and earlier if data are missing in 1982)	1982: 17-24		Actual
Waldfogel 97	US	NLS-YW 1968-1988			Actual
Phipps, Burton & Lethbridge 01	Can	Statistics Canada General Social Survey 1995 Retrospective work history info	1995: 25-54	Income not wage	For each career interruption of >=6 weeks: reason, duration in weeks, Ft or PT before and after interruption. potential exp. and corrected for time out.
Datta Gupta & Smith 01	DK	1980-1995 Only individuals with an annual employment of more than 1,000 hours included.	1980: 18-40 1995: 18-55	Annual wage income divided by number of working hours, which is calculated from the register on supplementary pension payment (ATP).	Actual: Accumulated. For cohorts born after 1960 split into: before 1st birth, during the child birth period & after last childbirth
Albrecht, Edin, Sundstrom & Vroman 99	S	Family & Work 1992 1993, matched with wage data from Statistics Sweden; Individual's main activity from age 17 up to the date of the interview excl. activities of less than 3 months duration; Only persons working more than 16 hours per week.	24-44	Wage data are adjusted to a full-time basis. Wages from Statistics Sweden are based on employers'reports of individual wages once per year.	Individual's main activity from age 17 up to the date of the interview; Employment measured in ft equiv.yrs
Dekker, Muffels & Stancianelli 00	NL	SEP 1985-1994	16-65		Experience is not available in most waves, therefore not included
Gustafsson, Kenjoh & Wetzels (forthcoming)	NL, G, GB, S	OSA 1998; GSOEP 1998 BHPS 1998; HUS 1998	18-65		Not included
Zorlu (2002)	NL	CBS-LSO 1997:employed	18-65	Administrative data: weekly wages.	Potential experience included
Harkness & Waldfogel 99	Aus, Can, UK, US, G, F, S	LIS and LNU for S: microdata from the 7 countries: most 1994, UK 1995; F & S 1991.	25-44		Not included

Source: Wetzels 2002 Does motherhood really make women less productive, paper presented to EALE conference 2002. Countries: AUS=Australia; CAN=Canada; DK=Denmark; FIN=Finland; GER=Germany; N= Netherlands; SWE=Sweden; UK=United Kingdom; US=United States; Data sets: NCDS: National Child Development Study every child born in Britain during the first week of March 1958 with surveys conducted at birth age 7 age 11 age 16 age 23 and age 33 in 1991; 3,800 women reported wage data from at least two jobs a current job and a prior job; MRC: Medical Research Council's National survey of Health and Development a cohort born in a week in March 1946; NLSY: National Longitudinal Survey of Youth a national probability sample of individuals ages 14-21 in 1979 followed annually, Blacks and Latinos oversampled; PSID: Panel Study of Income Dynamics; SEP: Socio-Economic panel; OSA Organisatie voor Strategisch Arbeidsmarktonderzoek; CBS-LSO: Central Bureau of Statistics-Loon structuur onderzoek; LIS: Luxembourg Income Study.

Appendix Table 2: Specifications and estimation methods of two Nordic studies compared

		AES&V (F,M)	AES&V (F,M)	AES&V (F,M: Prv./Pbl.)	AES&V (F,M:ed1+2, ed3+4)	DG&S (F,M)	DG&S	DG&S	DG&S	DG&S (F,M: in 1980: no child+age 18-40)
D	Ln hourly Wage	OLS	OLS	OLS	OLS	OLS&LS	RE	RE	RE	RE
D:	Deviations from mean lnw	Panel (age20+)	Panel (age20+)	Panel (age20+)	Panel (age20+)	FE RE				
E	Exp	X	X	X	X	X	X	X		
E	Exp2	X	X	X	X	X	X	X		
E	Total time out	X								
E	Parental lv		X	X	X					
E	Household time		X	X	X					
E	Other time		X	X	X					
E	Diverse leave		X	X	X					
E	Unemployed		X	X	X					
E	Milt.service		X	X	X					
E	Married/cohabit	X	X	X	X					
E	Legally married					X	X	X	X	X
E	Cohab./not mar.					X	X	X	X	X
E	Age child <17	X	X	X	X					
E	1 child					X	X		X	X
E	>=2 children					X	X		X	X
E	Central govern	X (nt P)	X (nt P)		X (not P)					
E	Municip.Govern	X (nt P)	X (nt P)		X (not P)					
E	Other Nordic	X (nt P)	X (nt P)	X (not P)	X (not P)					
E	Non Nordic	X (nt P)	X (nt P)	X (not P)	X (not P)					
E	High lev.salar.					X	X	X	X	X
E	Medium lev. s.					X	X	X	X	X
E	Low lev salaried					X	X	X	X	X
E	Yrs out of l.m.						X	X		
E	Yrs out of l.m2						X	X		
E	Act.exp.inter.: 0 children 1 child >=2 children								X X X	
E	Act. Exp. ² inter. 0 children 1 child >=2 children								X X X	
E	Exp. <1st birth									X
E	Exp. <1st birth ²									X
E	Exp betw.births									X
E	Exp betw.bs ²									X
E	Exp after last b.									X
E	Exp aft. last b. ²									X
E	Province					X	X	X	X	X
	Lambda					X (not OLS)	X	X	X	X

AES&V: Albrecht, Edin, Sundstrom and Vroman (1999); DG&S: Datta Gupta and Smith (2000). F: females; M: Males, Prv./Pbl. Private/Public Sector, ed.: education level (1 is lowest), X: variable is included in the analysis. D: dependent variable E: explanatory variable. Not P.:nt.P: Not in panel estimation.

Appendix Table 3: Review Explaining Women's Pay: focus and results

Research	Focus	Details on Data+ statistical model	Results
Albrecht, Edin, Sundstrom & Vroman 99	Career interruptions and subsequent earnings	Family and Work 1992/1993. W born :1949,'54,'59,'64 & '69. Men born in 1949,'59&'64. Individual's main activity from age 17 up to the date of the interview. These data are matched with wage data from Official Statistics on wages (Statistics Sweden) which are based on employers' reports of individuals wages once per year. Activities >= 3 months duration; Wage data adjusted to ft; Working >= 16 hours per week. Cross section and panel	In the CS the effects of time out vary both by type of time out (formal parental leave has no effect on w's subsequent wages, whereas other types of time out have negative effects), and by gender (the effects are stronger for men than for w). PE with controls for individual FE eliminates most of the difference in effects across different types of time out but the difference across genders in the effects of time out remains. HC depreciation interpretation of the negative coefficient on total time out in earnings functions estimates does not explain the entire effect of time out on wages.
Avellar, S. 2002	Child gap in pay	National Longitudinal Survey of Young Women & National Longitudinal Survey of Youth, fixed-effects models	Explicit test of the relationship between motherhood and wages across two cohorts. Even after controlling for unobserved heterogeneity and myriad human capital variables, mothers in both cohorts tend to earn less, compared to when they did not have children. This association has weakened across cohorts, to the point that in the recent cohort, women with only one child do not experience any significant penalty. Penalties are larger for married than for non-married w. W with (more) children have fewer job experience and after controlling for experience a penalty of 5% remains. "Mother friendly" characteristics of the jobs held by mothers explain little of the penalty beyond the tendency of more mothers than non mothers to work pt. The portion of the motherhood penalty unexplained probably results from the effects of motherhood on productivity and/or from discrimination by employers against mothers. When controlling for time constant unobserved heterogeneity the negative effect of children on mothers' wages disappears. The main effect of children seems to be loss of HC accumulation during childbirth periods. There is no indication that children have long term effects on the earnings potential of their mothers holding experience constant.
Budig & England 01	Wage penalty for mother-hood	NLSY 1982-1993 Employed ft and pt during >=2 years from 1982-1993; The first analysis to distinguish among years of ft and pt: experience and experience with one's present employer. Fixed effects models following Waldfoegel 1997, but more detailed measures to assess whether the loss of ft experience and seniority caused by motherhood explains most of the penalty.	Penalties are larger for married than for non-married w. W with (more) children have fewer job experience and after controlling for experience a penalty of 5% remains. "Mother friendly" characteristics of the jobs held by mothers explain little of the penalty beyond the tendency of more mothers than non mothers to work pt. The portion of the motherhood penalty unexplained probably results from the effects of motherhood on productivity and/or from discrimination by employers against mothers. When controlling for time constant unobserved heterogeneity the negative effect of children on mothers' wages disappears. The main effect of children seems to be loss of HC accumulation during childbirth periods. There is no indication that children have long term effects on the earnings potential of their mothers holding experience constant.
Datta Gupta & Smith 01	Family gap in Denmark	1980-1995 representative sample for persons age 18 to 40 in 1980, and age 18-55 in 1995. Hourly wage is annual wage income divided by number of working hours, which is calculated from the register on supplementary pension payment (ATP). Only individuals with an annual employment of more than 1,000 hours are included. For the cohorts born after 1960: the accumulated experience could be split into experience obtained before first birth, during the childbirth period and after birth of the last child. Controls for unobserved time constant heterogeneity;	When controlling for time constant unobserved heterogeneity the negative effect of children on mothers' wages disappears. The main effect of children seems to be loss of HC accumulation during childbirth periods. There is no indication that children have long term effects on the earnings potential of their mothers holding experience constant.
Dekker, Muffels & Stancianelli 00	Pt work in The Netherlands	SEP 1985-1994 Experience is not available in most waves, therefore not included RE GSL log hourly wage for different working hours by gender: Ft jobs>32 hrs pw; short pt jobs (<12hrs pw) are quite distinct from long pt jobs.	Without control for actual HC:child gap in w's wages in ft jobs: 17%; in short pt jobs 23%; the effect is insignificant for long pt jobs. Every extra child lowers w's gross wage by 4% and 7% in long pt and ft. No effect in short pt jobs. Education premium (ed.p) is half for W compared to men both employed in ft jobs. Ed.p. is also half for ft compared to pt working w W previously non-participant/unemployed have lower wages.
Gustafsson, Kenjoh & Wetzels 02	Incidence & pay of nonstandard work	GSOEP, BHPS, HUS and OSA 1998. No experience information included.	

Harkness & Waldfogel 99	Wage penalty in: Australia, Can, Uk, US, G, Fin. And Sweden	LIS microdata from the 7 countries: one CS,most 1994, UK 1995, and Fin.& S 1991;W and men 25-44 years old. OLS with controls for age, age squared, education, race or ethnicity region and urban residence. And marriage and dummies for having 1, 2 or 3 and more children; Also corrected for sample selection bias only significant for US.	Child gap in pay in UK & G; This child gap is largest in the UK. 1.higher propensity of UK mothers to work in low paid pt jobs; 2. Among ft working W mothers are relatively lower paid in UK than are mothers in other countries. The variation in child gap in pay across countries is not primarily due to differential selection into employment or to differences in the wage structure
Hill 79	Wage effects of marr. & children	PSID 1976 Controlling for actual experience No control for unobserved differences.	Controlling for actual experience and tenure explained all the negative effect of children on w's pay.
Joshi, Paci & Waldfogel 99	Wages of motherhood	MRC 1978 and NCDS 1991 UK W at age 33.	
Korenman & Neumark 92	Marriage, motherhood & wages	NLS-YW 1980-1982 Controlling for actual experience Person fixed effect model	No difference in wage change across the 2 year period between W who experienced a birth during the period and those who had not regardless of whether w's work experience during that interval was controlled
Lundberg & Rose 00	Parenthood and Earnings	PSID 1980-1992 no controls for experience Person fixed effect model;	Wage penalty for motherhood (5% for 1st birth). Married fathers' wages increase after having a child
Neumark & Korenman 94	Sources of bias in w's wage equations	NLS-YW 1982 (but if data were missing then taking data of 1980, 1978,1977,1975,1973). Sibling fixed effects model	how differences in sisters' wages are related to fertility differences assuming that the relevant sources of heterogeneity that bias models seeking to estimate child penalties are held constant within pairs of siblings. Wage penalty to motherhood 7 %, which falls to 4 to 5 percent when job experience was controlled
Phipps, Burton & Lethbridge 01	Income consequences of childrelated career interruptions	Only ft employed, ever had children; income not wage. Control for education and region not shown.	Income penalty associated with time out: Yes, Significant, but only with a job change. W who have always worked ft after their interruptions, switching jobs following a child related interruption has significant negative effect on current inc. Weekly hours of unpaid work are negatively associated with w's incomes. Controlling for unpaid work hours as well as career interruptions substantially lowers though still not generally eliminates the family gap. It is housework rather than childcare that is negatively associated with w's inc. Child ever dummy instead of child now dummy does not change the results. Child penalty remains after controlling for actual experience.
Waldfogel 94	Family status& women's pay	Controlling for actual experience	
Waldfogel 95	Family status & women's pay	NCDS in 1991; W age 33	Test of the work and family conflict hypothesis Do the effects of children vary with:family status, pt work,maternity leave
Waldfogel 97	Effect of children on women's wages	NLS-YW 1968-1988 Person fixed effects model Controlling for marital status, experience and education	6% wage penalty for mothers with 1 child and 13% for mothers with two or more children; Penalty for 1 child declines to 4 if controls are added for whether the current job is pt and how much of past experience was pt
Waldfogel 98	Family gap in pay and maternity leave	NCDS 1991; W age 33 in 1991 NLSY W age 26-34 in 1991 Actual experience in NCDS for the period pre 1981 is taken from the 1981 survey and for the period 1981-1991 from the 1991 survey. Actual experience in NLSY is the sum of actual work experience starting in 1978 as recorded plus potential experience for the pre 1978 period for those who left school before 1978.	Regression results indicate a negative effect of children on w's wages even after controlling for observable characteristics such as education, Controlling for unobserved heterogeneity did not significantly reduce the estimated child penalties Controlling for actual experience was important in reducing child gap. However the majority remained. W who had leave coverage and returned to work after childbirth received a wage premium that offset the negative wage effects of children
Zorlu 02	Etniciy and gender in women's wages	CBSLSO 1997	Double disadvantage is the largest for Moroccan women. Parttime is highly ender biased.

CHAPTER 5: Fertility and Women's Work Status

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5.1. Introduction

The decline in fertility and the growth in women's labor market participation in most OECD countries, has been one of the most important economic and demographic events of the last decades. In order to explain the observed negative relationship between fertility and income, economic models have introduced women's allocation of time decisions and emphasized the opportunity costs of women's time. Only in recent years the fertility decision is viewed as an economic one, in which one of the costs of having a child is the foregone earnings of the person caring for the child in the home, usually the mother. The increase in women's education, relative earnings and employment rates has increased the opportunity costs of child bearing (Becker 1964, Willis 1973).

Other explanations have considered several risks that women face in the allocation of time choices. On one hand unemployment growth among women may contribute to delay child's birth and consequently total fertility. Other risks are related to the lower stability of unions: potential mothers are facing an increased risk of becoming single parents, with the economic and social disadvantages this often brings. Finally both changes in fertility and changes in employment are related to an increased emphasis on individual independence and to the desire of women to be attached in a more permanent way to the labor market (Lesthaeghe, and Willems 1999).

Several important changes characterize the cross countries and temporal pattern of participation and fertility. The correlation between female participation and fertility that was negative and significant for several years, since the 1980s changed sign and became positive and weaker, while important differences emerge across countries. In Southern European countries a positive correlation was

observed between low participation and low fertility rate, in Northern European countries a positive association emerges between high participation and high fertility. Because of this different characteristics research focusing on the relationship between women's participation and fertility has grown especially in Southern European countries where seems still difficult conciliating work and fertility. In Northern European countries where the difficulty is lower, research focuses has been more on the effect of timing of the birth on wages and careers.

In section 2 we discuss the analytical framework which has been used to study labor supply and fertility. In section 3 we present important facts that are likely to have affected the recent trends. In the fourth section we discuss several empirical results of several studies and provide interpretations of the relationship between women's work status and fertility in various countries and the differences across them.

5.2. The basic theory of the relationship between fertility and women's labour participation.

For long time economists neglect the analysis of fertility and its determinants. Fertility was in fact considered essentially a non-economic phenomenon but a socio-demographic one and the analysis of fertility outside the scope of economic theory. More fundamentally economists have neglected fertility behaviour because of the difficulties of incorporating it rigorously into the traditional theory of consumer choice. Only when economic theory focus on human capital and allocation of time, then in the basic model, fertility variable (as other demographic, sociologic and psychological variables such as marriage, divorces, education, etc.) was introduced among the other traditional economic variables such as income, consumption and saving (Browning 1992).

The modern literature in the area is based upon the work of Becker (1964), who asserts that fertility could be analysed within an economic framework emphasizing the connection between income and fertility. Assuming that children are normal good the demand for children will increase with the household income. Since husbands are usually not involved in child care activities an increase in the husband wage has the same positive effect on the demand for children as an increase in household income. Instead child rearing is intensive in the mother's time, increasing wives' wages could have a negative effect on the demand for children (Willis 1973). At the same time high and rising consumption aspirations encourage both members of couple families to remain in full-time paid employment also during child bearing years. In other studies the quality and quantity of children have been considered. Income increase may reduce fertility if the income elasticity for the quality of children is sufficiently greater than the quantity (Becker and Lewis 1973, Willis 1973).

The application of economic modelling of fertility or of fertility and participation has been an active area of research that has now reached a high level of sophistication, and incorporating advances in economic theory as well as econometrics. In the empirical analysis, there are two broad approaches to estimating labor supply functions, taking some account of fertility.

The first approach, which is called by Browning (1992) “purist”, is to estimate a reduced form. In this approach children variables are not included in the labor supply equation although we may include variables that determine the fertility. This approach takes its inspiration from demand theory. Children are treated as a commodity (albeit one with odd durability and irreversibility properties) and should not be included in other demand functions (for example, the demand for leisure).

The second approach, defined the “standard” approach, consists in including fertility variables on the right hand side of the labor supply equation with possibly some allowance for endogeneity. Empirical studies have shown that most of the data rejects the standard approach since the only valid instrument for fertility variables in a labor supply equation is the costs of increasing the number of children. If this cost is not observed we cannot obtain consistent estimates of labor supply conditional on fertility. If this cost is observed, then labor supply equations conditional on this cost and not on children, gives all the information necessary to infer anything we want to know about the conditional labor supply equation (Rosenweig and Wolpin 1980).

More recently fertility and labor market participation decisions have been recognized as the joint result of the maximization of household expected lifetime utility under wealth and time constraints in a dynamic context. The desired participation status and the desired number of children depend on the whole sequence of price and wages and on the variety of characteristics reflecting preferences. The two types of decisions are therefore simultaneous in the sense that they are the solution to a common constrained maximization problem (Cigno (1991), Rosenzweig and Wolpin (1980), Hotz et al. (1988)). The increasing use of panel data allow researchers to take into account the dynamics involved in the relationship between births and work status of women. More over it allows to take into account important omitted factors such as fecundity, tastes, and other individual and marriage-specific traits which are important factors in explaining the decision to have children and are unobservable to the researcher (Del Boca 2002).

Finally most recent directions of the economic of the family have analyzed the limitations of traditional models based on a unitary approach where household income is pooled. Recent analyses of fertility and women’s labor supply have dealt with household behavior as the results of interactions between the family members. In fact it seems that fertility as well as women’s labor supply are the object of a bargaining process between the spouses (Del Boca 1997, Schultz 1998).

An understanding of the relationship between fertility and labor supply is critical to a number of policy debates. Recent analyses have analyzed the relationship between labor market participation and fertility considering not only the effect of prices and incomes and the household characteristics but also several aspects of the labor market and the social service system (the child care system, part time and parental leave).

5.3. The facts

Observation of the most recent data indicates two important patterns have characterized the relationship between fertility and participation in most OECD countries. While for many decades the relationship was negative, in the late 1980s the correlation became positive and weaker⁵⁷. Some interpretations have suggested that the weakening link is mainly due to a greater availability of child care (Ahn and Mira 2002, Ermisch 1989, Hotz et al 1997) and to the growth of unemployment rates.

Even if a decline of fertility and increasing participation pattern has been observed in almost all industrialized countries, important differences emerge in the levels suggesting that different countries are in different stages of development and are constrained by specific social and economic factors (Table 5.1). In the high participation countries, the total fertility rate start at 2.19 in 1970 decline to 1.65 and went back at the end of the 1990s to 1.79. In low participation countries the fertility rate start at 2.72 in 1970 and decline to 1.4. See Ahn and Mira, 2002, for detailed description and integration of these trends. While in the Southern European countries fertility and participation are both low, in the Northern European countries fertility and participation are both high. Graph 5.1 illustrates these differences.

Table 5.1. Fertility Rates and Female Participation rates in selected countries.

Country	Fertility rates		Participation rates	
	1977	1999	1977	1999
Italy	1.98	1.21	37.6	44.1
France	1.86	1.71	53.0	59.8
Spain	2.65	1.15	33.0	47.1
Greece	2.27	1.30	33.3	47.5
Denmark	1.66	1.75	64.7	75.1

⁵⁷ While the correlation was -0.5 during the 1970s and the beginning of the 1980s, by the late 1980s the correlation became $+0.5$.

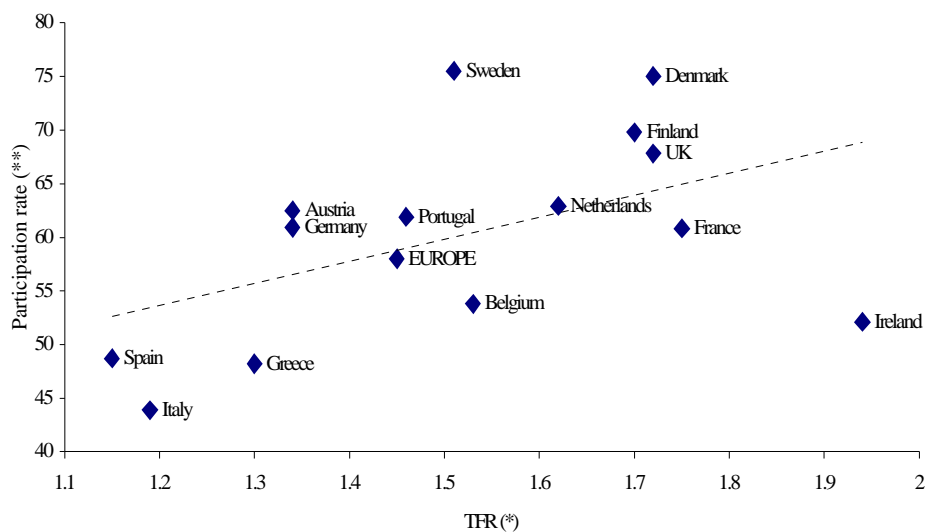
Sweden	1.65	1.52	70.0	74.5
U.K.	1.69	1.71	56.3	67.5

Source: OECD Eurostat 2001 Statistics in Focus

Important differences characterize the labor market characteristics and welfare system of Northern and Southern countries. In regards to the labour market, in Northern countries part-time employment is very widespread and represents most of the opportunities offered to women. Part-time is extremely rare in Southern European countries and it is an important factor in accounting for the low employment rates of married women, particularly those with children. Where part time is limited, married women are forced to choose between no work or full-time work, neither of which is necessarily their preferred option. Married women who choose to work tend to have full-time work commitments, which is not compatible with having large numbers of children.

Graph 5.1.

Women's participation rate and fertility in Europe (1998)



Source: * Eurostat 1999 *Demographic Statistics*, ** OECD 2001 *Employment Outlook*

Table 5.2 shows the low percentage of part-time workers and women in the service sector (as a % of total employment) relative to other European countries. Moreover the service sector, where part-time work is traditionally more widespread, has developed differently in Southern European countries.

Moreover, even married women who do not work tend to limit their family size, at least in part due to the characteristics of the labor market. Because entry-level positions are so hard to find, many

children live at home until they find their first “stable” employment. Thus the labor market indirectly imposes large fertility costs on families even when the mother does not work; thus the structure of the labor market both directly and indirectly acts so as to discourage fertility. It encourages women not to leave the labour market when they have young children but to maintain continuous attachment with negative implication on fertility.

Table 5.2. Proportion of women working part time and women working in the service sector

	<i>Part time</i>	<i>Women in service sector</i>
Sweden	24.7	69
Netherlands	38.8	67
Denmark	22.8	68
UK	25.6	62
Germany	17.5	48
France	12.5	59
Italy	10.1	56
Spain	10.6	52
Greece	6.1	54

Source: Eurostat 2001

In spite of recent institutional changes, the Southern European labor market still remains a highly regulated one. Strict rules apply regarding the hiring and firing of workers and permissible types of employment arrangements. The hiring system and the high entry wage as well as very strict firing rules severely restrict employment opportunities for labor market entrants. These labor market regulations have been largely responsible for the high unemployment rates of women and youth.

Table 5.3 shows unemployment rate in different countries. In the Southern countries where unemployment has increased more fertility rate has declined.

Table 5.3. Unemployment (percentage of labor force)

	<i>Average 1986-1996</i>	<i>1998</i>
Sweden	4.5	6.5
Netherlands	6.9	4.2
Denmark	9.7	6.3
UK	8.8	6.2

Germany	8.0	11.2
France	10.6	11.8
Italy	10.3	12.2
Spain	19.7	18.8
Greece	8.4	10.1

Source: OECD 1999, *Employment Outlook*

Furthermore Table 5.4 shows the employment status of women by employment status of their partner. The data show that employed women tend to marry employed men. They don't seem to work to compensate in the short run for the unemployment of their husbands. In fact it is possible to observe, for all the countries considered here, the so called *assortative mating*, that is wives and husbands do not marry randomly but share the same characteristics in terms of employment status (Del Boca et al. 2000).

Table 5.4. The employment status of women by the employment status of their partner, 2000
(% of women with partner employed/unemployed/inactive)

	Woman employed	Woman unemployed	Woman inactive
<i>Man employed</i>			
Belgium	94.5	85.5	79.8
Germany	90.7	70.9	83.9
Greece	92.9	85.7	86.5
Spain	90.8	82.7	86.5
France	91.5	81.4	79.9
Italy	90.6	81.5	80.9
Netherlands	94.9	94.0	83.0
U.K.	94.1	79.7	74.3
<i>Man unemployed</i>			
Belgium	1.0	--	3.7
Germany	4.1	22.0	5.6
Greece	2.2	9.8	2.6
Spain	4.5	12.5	4.3
France	3.7	11.2	6.5
Italy	2.0	13.0	3.5
Netherlands	1.0	--	1.4
U.K.	1.9	14.3	6.3
<i>Man inactive</i>			
Belgium	4.5	--	16.5
Germany	5.2	7.1	10.5
Greece	4.9	4.5	10.9
Spain	4.6	4.8	9.2
France	4.9	7.4	13.6
Italy	7.4	5.4	15.6
Netherlands	4.2	--	15.6
U.K.	3.9	6.1	19.5

Source: Eurostat 2002, *Statistics in focus*

Another important aspect concerns the division of labour within the household. Compared to other European countries, in the Southern European countries such as Italy, Spain and Greece female employees work longer hours. In spite of this the proportion of hours devoted by husbands to the household is much lower. The United Nations on Human Development report (1995) shows that the men's share of total domestic labour in Southern Europe is the lowest among industrialized countries (Table 5.5).

Table 5.5. Average hours worked per week and % of male domestic labour to total

	<i>Week hours</i>	<i>% male domestic labour</i>
Sweden	32.0	33
Netherlands.	25.2	35
Belgium	32.0	
UK	30.7	33
Germany	17.5	36
France	34.0	33
Italy	34.6	19
Spain	36.0	12
Greece	37.8	14

Source: OECD 1999,UNPD 1995

The slow change in the division of labour between men and women in the Southern European families has created an additional constraint for working and having children. While in Northern European countries social protection in the welfare regime are generous in services, in Southern European countries is relatively generous in transfers and continues to rely on the role of the family as producer and distributor of welfare. The most important example of the lack of social services concerns the availability of child care for children under 3 years of age.

Table 5.6 shows that in Italy the percentage of children less than 3 who are in child care is quite small (6 per cent), relative to other European countries such as Sweden and Denmark, while the proportion of children older than 3 in child care is relatively high (95 per cent) even relatively to Northern European countries.

In Southern Europe the child care services are typically inadequate and characterized by extreme rigidity in the number of weekly hours available. This makes the service compatible with part-time work but not with full-time activities. Having school age children does not necessarily increase the attractiveness of full-time employment since school days often end in mid-afternoon, thus making child care necessary for late afternoon and early evening.

Table 5.6. Child care for children under 3 and 3-6 (%)

	<i>Aged under 3</i>	<i>Aged 3-6</i>
Sweden	48	80
Denmark	64	91
Netherlands	6	98
UK	34	60
Germany	10	78
Austria	4	68
Belgium	30	97
France	29	99
<i>Italy</i>	<i>6</i>	<i>95</i>
Spain	5	84
Greece	3	46

Source: OECD, *Employment Outlook*, 2001

Table 5.7 show that the employment rates of mothers of children by age of the child is much lower in Southern European countries relatively to other European countries (such as Sweden, Denmark).

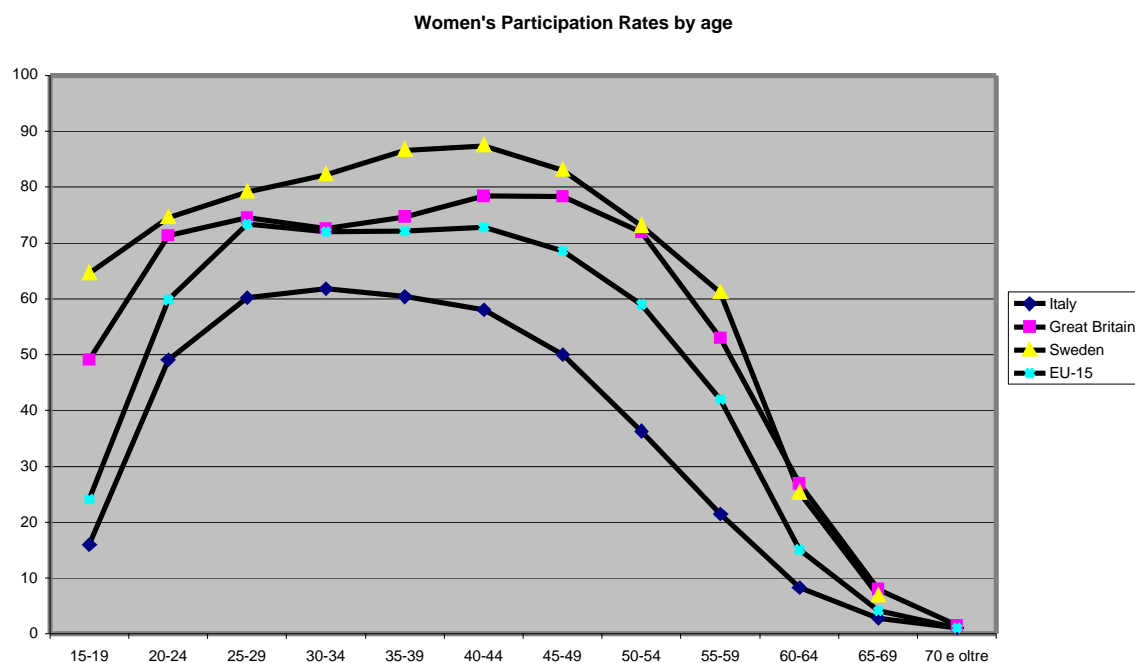
Table 5.7. Participation of mothers by age of the child (%)

	<i>>3 yrs.</i>	<i>3-6 yrs.</i>	<i>7-14 yrs.</i>
Denmark	85	90	90
France	61	69	63
Sweden	81	82	86
<i>Italy</i>	<i>50</i>	<i>54</i>	<i>47</i>
Greece	47	49	50
Spain	40	44	37

Source: OECD (1999)

The differences described above contribute to explain the different shapes of participation rate in the life cycle of women in different countries. In Italy for example the participation rate is low at any age bracket, while in Sweden the proportion of women working is high and women enter early and leave later the labor market (Graph 5.2).

Graph 5.2.



Source: Eurostat 2001

Another important factor is related to the structure and role of the families. While in Southern European countries the continued presence in the parental home of adult children imply additional costs and creates additional demands on women's time.

Table 5.8 shows that the proportion of children living with their parents have actually increased in the Southern European countries while decreased in the Northern ones.

Table 5.8. Children 20-29 living with their parents in 1987 and 1995 (%)

Country	1987	1995
Italy	60	71
France	34	33
Spain	49	59
Greece	41	49
Denmark	32	29
Sweden	29	23
U.K.	30	31

Source: Eurostat, 1997

5.4. Empirical studies

The increase in the proportion of parents at work has stimulated an intense debate concerning the importance of factors affecting work and fertility. These studies have different focuses across countries. In some countries where family friendly policies have been traditionally part of the welfare system (Sweden, Denmark, Norway), the focus of research and policy debate has been more on the effects of such policies on households' members welfare. In a context where women labour market participation as well as fertility rate are both high, the interest is more on how to minimize the effect of fertility on women's career patterns and relative wages (Albrecht et al 1999, Wetzels 2002, Kunze 2002). Several research have shown a strong association between part time opportunities and career perspectives, while parental leave have shown important impact on women's labour market attachment and wages (Bardasi and Gornick 2000). Given the high rates of participation of women in the labour market another important concern regards the impact of the growth of mothers' employment on children welfare (Ermisch and Francesconi 2001, C. Ruhm 2002).

5.4.1. Wages and income

In the analysis of the joint decision of women to work and to have children, the effects of wages and income have been considered among the most important variables.

Table 5.9 summarizes some of the results of these studies. These results are quite coherent with the implications of microeconomic analysis and indicate that female wage have a negative effect on fertility and positive effect on participation. Male wage coefficients instead have the opposite sign, are positive on fertility and negative on women participation.

When only mother's time and market goods are required for childrearing, wages increase for working women induces both income and substitution effect on fertility (as well as on labor supply). A wage increase leads to an increase in labour supply at low wages as the substitution effect dominates the income effect. At higher wages it may even become negative. For fertility at sufficiently high levels of female wages further wage increase could also reverse the negative sign, that is to produce a positive demand for children.

Table 5.9. Fertility and participation: the wage effect

	<i>Fertility</i>		<i>Participation</i>	
	Female wage	Male wage	Female wage	Male Wage
Ermisch (UK), 1989	-0.26~-1.01	0.18~1.18	0.69~0.87	-0.24~-0.34
Carliner et al. (Canada), 1980	-0.01~-0.016	0.01~0.02	0.185	-0.05
Colombino and Di Tommaso (Italy), 1996	-2.3	0.2	1.34	-0.018
Del Boca 1997	-1.97	0.17	1.77	-0.06
Di Tommaso, 1999, (standard and estimates corrected)	-0.66	0.09	2.82	-0.20
	-2.5	0.2	--	--

Ahn and Mira (2002) argue that the increasing importance of income effects derived by the increasing female wages could yield the change in the cross country correlation between fertility and women participation over time. Ermisch (1989) provide empirical evidence for this for Britain. Other analyses have tested the different effect of household non labor income, shifting the attention from resources pooling to the control of resources. Resources are not an indistinguishable income, but are attributable to each spouse: therefore the two partners may want to allocate a different share of resources to their consumption, possibly making the effect of the husbands' income different from that of the wife's income. The implications for economic policies are clearly important. Public policies (taxes and transfers) do not have neutral effects on distribution within the family, but influence the behaviour and demand for leisure of husbands and wives in a different manner, depending on who the beneficiary is (Del Boca 1997, Schultz 1990). The results of studies have led in most cases to refute the hypothesis of family income being indistinguishable both in terms of demand for leisure as well as the demand for children.

5.4.2. Education

Other studies focus more on human capital. Women education changes affect wages as well as wages' profiles with important effects on participation and fertility decisions and the timing of the events (Gustafsson 1994, 1995). Gustafsson and Wetzels (2000) have analyzed the postponement of births in Germany, Great Britain, Netherlands and Sweden and they reported an important effect of education. Postponement also leads to involuntary childlessness, increases in biomedical costs and

in health risks of both mothers and their late born children. The negative consequences offset the positive ones represented by the gains in lifetime earnings. Bratti (2001) explains woman's participation decision in the period surrounding a birth event estimating the effect of education and several economic variables on the decisions to give birth and to participate in the labour market. He found that education raises the job attachment of women. In particular highly educated women work also in the period surrounding a birth event and therefore education induces fertility postponement. His results imply that policies aiming at increasing women education would have a positive effect on participation but uncertain effect on fertility given evidence of a U shaped pattern of fertility with education (interpreted in terms of the prevalence of income over substitution effects due to education and by more access to private child care for highly educated women). In the last few years there has been an increasing interest in the effect of other factors related to the environment in which women's labor market and fertility decisions are taken. The most important factors are related to the child care system, labor market characteristics such as hours of work options, unemployment and parental leave.

5.4.3. *Child care*

Analyzing in-kind transfers, it has been shown that the availability of child care services significantly affects women's preferences for non-market time versus time spent in paid work. Improvements in child care options as well as variations in their costs have been associated with significant increases in the labor supply of mothers in most countries (Gustafsson and Stafford 1992, Gustafsson 1994, 1995). Ermisch (1989) findings have suggested that the increased availability of market child care is one possible explanation for the change in fertility. According to his results the changing effect on fertility of increases in women's wages (from negative to positive) would be facilitated by the availability of market child care.

Child care availability seems to be more important than its costs. Del Boca (1993, 2002) have analyzed the effect of child care on participation of married women in Italy and the specific characteristics of the supply of public and private child care systems. Using different data sets the studies arrive to similar conclusions, that is, household labor supply depends on child care rationing rather than its costs. The estimation of the relationship between child care costs and labor supply shows that a reduction in child care costs increases the probability of mothers' part-time employment, but has no effect on the probability of working full time (Del Boca 1993).

Child care costs seem to affect labor supply only in areas, where places are not rationed (Del Boca (2002), showing results similar to some extent to results reported in Sweden (Gustafsson and

Stafford 1992). Most of the working mothers have to rely on family support system (mainly to grand-parents' help) or to babysitters, since also private child care system has still a limited offer. The results show that the decision to work and to have a child, are both positively influenced by the availability of public child care. An increase in the provision of public child care in terms of number of slots and hours provided per day, would reduce the cost of taking a full-time job and increase female labor supply.

5.4.4. Unemployment

Empirical studies employing cross-country data discuss the possibility that the emergence of high and persistent rates of unemployment in Europe might have contributed to the acceleration of the fertility decline and might have been responsible for the reversal in the sign of the correlation between fertility and participation (Anh and Mira 2002). They found a strong difference in fertility rates for countries characterized by high women' labor market participation (such as Sweden and Denmark) and countries characterized by low participation such as Italy, Spain and Greece. While Spain, Italy and Greece in the late seventies were ranked among the most fertile countries, they became the least ones in the late nineties, the opposite happens in the Northern countries. The negative effect of unemployment on fertility in the Southern countries have explained by the fact that in these countries unemployment concern mainly the younger cohorts and most unemployed do not receive unemployment subsidies due to the lack of previous employment experience.

The expectation about sustained unemployment would make this effect on fertility: on one hand women will participate in the labor market to protect household income by negative shocks to the partners wage and employment on the other hand they would not leave the employment during childbearing years to protect their won labor market prospects. Del Bono (2001) tests directly the hypothesis that expectations of future labour market outcomes affect current fertility decisions. Their results show that unemployment is one of the variables that most significantly affect the expectations of future wages and job opportunities and therefore may be responsible for the decline in fertility. Other studies have considered more closely the relationship between fertility and the labour market characteristics. Bettio and Villa (1998) focus on the way women form expectations about future labour market conditions and project these expectations into their fertility decisions. The high unemployment rate may affect fertility in a significant manner. The experience of unemployment not only reduces current income but also affects the level of income families consider necessary for the well being of the children.

5.4.5. *Part-time*

Another important characteristics of the labor market concern the availability of part time jobs. Comparative studies have found a high correlation between the proportion of part time jobs and the participation rates of women, in particular married women with children (Meulders and Plasman 1994). The low proportion of part-time does not seem to be coherent with self-reported preferences. A large number of women who are unemployed or out of the labor force report that they would actually prefer to work part-time: surveys at different points of time and different areas of the country have reported similar results. Even among workers more people would like to work fewer paid hours than would like to work more hours at the given hourly wage (European Economy 1995).

Bardasi and Gornick (2000) show that being a mother (compared with being childless) decreases the probability of selecting full-time work and increases the probability of both non-working and working part-time, but the effect of the presence of young children is smaller in Italy (where part-time jobs are less widely available) than in other industrialised countries (UK, US, Canada and Germany). Also Tanda (2001) analyses the impact of part-time using ECHP data and found that the availability of part-time jobs increases the probability for a women to be employed.

Analyzing the relationship between motherhood and careers prospective. Guetierrez-Domènech (2002) shows that the career transition after a first birth may be of different type: women who were used to work may become either unemployed or inactive after it or to experience downward occupational mobility. That is, even if a woman remains employed she may end up in an occupation that is below the one held before the birth in terms of quality, payment and responsibility. There are several potential reasons why this may happen. On one hand, mothers may be willing to supply labour that involves fewer responsibilities as long as they can take care of their children. On the other hand, employers may be reluctant to hire mothers for high profile positions since their family role may absorb their energy and interfere with their productivity. Furthermore, in some countries, women return to part-time jobs after childbearing and part-time jobs tend to be more concentrated in low qualified occupations with a negative impact on women career prospective.

5.4.6. *Co-residence with adult children*

As we mention above, the permanence of children at home after mature age is an increasingly important phenomenon in the Southern European Countries.

Demographic studies have pointed out that in the last fifteen years in Western countries, the lower the fertility, the higher the proportion of people aged 20-30 living in the parental home. This

correlation suggests that stronger the traditional family ties the lower the fertility rates. The data for 1987 and 1995 show that the proportion of 20-29 years old living with their parents is highest in Italy, Greece and Spain, and has increased during the period of observation, while in most other countries has decreased. The role of the family in support of children often extends far beyond the completion of schooling by the children. Because of the limited access to credit and housing markets to individuals without stable employment, the Southern family traditionally provides income support to its children during their usually lengthy search for a stable, "protected" job. This responsibility is likely to have significant effect on women's participation and fertility (Giannelli and Monfardini, 2002, Martinez-Granado Castillo, 1998)

5.4.7. Parental leave

Economic theory suggests that a parental leave policy would result in more women remaining in the labor force, since they do not have to leave employment to take time off from work, but it may lead to more women on leave at any points in time and thus to fewer employed. Examining changes in labour supply of mothers of infants where maternity leave statutes were passed between 1980 and 1990 Klerman and Leibowitz (1994) did not find significant higher employment and greater leave taking, though they find evidence for a lower rate of mothers of infants actually being in their jobs in states that passed maternity leave legislation. A second expectation is that parental leave may reduce efficiency if it encourages women who would otherwise be employed to stay out of work longer. On the other hand more women may enter employment if they would know they have access to leave. Ruhm and Teague (1997) examine the association between leave policies and indicators of macro economic conditions and found that paid leave is associated with an increased domestic GDP, increased employment and reduced unemployment. Unpaid leave is associated with increased labor force participation and employment, but increased unemployment as well presumably because unpaid leave is not sufficient to discourage mothers who want longer leaves from leaving their jobs. Tanda (2001) compare the effect of both compulsory and optional maternity leave regulations in the European countries on female employment rates. A long compulsory maternity leave period to have a negative impact on the probability of women to work probably because employers perceive this as a negative effect of hiring a female worker, but also for the discouraging effect on women's decision to participate. On the contrary the length of the optional maternity leave has a positive effect on women's employment rate. In countries where participation and fertility are relative high, many studies have focused on the effect of parental leave on women's wages and career. Despite the increased human capital accumulation the gender gap seems to have stagnated.

5.5. Conclusion

During the last two decades fertility rate have sharply decreased in most developed countries, childbearing has been delayed and the correlation between fertility and participation rates across the European countries has become positive. The flexibility of the market to accommodate women's exit and entry decisions and the penalty that particular market arrangements impose on interrupted careers, like foregone experience, delayed wage growth and increased risk of unemployment, are aspects that can explain those trends.

Different equilibriums can be distinguished across EU countries. In Northern Europe, both large public sectors with a large share of female workers and generous maternity benefits guarantee a high level of female participation and a high fertility rate (still barely below replacement rate). In Southern Europe, in which female participation is relatively low, part time is uncommon and the stickiness of unemployment has brought about a dual market with unstable labor contracts for young workers, the fertility is relatively lower.

In this review other factors were analyzed such education, child care, as part time, and coresidence with adult children. Child care subsidies seem to be a significant factor of women participation in areas where availability of services is adequate. Education raises the job attachment of women and induces fertility postponement. Comparative studies have found a high correlation between the proportion of part time jobs and the participation rates of women, in particular married women with children, but in the Southern Europe countries, the rigidity of the labor market is higher than in Northern Europe countries and there is scarcity of part time jobs and also flexible hours jobs or teleworking. The negative correlation between coresidence and fertility suggests that stronger the traditional family ties, the lower the fertility rate.

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CHAPTER 6: Motherhood and Time Allocation

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6.1. Introduction

Historically the amount of time spent at work has never been greater than the time spent at other activities. According to the theory of the allocation of time, time has a cost, and this cost is examined in the same ground as the cost of market goods. Households are considered as “producers” as well as “consumers”. They produce income and that means they have earnings by working or by other ways and this income is available for consumption. In order to have a balance between production and consumption of earnings and other income a specific allocation of time is needed (Becker, 1976). The more time (working time) somebody dedicates for increasing his earnings, the less time he spends on “quality commodities” including “leisure”. Household commitments can be part of the “consumption time” of individuals. These commitments can be identified as childcare, studying or taking to a walk and duties related to household (like cleaning, washing etc.)

It is obvious that considerable socio-economic changes have occurred since Becker introduced his theory on time allocation. Nowadays, in order to understand differences among peoples’ allocation of time in different countries it is necessary to take into consideration many variables. Some of them are: men’s and women’s access to paid work and their economic independence, as well as the complex relationship between work, household duties and welfare provision. All these variables seem to play an important role on the configuration of the allocation of time.

In all European Union countries there has been a progressive increase in women’s labour market involvement since the mid-1960s. Women want to control their own lives by active

participation in economic and social processes. Their level of education has considerably increased and they have chosen paid work instead of unpaid care work and full-time instead of part-time jobs where available. The increase in women's labour market participation has taken place in all EU-countries despite economic recession, falling general level of employment, high rates of unemployment and lack of childbearing facilities (Rubery, Smith and Fagan, 1996).

Since female labour force participation rates begun to rise in recent decades, the interaction between work and family has driven considerable attention, particularly on the individual level. There is an extensive literature on what is described as the "hard choices" (Gerson, 1985) or the "dilemmas" of modern family life (Frinking and Willemsen, 1997), particularly as they affect young women. For example, labour force participation of most women in European countries still depends to a large extent on whether or not they have young children to care for.

The way in which labour affects the availability of time is differently perceived in the various European countries, possibly due to the existence of different productive and managerial structures. Therefore it is necessary to specify individuals' commitments on labour and especially to locate their time use on paid and unpaid work. Moreover differences exist on the basis of the cultural differences of societies, which can also affect the division of paid and unpaid work.

The development of work in the labour market is not homogenous in all European countries, nor is the development of unpaid work in households. Consequently it is important to figure out how the time is budgeted for these activities in different countries. The Eurostat Survey on Time Budgeting carried out in 1998 (Eurostat, 1998) contains some data on how can be conducted a survey on time allocation. According to the exemplar **Eurostat Pilot Survey** (Parlsa Eglite and Inna Bronislava Zarina, 1999) time allocation is specified in proportion to peoples' activities which are divided in the following ten categories:

- 1) Private needs (care for oneself) such as time spent on sleeping, eating, bed rest (involving sickness), body care
- 2) Paid work
- 3) (Partly) regular studies
- 4) (Partly) additional studies and self education

- 5) Household and family care
- 6) Civic and religious activities
- 7) Social life and entertainment
- 8) Sports and physical activities
- 9) Hobbies, games
- 10) Mass media
- 11) Unspecified time use

In the present working paper time is considered to be allocated to paid and unpaid work. **Paid work** is defined as “every activity that generates an income”. Under this category it is also included travel to and from work and time for study. **Unpaid work** is defined as “household work and childcare”, which can include the following activities:

- a) household duties (preparation of meals, laying the table or doing the dishes, laundry and ironing, shopping and cleaning),
- b) child-care tasks (washing or dressing, feeding, transportation to school, to doctor or playmates, playing, reading, homework) and
- c) other tasks like house repairs, gardening, care for sick or other members in need, non-institutionalised voluntary work or care, financial matters, administration etc.

It seems quite difficult to detect the influence of policy measures on the actual behaviour of men and women, especially with regard to work, childcare and housekeeping. It is necessary though to calculate how much time is spent on each of the above activities for the different countries. No money is involved in work like cooking, taking care of children or house cleaning, though much time is needed for this kind of work. If women have to pay for the value of domestic work for reconciling family and working life, the risk for them to leave their labour market position and their independent income becomes higher. Quite often, taking care of children or elderly family members determines the position of women in the labour market and their family size.

6.2. Reference to Recent Literature

“Housework”, is identified as the “unpaid work done to maintain family members and/or a home”. This topic has been widely recognised as an interesting area of research study since

the 90's. Various studies and publications during the last decade, were the result of a drastic turn of attention towards studying causes and consequences of the division of household labour for the members of the family and society (Coltrane, 2000).

Many recent studies on the division of household work attempted to use concepts and test hypotheses already known from the time-use research tradition (Berk and Berk, 1979). In other cases past interviews and other observational studies were used (Hochschild, 1989; Hood, 1983). The most important finding coming out of these studies, is that housework depends on complex patterns of social relations that are continuously changing. Therefore in order to carry out research on this area it is necessary to study first the interconnections between housework, gender, household structure, family interaction and informal and formal market economies. Studies in the 1990's have identified how the allocation of housework was linked to life course issues or issues like: a) gender ideology and display, b) role identification c) marital quality, d) kin relations, e) interpersonal power, f) scheduling and performance of paid work etc.(Coltrane, 2000).

According to Robinson and Godbay (1997), who were based on National Time-Diary studies in the United States, women's time devote to family work has declined between 1965 to 1985 from 24 hours per week to 16 hours, while men's participation during the same period has doubled (from 2 to 4 hours per week).

Women who are employed longer hours, have a higher level of education, earn more money and endorse gender equity, spend less time on housework. On the other hand men working less hours, having more education or affirm more gender equity, spend more time on housework. It is worth mentioning that the total time spent in unpaid labour for housework, childcare, eldercare etc., is almost equal to the time spent in paid work.

According to DeMeis and Perkins (1996), employed women do one third less family work than non-employed women. Apparently dual-earner couples are sharing more family work than male-only breadwinner couples. Especially when the earnings between husbands and wives are more equal the share of household tasks is more balanced (Brimes, 1993; Hersch and Stratton, 1997).

According to recent surveys women spend less time on paid work but more time on housework when they are married and become mothers. Conversely, men spend more time in paid work and less time on unpaid labour when they marry and assume a smaller share of the housework after the birth of their children (Coltrane, 2000). Therefore being married means more housework for women and less for men (Shelton, 1992).

Single and cohabiting women perform less housework than married women, whereas single and cohabiting men perform more housework than married men (Shelton and John, 1993). On the other hand single mothers spend as much time on household work as married mothers (Demo and Acock, 1993). In general the transition to parenthood is associated with less sharing of household's tasks. (Cowan&Cowan, 1992). Traditionally women when they get married or when becoming mothers feel more obliged to perform household tasks (Perkins and DeMeis, 1996). In other studies it has been shown that the presence of pre-school age children is positively related to housework for both men and women (Baxter, 1997; Presser, 1994).

Therefore from the above presentation it seems that women's employment and the presence of pre-school age children, are decisive factors, sifting the division of paid and unpaid work in the households and in the whole of the society.

6.3. Recent Relevant Empirical Surveys in E.U. Countries

6.3.1. Introduction

While several studies have examined the relationship between fertility and female labour supply, the relationship between fertility and mothers' non-market time allocation on the one hand and the market and non-market time allocation of fathers on the other hand have received little attention.

In this section some empirical studies on the Division of Paid and Unpaid Work will be presented. More emphasis will be given to the most recent one (carried out in 1999-2001), i.e. to the international comparative survey entitled: " The Division of Unpaid and Paid Work. The use of Policies". This survey will be presented more extensively in this report not only because it analyses recent data of a group of European countries, but also because it

covers in depth many aspects of the researched topic and it gives emphasis to relevant policies.

The results of another group of studies entitled “Gender Use of Time. Three European Studies”, will be also briefly presented. Finally the results of a Eurobarometer Survey on “Equal Opportunities for Women and Men”, when referred to the researched topic on the Division of Work, will be given and a general conclusion will be drawn at the end of the report.

6.3.2. The Division of Paid and Unpaid Work. The Use of Policies

6.3.2.1. Aim and Theoretical Framework of the Study

In 1995 the European Network on Policies and was launched in order to fill the gap of the lack of evidence concerning time allocation. The aim of this Network, which was coordinated by Tilburg University, was to prepare and conduct an international comparative study on the impact of various policy measures on the division of paid and unpaid work between men and women.

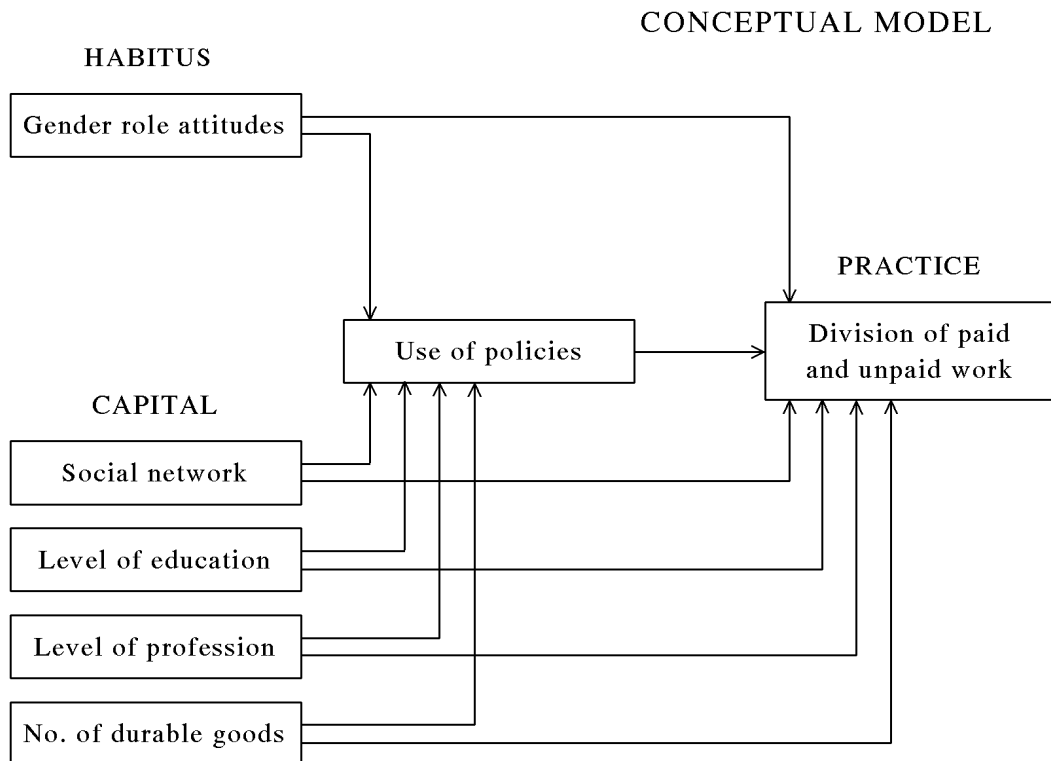
The aim of the project was to gain insight into the conditions under which policy measures are (or are not) effective in influencing the division of paid and unpaid work between men and women.

The theoretical framework adopted by that research project was mainly based on Bourdieu’s *Theory of Practice* (Bourdieu, 1977, 1994) which combines the macro, structural level with micro, individual level of analysis by studying ‘Habitus’, ‘Capital’, and ‘Practice’ as well as their interconnections. *Habitus* functions below the conscious level and refers to dispositions to behave in a certain way, expressed in this case by gender role attitudes of men and women. *Capital* refers to both material and symbolic goods that are worthwhile in a certain situation presented in three basic forms (economic capital, cultural capital and social capital). *Practice* refers to frequently repeated actions, customs or duties. Habitus and capital influence the division of work both directly and indirectly, through the use of policies. The form of capital that plays each time important role depends on “fields”, i.e. on a configuration of social positions occupied by individuals or institutions. In the described

study the field of policy, i.e. of knowledge and use of policy measures, is of main interest as well as the field of labour market and of family relationships.

The expected relationships between the independent variables “Habitus”, “Capital”, “Policies” and the dependent variable of “Practice” are presented in Graph 6.1.

GRAPH 6.1.



Even if this theory is very general and doesn't lead to specific predictions about the relationships between policies and individual behaviour, it is certain that “practice” results from a relationship between “habitus” and current “capital” within a given field. The interconnection between the above variables can determine each field's reality of time allocation.

6.3.2.2. *Data and Results*

From the countries participating in the Network on the Division of Paid and Unpaid Work, Finland, France, Germany, Greece, the Netherlands and Portugal, carried out fieldwork surveys, on the basis of a specially designed questionnaire, whereas Belgium, Finland, Spain,

U.K. and the Netherlands carried out “Delphi studies”. The division of paid and unpaid work in the seven participating countries which have carried out field work surveys is briefly presented in the text that follows, and it is based on a recent relative comparative work carried out by Willemsen and Jacobs (2001).

Table 6.1.

Working time¹ (in hours) per week, male/female ratio of working time, percentages of working women and men, and working time of working men and women, in households with at least one child under 7.

Column	1	2	3	4	5	6	7
	Time spent by Women	Time spent by men	male/female ratio	% of working women	% of working men	time spent by working women	time spent by working men
Finland	27.9	55.4	1.99	62.1	96.4	44.9	57.5
France	21.9	46.9	2.14	55.3	92.0	39.6	51.0
Germany	13.4	54.5	4.06	53.5	97.8	25.1	55.7
Greece	15.5	54.8	3.53	38.7	96.6	40.1	56.7
Italy	19.8	47.1	2.38	56.1	96.3	35.2	48.9
The Netherlands	13.3	54.0	4.07	61.3	98.1	21.7	55.1
Portugal	34.6	57.4	1.66	74.7	99.1	46.3	57.9
Total	19.4	53.1	2.74	52.1	96.7	37.3	54.9

Note. ¹Working time = time spent per week on paid work, education and commuting.

According to Table 6.1, it seems that in all participating countries the percentage of working fathers is much higher than the percentage of working mothers (see columns 4 and 5). Women’s percentages vary between 75% in Portugal and 39% in Greece. France and Italy appear with a percentage around 55%, while in the Netherlands the percentage of working mothers is somewhat higher, reaching 61%.

Fathers traditionally spend more time on paid work than mothers: the average for all countries and irrespective of respondents work status equals to 19 hours per week among women and to 53 hours among men (see columns 1 and 2). According to the male/female ratio on time use (column 3) only in Portugal and Finland the differences in working time between men and women are somewhat smaller. Women spend about two-thirds of the time men spend on paid work and that is considered as extremely high as compared to the

percentages of the other countries. Men's average working time shows that men are still the basic breadwinners, verifying that a fathers' role is still, predominantly to work in the market.

The average time spent on paid work, if we consider only those respondents who have paid work, is also shown in Table 6.1 (columns 6 and 7). The average working time per week in the Netherlands is only 22 hours, verifying the tendency of Dutch women to work part-time. The percentage is rather high in France and Greece (around 40 hours), while in Italy is equal to 35 hours, and in Germany to 25 hours. In Finland and Portugal much higher percentages are met (45 hours and 46 hours respectively). The average time spent by working men is rather similar to all countries, except for Italy and France where the lower average working hours are met (around 50 hours).

The predominance of male participation in the labour market and especially in full-time jobs can be one variable configuring time allocation. There are many variables affecting or even determining time allocation. These are:

a) **Economic variables.** For example if the income level of a family is relatively low, it is rather evident that women are obliged to work and consequently to abstain from maternity or delay the birth of their children. Beyond family income, other variables affecting time allocation like **female independence**, conducted by the new role models (super women choice, equality between men and women, women's level of education etc.) and the new models of modern life, can be added.

b) **Variables due to cultural capital.** For example it is necessary to distinguish if the allocation of time in a family is due to a large extent to cultural capital which captures women to "obligatory altruism"(Land and Rose, 1985). Southern-European countries, with the only exception of Portugal, where women work in higher percentages, belong to the male-breadwinner model, while the female traditional role of caring is still predominant.

Economic and cultural variables can be decisive for labour force participation and indirectly for the amount of working time. Consequently men's and women's shares in paid work are determined to a large extent by these variables.

Out of the above analysis the differences between men and women become obvious: almost without exception, the fathers have some kind of full-time job regardless of whether the

mother works or not, while much more variation is observed among mothers which is worth explaining. We will analyse first the influence of education, upon work which in the present study is used as a measure of the cultural capital (Table 6.2).

Table 6.2.

Percentage and number of mothers with paid work, per educational level

	Low		middle		high	
	%	N	%	N	%	N
Finland	54.2	24	57.8	83	66.4	128
France	48.4	64	58.2	67	80.0	10
Germany	50.0	46	50.0	162	60.9	92
Greece	16.6	145	29.6	257	61.4	246
Italy	37.2	43	58.3	84	85.7	21
the Netherlands	42.9	21	65.7	70	66.7	15
Portugal	73.5	136	76.0	25	88.9	9
total	45.1	479	47.9	748	64.5	521

Willemsen and Jacobs (2001) are describing thoroughly the relationship of paid and unpaid work with education and attitudes. They underline that in all countries, without exception, there is a positive relationship between educational level and having a paid job. The higher the level of education the higher the percentage of working mothers. On average out of women with lower education 45% are working, out of those with middle level education 48% are working, while the percentage among those with higher education is 65%. In some countries, for instance in Germany, differences in labour force participation of women by level of education are rather small (varying from 50% to 61%), in others they are larger, notably in Italy, varying from 37% to 86%, and in Greece, varying from 17% to 61%. This relationship between educational level and workforce participation is completely compatible with economic theories and with the already described Bourdieu model.

Next the relationship of men's and women's attitudes on family and work upon women's paid job is examined. The attitude scale used in the present study was especially developed to measure attitudes in this field of paid and unpaid work by women and men. It consists of the four subscales of the Attitudes towards Occupational and Family Roles of men and women (AOFR) scale (Abele & Andrae, 1997): attitude towards working mothers, attitude towards task division in families, attitude towards men's participation in families, and attitude towards the compatibility of work and family. A number of other items, mostly self-

developed, were combined into two other subscales: orientation towards paid work, and orientation towards family (see Table 6.3 and Table 6.6). The subscale of attitudes towards working women and that of orientation towards paid work are the most relevant to consider for the explanation of the amount of time mothers spend on paid work (see Table 6.3). In the Netherlands, the attitudes towards working women are the most traditional of all countries. The other countries generally score around the midpoint (3.0) of the 5-point scale; only Greece has a more progressive attitude than all the other countries, scoring 3.6 on this scale. On the other attitude scale, the Orientation towards Paid Work, the Netherlands again has the lowest average score, this time sharing this position with Finland. Greece again has the highest score.

A negative attitude towards working mothers in a country may indicate a cultural restriction, a social norm that makes it difficult for a woman to take the decision to continue paid work if she has a child. Table 6.3 shows that in the Netherlands a mother of young children will meet with much more resistance from her friends and relatives if she wants to continue working than in, for instance, Greece or Portugal.

Within the individual countries, with the only exception of Finland, there is a correlation between the amount of time the female respondents spend on paid work and their attitudes towards working women (see Table 6.3). The correlations for the Orientation towards Paid Work are higher. In the separate countries these correlations are higher than if the countries are examined together. This indicates that the context, the number of hours mothers generally work in one country, and the availability of part-time work, act as a restriction, to the decision that mothers can take regarding the number of hours they want to work. Within the general context of a country it does matter, in general, whether one is in favour of working women and oriented towards paid work, to decide on the amount of working hours. This is in line with attitude theories, and with Bourdieu's theory.

Table 6.3.

Attitude towards working women, orientation towards paid work, and correlations (for female respondents only) between those attitudes and number of working hours.

	Attitude towards working women (AttWW)			Correlation AttWW-working hours	Orientation towards Paid Work (OrPW)			correlation OrPW-working hours
	Women	Men	total	Women	Women	Men	total	women
Finland	3.0	3.0	3.0 ^{bc}	.01	3.1	3.1	3.1 ^a	.35**
France	3.0	3.1	3.1 ^{bc}	.21**	3.6	3.7	3.6 ^c	.23**
Germany	2.9	2.9	2.9 ^b	.15**	3.7	3.7	3.7 ^c	.23**
Greece	3.6	3.6	3.6 ^d	.26**	4.1	4.2	4.1 ^d	.12**
Italy	3.1	2.9	3.0 ^{bc}	.28**	3.4	3.5	3.4 ^b	.32**
Netherlands	2.5	2.6	2.6 ^a	.42**	3.1	3.1	3.1 ^a	.50**
Portugal	3.3	3.1	3.2 ^c	.28**	3.2	3.4	3.3 ^b	.30**
total average	3.2	3.0	3.2	.18**	3.7	3.6	3.6	.10**

Note. ^a, ^b, ^c, ^d within a column, averages with the same superscript are not significantly different from each other on Tukey's HSD with alpha = .05** p < .01

Child care is generally more associated with women than with men. The first aspect that stands out in Table 6.4 is that the average total time spent on child care varies greatly between countries. Even if we account for biases like overestimation of own activities, it is still likely that parents in Greece spend more time on child care than parents in Portugal. Apart from cultural differences, which may range from different bed times for children, to parents taking their children with them to various activities versus leaving them at home, the availability of child care by others than the parents is also important in this respect. Nevertheless, the differences between the countries are striking.

Table 6.4.

Time spent per week on childcare tasks

	women	Men	Female/ male ratio
Finland	31.7	16.5	1.92
France	26.1	13.0	2.01
Germany	37.8	22.5	1.68
Greece	36.5	19.9	1.84
Italy	36.0	19.7	1.83
the Netherlands	26.3	12.5	2.10
Portugal	22.5	12.4	1.80
total average	33.2	17.5	1.90

Coming next to the number of hours men and women devote to child care and each parent's relative share in child care tasks, we found some interesting results. Table 6.4 shows that women spend much more time on childcare than men and that there are some differences in the percentages between countries. In Greece and Germany women spend almost one third of their time per week on childcare, while in Portugal and France this percentage is lower (one fourth). Moreover German mothers and fathers spend the highest number of hours as compared to the other countries, followed by the Greeks and the Italians. The female/male ratio shows that the largest share of men spending time in child-care is met in Germany and in the Mediterranean countries.

It is worth mentioning that *"although mothers still shoulder the lion's share of the parenting on weekdays, fathers do become more equal partners in caring for children on weekends* (Yeung, Sandberg, Davis-Kean and Hofferth, 2001). The new model of super women may be a part of the European reality but the new "father model" is still difficult to replace the traditional division of unpaid work between men and women. On Table 6.5 time spent on specific child care activities reveals traditional father's and mother's roles: mothers traditionally take care of their children's bathing, clothing, feeding, while fathers dedicate time on teaching or playing, sharing this activity with their spouse.

Table 6.5.

Time spent per week on specified child care activities

	Women	Men
Bathing, clothing, feeding	11.9	4.3
Transportation	3.1	1.5
Playing, reading	18.0	12.0

Table 6.6.

Attitude towards fathers roles in families, and correlation (for male respondents only) between this attitude score and time spent on child care

	Attitude towards men's role in families (AttMR)			Correlation AttMR-child care hours
	Women	Men	Total	men
Finland	3.6	3.4	3.5 ^c	.30**
France	3.4	3.2	3.3 ^{ab}	.32**
Germany	3.5	3.6	3.5 ^c	.14*

Greece	3.5	3.2	3.4 ^{bc}	.24**
Italy	3.3	3.2	3.3 ^{ab}	.26**
Netherlands	3.2	3.3	3.2 ^a	.26**
Portugal	3.3	3.1	3.2 ^a	.23**
total	3.4	3.3	3.4	

Note. ^a, ^b, ^c within a column, averages with the same superscript are not significantly different from each other on Tukey's HSD with alpha = .05 ** p<.01, * p < .05

The above Table 6.6, is rather a table of verification than a table that provides new data. Particularly, it seems that men in all examined countries tend to have positive attitudes towards the participation within the family and the household. However, as shown in Table 6.5, time spent on specific child care activities by European men is rather low. This is contradictory bringing up the idea that the “new father” model is rather a rhetoric and a precipitating model than a reality (Willemsen and Jacobs, 2001).

Table 6.7.

Importance of household work: score on the single statement "Household work is just as important as paid work" (1 = strongly disagree, 5 = strongly agree)

	Women	men	Total
Finland	4.6	4.5	4.6
France	4.2	4.0	4.1
Italy	4.1	4.0	4.1
the Netherlands	3.8	4.0	3.9
Portugal	3.9	3.7	3.8
total average	4.2	4.1	3.1

Note. In Germany and Greece this attitude statement was not included in the questionnaire.

From Table 6.7 the already mentioned discrepancy between attitudes and behaviour is verified. Men and women seem to believe that unpaid work is equally important to paid work, but men's practices differ greatly to their attitudes. Within the countries, there is a stable but moderate correlation which is stronger in France and Finland between men's attitude towards the participation of men in families and the actual hours they spend on childcare (Table 6.6).

Table 6.8.

*Time spent per week on household tasks, and female/male ratio
(Presence of a young child, aged less than 7 years)*

	Women	men	Female/ male ratio
Finland	30.1	12.5	2.41
France	33.9	9.1	3.74
Germany	43.1	16.4	2.62
Greece	37.3	12.8	2.91
Italy	37.1	8.4	4.40
the Netherlands	37.4	9.8	3.81
Portugal	34.3	10.2	3.37
total average	36.8	11.9	3.08

From Table 6.8 it is shown that (with the only exception of Germany) the number of hours devoted to household tasks by mothers of a young child do not differ between countries (they are close to the average of 37 hours). In regards to fathers, in the Netherlands, in Italy and France they devote lower number of hours on household tasks than in Finland, Greece and Portugal, while the highest number of hours is met among German fathers.

Table 6.9.

Time spent per week on specified household tasks by mothers and fathers

	women	Men
Preparing meals	10.3	3.2
dishes, laying table	4.6	2.2
Cleaning	9.6	2.5
Laundry, ironing	6.8	0.9
other household work	8.0	2.3
Shopping	5.3	3.2
Gardening, repairs	2.9	5.6

Examining next a list of specific household tasks (Table 6.9) it is shown that there are some gender patterns in performing these tasks: while men traditionally dedicate more time to gardening and home repairs women spent a lot of their time in preparing meals and in doing the laundry and ironing. Shopping seems to be a task more shared by men and women. Identical results come from a research on household labour (Coltrane,2000). These findings are quite interesting. Although the fact that women spend more time than men on household tasks fits with most theoretical approaches, the interpretation of the differentiation within the task domain can hardly been made with economic rational choices or attitude theories; only

gender identity can explain that women do the routine and repetitive household chores, while men do the chores that are less repetitive and more discretionary.

6.3.2.3. Discussion

Discussing further the survey results, the comparative analysis, reveals some interesting similarities and differences between the seven countries participating in the survey on the Division of Paid and Unpaid Work and the Use of Policies (Symeonidou, forthcoming):

- a) It seems that although women's level of education (cultural capital) has considerably increased in all countries and women attend the university in equal percentages to men (in some instances the trend has even been reversed), differences in paid work – though narrowing- are still largely persisting: men work in higher percentages than women and for longer working hours. Differences between countries are very interesting in this respect. Greece presents together with Spain the lowest economic activity rates among women, as compared to the other EU countries. Men's activity rates are almost double than women's. Nevertheless, education is positively related to paid work, a finding which applies quite satisfactory to the survey's theoretical model: 'the capital variable as measured by education has a positive effect on women's paid work'. This is to be expected since women with higher education are expected to have higher 'opportunity cost' than the rest of women. They decide more often to continue working or to work full time and to have a smaller number of children than women with lower opportunity cost who may decide to stop working or to work less and have more children, given the incompatibility between work and family life. However, differences exist between countries, while the largest differences (in female activity rates by level of education) are met in Italy and Greece.
- b) In regards to part-time work, differences between countries are also quite interesting: in the Netherlands there exist a high tradition in part-time work, while in Italy and Greece part-time work is very limited. Besides part time work, it is worth mentioning another type of work, 'unpaid family work' (in family business), met quite often not only in the agricultural but also in the urban areas of Southern European countries and especially in Greece. Out of this practice women after 30 or even 40 years of work, first in their father's and then in their husband's business,

may find themselves without any resources, a fact which becomes far more serious in case of separation or divorce. Another relevant problem is the high participation of women in the black economy, performing considerable quantities of 'façon work' with very long hours of fatiguing work, very low payment and often without insurance. The image is not very encouraging for the other countries as well. With part time work women cannot support themselves and they cannot assure their rights for pension. Therefore, economic dependency among women often continues for their whole life to various degrees. This particular situation is very much related to other social problems. For example, according to recent research findings (Symeonidou and Mitsopoulos, forthcoming), decision for divorce in Greece is not related to women's working hours as in other countries, since women are found quite often in unpaid or low-paid, low-status jobs and the decision for divorce becomes very difficult without the necessary means to support a living. Therefore, though it seems that women's participation in the labour force has shown a considerable increase, especially among women with young children, there is still a long way to go in order to gain their economic independence.

- c) Coming next to 'habitus' (as expressed by attitudes) men's attitudes towards working women, are most progressive in Greece, as compared to all the other countries. However, this is not surprising. Since the national fertility survey of 1983, Greek men were appearing having no objection that their wife would work '*if nothing would change to their family life*'. On the other hand, a positive, statistically significant correlation, appears between female respondents' attitudes towards working women as well as their orientation towards paid work and the number of hours women spend on paid work: more positive attitudes are related to longer working hours. This finding is in line with the central hypothesis coming from the theoretical framework, i.e. that habitus will affect practices.
- d) Respondents' values and beliefs on work in the market and in household may seem to change, but the traditional practices in respect to household tasks and child care seem to persist irrespective of women's increased participation in the labour force: although men express positive attitudes on sharing housework and childcare with their partners their real participation is far from being satisfactory. Women devote on average double time than men in child care and about three times as much in

housework. Gender inequalities are larger in this later field than in the field of childcare. Willemsen and Jacobs (forthcoming) are very successfully referring to the division of tasks as a 'rhetoric' rather than a 'real-time phenomenon'. 'Doing-gender' seems to be still an important determinant factor of the non-division of household and childcare tasks. The results of a recent comparative study on union dissolution, carried out in 10 European countries, show that especially among unemployed men the percentages of sharing tasks are very low: unemployed men feel that their male identity, already threatened by the fact of being deprived of their traditional breadwinner role, would be further endangered in case of participating in household and childcare tasks (Blossfeld and Muller, eds., forthcoming).

- e) Comparing Greece to the other six analysed countries in respect to child care, it is found a higher participation of Greek parents in childcare. In respect to men's participation first comes Germany, while Portugal, Italy and Greece follow immediately after. Nevertheless, when examining what men do, men usually devote their time in playing with children or reading stories, while the other childcare activities of feeding, dressing, bathing, etc., are carried out almost exclusively by women.
- f) In regards to household chores men do gardening, repairs and shopping and the rest is left to women. It is interesting to note the re-evaluation of housework in some countries. In Finland it seems that housework is highly estimated. These attitudes have to be related however, to the problem of the devaluation of work in our societies. A great percentage of young people are obliged, because of the high unemployment rate, to work on jobs quite irrelevant to their qualifications.
- g) Policies have positively affected women's participation in the labour force as well as people's attitudes towards the division of paid and unpaid work. Nevertheless, an effect on practice, in terms of more egalitarian division of household tasks and childcare activities is not apparent. It seems that the existing policies were not sufficient in the respect.

In conclusion the division of paid and unpaid work has many socio-economic consequences for each particular country. Especially in Southern European countries the overburdening of women

with the task of meeting a wide range of needs turns often to ‘compulsory altruism’ and becomes intolerable. A more effective state policy is needed to actively support the role of the family, i.e. of women, to substitute the lacking welfare state and to affect towards the division of paid and unpaid work.

6.3.3. Gender Use of Time. Three European Studies

The three relevant rather recent studies carried out by the European Commission⁵⁸ (1998) were undertaken in the framework of the Medium-term Community Action Programme on Equal Opportunities for men and women between 1996-2000 and it will be briefly presented in this section. These surveys are presented under the above title and have the following subtitles:

First study: “Flexible working and the reconciliation of work and the family-or a new form of precariousness”.

Second study: “Reorganisation of working time. Equal opportunities for men and women. Job creation: How are they linked?”

Third study: “The Future of work in Europe. Gendered patterns of time use”.

These three studies explore the relative contributions made by the state policies and company practices in determining the extent to which flexible employment facilitates the reconciliation of work and family life. Best practice arrangements are: employee sovereignty over working times, equal access (for women and men) to training, promotion and benefits, the reconciliation of paid work and family life.

The aim of the first study is to identify both best practice arrangements and the limitations of flexible working. For that purpose it investigates employers’ and employees’ experiences on flexible working in six member states: Spain, Greece, UK, Germany, France and Sweden. These six countries were chosen because they represent a range of welfare regimes with different employment regulations and different levels of childcare provision.

Through the second research it is specifically illustrated the “social added value” with which an equal opportunity strategy for men and women may provide for negotiations on the reorganisation

⁵⁸ Full versions of the studies are available by the Equal Opportunity Unit (DG EMPL) by fax 32-2-296.35.62 or email epoq@cec.eu.int.

or reduction of working time. This research is based on the analysis of different strategies adopted by fourteen European enterprises (in Italy, Spain, Germany, France, Finland, U.K. and the Netherlands) in order to promote occupational equality between sexes, to reduce working time, to adapt to the production system and to create or preserve jobs. The basic aim of the above adopted strategies is to reorganise and improve employees' standards of living, favouring indirectly the reconciliation between working time and time needed for other activities (private life).

The third research is basically a comparative analysis, which includes various studies on time use and unpaid work carried out in the Scandinavian countries, France, Portugal, Spain and Greece during 1997-98, sponsored as the previous two studies by the General Direction V of the European Commission and the Equal Opportunities Unit. In this research are analysed for each participating country, among others, the use of invisible time, the diffuse limits of care (childcare or eldercare) and labour demands, the household work in each of the participating countries.

According to the results of the above European studies the limits between child-care, labour and time spent on unpaid work in the household are characterised as diffused. It is quite difficult to measure unpaid work because it is a mental activity as well as physical activity, verifying the importance of "habitus" mentioned in the previous study for the Division of Paid and Unpaid Work. Variations between countries can be found but it is a common ground that the amount of unpaid work increases with the number of children, while at the same time increases the demand for jobs and for a higher employment rate, due to economic reasons (cost of children). Moreover all non-paid activities carried out by men and women for the benefit of the family have as a basic aim the production of goods and services that are important for the maintenance of balance in family life.

A basic finding that comes out of these studies concerns the ideal lifestyles for women as viewed by European men and women (Table 6.10). Over 41% of Europeans consider as ideal for women to combine a career with household chores and the care of children and a 37% of women and 31% of men think it is ideal for a woman to stay at home when her children are still young combining labour activity with household chores in other periods of her life. Among participating countries Germany and U.K. seem quite different to other countries i.e. to France, Italy and Spain. Specifically in Germany over 42% of men and women tend to consider as ideal way of life for women the solution of staying at home and taking care of children that are still young rather than the solution, more popular in the other countries, of the combination of family and working life. In

the United Kingdom more men (46%) than women (37%) prefer the solution of combination of work and family life and conversely more women (45%) than men (35%) tend to the ideal of staying at home and take care of young children.

Table 6.10.

The ideal way of life-styles for a woman												
	European Average		France		Germany		U.K.		Italy		Spain	
Basis:	W	M	W	M	W	M	W	M	W	M	W	M
W and M aged 18-65	5.131	1.650	1.000	300	1.112	416	1.010	314	1.010	319	999	301
Having a job or professional career (%)	8	7	3	2	7	4	5	4	5	6	20	20
Households chores mainly	9	13	15	19	5	8	9	8	11	16	7	13
Combining job/professional career with household chores and child care throughout life	41	41	45	47	36	32	37	46	46	48	40	33
Staying at home when children are young: combining job with household chores in other periods of life	37	31	33	26	42	43	45	35	36	27	28	24
No preference	3	5	3	4	6	9	3	5	1	2	2	4

Source: From MORI-Whirlpool Foundation (1995). In: European Commission (1998) Gender Use of time. Three European Studies.

6.3.4. Equal Opportunities for Women and Men in Europe

The investigation of “Equal Opportunities for women and men in Europe” carried out systematically by the European Commission during the last decade and combined with other large-scale surveys on the same theme since 1975, shows some interesting points in regards to the reconciliation of family and working life.

The survey data published by the European Commission (1998a) in a special Eurobarometer issue, show that a high percentage of European women consider that they are forced to choose between their professional career and motherhood, that means they are indirectly led to a decision either to have a child or to continue their career. The results differ greatly between countries. Only one third of German women and less than 20 % of Austrian and Spanish women believe that they can combine motherhood and career, while in Scandinavian countries and in Belgium women have an opposite view, i.e. they believe in very high percentages that the combination is possible. Somewhere in the middle, with a 60%, are situated Greek, Dutch and British women, while somewhat lower percentages of Italian and French women, consider that the combination is possible.

Lack of financial resources is the most important reason for women to choose participation in the labour force. However child minding has a cost and it is difficult to combine it with work. A large number of Europeans seem to be attracted by the idea of “homeworking” or “teleworking” in order to resolve the child minding problem. Nevertheless almost 40% consider that it is impossible “to work at home while at the same time looking after the children”. More men than women from the Mediterranean countries as well as Belgians, Germans, Austrians and British feel that it is impossible to combine work and family.

Special measures are needed to provide a rational solution to the work/family dilemma. The choice is difficult between “assistance in kind” and “financial help”, while the choice is more up to mothers’ decision whether to work or not. Any public policy should definitely measure women’s influences. Of course in countries where facilities are inadequate, there is more enthusiasm for financial aid which would allow mothers to stop working. Germans, Belgians, Dutch, British and Spanish, prefer child care facilities and services, while the rest of Europeans prefer a temporary absence from labour activity with an adequate financial compensation.

In general, most European women are ready to take an exceptional unpaid leave in order to bring up a child but the differences are quite big among countries. Moreover European men have very diverse views in this respect. The lack of financial resources is considered the most important reason given by men and women for not taking unpaid leave. Another reason is that they are afraid of losing their job! Dutch, German, Greek, Spaniards and Irish men are totally opposed to interrupt their careers and stay at home in order to take care of their children or have another activity, while others are mostly prepared. For example Swedish and Finish would easily accept it. This finding is explained through the very efficient social protection system of the Scandinavian countries, which diminishes the feeling of uncertainty in case of replacing labour by childcare. In these countries time allocation for parents with young children is facilitated.

Finally it is a paradox that almost 74% of Europeans (men and women) agree that “a mother should give priority to her young child rather than to her work” although they consider female labour activity as necessary. On the other hand 58% of Europeans think that the costs of childcare cancel out the earnings of a mother from her work.

Finally the results of this study in regards to the distribution of household tasks (i.e. home running, doing the shopping, cooking, cleaning), reveal that in Southern European countries the division of tasks is considered by both men and women as less equal than in other E.U. countries (especially in Scandinavian countries). In all countries, except Portugal men have a general tendency to believe that their contribution is equal to women’s contribution. The final results show that 30% of men and 36.9% of women think that women do almost all household tasks, 33.8% of men and 31.3% of women think that women do most of these tasks, while 2.6% of men and only 2.2% of women think that men do almost all or most of these tasks. A 30.9% of men and 25.5% of women consider that they are sharing the household tasks. Consequently and traditionally over 65% of the Europeans accept that women do almost all or most of household tasks and in less than a 30% of the families these tasks are shared.

6.4. Conclusion

State policy towards the division of paid and unpaid work helps towards the reconciliation between family and working life which is one of the four “pillars” on employment adopted by the European Commission, by the Luxembourg Summit of 1997. However it is an important problem to be solved what kind of policies have to be applied for achieving this goal.

Current legislation on equality between men and women is quite progressive in European countries, and the question of equality has been widely debated in the last decades. Nevertheless, the prevailing norms and values are not in line with the relevant legislation. The discrepancies observed among men's positive attitudes towards the division of household chores and child care and the practices of non-division is a quite representative example of the present situation. Family relationships are gradually changing, but traditional values still remain largely persistent in most countries. It has to be recognised that the division of paid and unpaid work does not concern only the family unit, but the whole of the society, since it has many socio-economic implications. An example of these implications is the effect on the declining birth rate (Symeonidou et al., 1997) and its secondary effects on the ageing of the population. Therefore, although there is so much discussion about the deregulation of the welfare states in Europe, it has to be noticed its secondary effects will go as far as affecting the division of paid and unpaid work. Especially in countries of Southern Europe an adverse policy has to be adopted: the welfare state has to be developed, at least to some extent, in order to sustain the role of the family and especially the development of policies for the division of paid and unpaid work and the reconciliation of family and working life.

One good example of policies to be adopted is to encourage fathers to take parental leave. This leave should be at least partly paid and should consist an individual and non-transferable right. Moreover, it is important to find appropriate forms of intervention for supporting the family, which should combine financial support for beneficiaries and carers with services in kind, without undermining the structure of family life. The institution of 'home help' and 'care at home' could greatly help towards this direction if implemented at a large scale. Organized voluntarism could also play an important role, while the informal networks, which have traditionally sustained the family, should be reinforced. Exploration of new forms of interaction between the 'public' and the 'private' is needed.

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MOCHO among the European Projects in Progress

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The European Union is undergoing radical changes in its social, economic, political, demographic and cultural structure. In particular, new family structures and new ways of working must be taken into account in order to implement adequate policies in the European countries. The European Community keeps calling for more and more research on this subject, and more specifically on the interaction between the decrease in fertility, female employment and public policy. A lot of different projects are in progress. The field is very large. It requires a multidisciplinary approach that integrates economic, sociological and demographic studies. Therefore, it is useful to integrate each particular project within a set of similar ones in order to get a comprehensive view of the results.

Some European projects in progress are close to our present work. They are summarised in table 1. Some of them deal with very similar fields as MOCHO⁵⁹'s and others are more at the periphery of these. In this section, we try to situate MOCHO's research subject with respect to the projects closest to it. We have chosen to develop the four projects that can help to understand the originality and the interest of MOCHO.

For all projects, the first step is usually the same. It consists in a State of the Art that presents the research theme and existing studies on the subject. This is also the aim of the present report. It is generally a kind of workshop with the purpose of identifying new evidence and formulating a research agenda for the future. Existing and missing data are evaluated.

In this short annex, after having quickly repeated the main objectives of MOCHO, we will develop some interesting projects. All these European programs draw up an overall picture as far as Family, Work and Fertility are concerned but each of them bring a new answer to these questions.

⁵⁹ MOCHO started in October 2001 and will cover the three-year period until October 2004.

Recall of MOCHO's objectives

Over the last twenty years, 2 opposite trends were observed in Europe :

- ü The rise of women's labour supply and employment;
- ü The decrease of fertility rates.

There is no doubt about the connection between both facts. But which fact explains the other? We can present this relationship in 2 ways:

First, the rise of women's employment might be explained by the decrease in the fertility rate. If this is the case, it means that women's desire of motherhood has fallen (for specific reasons); they prefer to take a job. If so, then public policies towards families or the situation of the labour market will not have any significant effect on fertility rates.

Second, the fall in fertility is partly explained by a rising willingness of women to participate in the labour market. This means that they choose to work. As a result, they cannot have as many children as before because of a lack of support of men and of the public community. So their desire of children might be the same as before but they have to change their behaviour on the labour market : They prefer to work and have less or no children.

In reality, the interrelation between these facts is considerably more complicated and both causal relationships might be true. However, the last relationship seems to be more relevant. This is the reason why we chose to test it in the MOCHO project. We try to explain the determinants of women's choices concerning motherhood (that is our dependent variable). We specifically focus on the role of employment prospects and public policies concerning children and motherhood (they are our main explanatory variables). MOCHO has a triple objective:

- ü First, it will contribute to the prediction of fertility rates;
- ü Second, it will inquire into the impact of employment conditions on fertility decisions;
- ü Third, it will investigate the influence of social policies on parenthood choices.

This short listing of our main aims is necessary to understand the innovating potential of MOCHO in the whole of European projects on this wide subject.

1. NIEPS⁶⁰: Network for Integrated European Population Studies

Ties to MOCHO's objective:

The network is composed of 11 European Population Institutes. It mixes Western countries and transition countries from Central and Eastern Europe (see table 1). It focuses on the impact of employment, gender and family policies on the gender division of paid and unpaid work and on the fertility pattern (timing and number of children). The main difficulties of the project are related to the difference in problems faced by Western countries whose problems have shifted from Welfare to Wellbeing and countries in transition that are focused on more fundamental economic and social problems.

In MOCHO, the research thrust is the same, but we do not consider these kind of countries ; the analysis is concentrated on the Western European countries. The evolution of the transition countries is very interesting in terms of future public policies to be implemented over there; Western countries' experiments can help in this task. But even in the Western countries, the cross-country differences in employment, fertility and motherhood choice patterns are still relevant. There is still a lot do in this direction. Both projects bring interesting views of these questions but with different perspectives.

Preliminary findings and future MOCHO contribution:

Theoretically, family formation and motherhood are seen as factors contributing to women's reduced participation in the labour force. At the same time, the number of births decreases, the birth of the first child is postponed and the number of childless couples increases. These trends are attributed to the work role of women. Women have to restrict their family roles if they want to participate in paid work. The network members introduce a life course perspective to explain different employment patterns. They put forward the hypothesis that employment careers tend to take precedence over family careers, especially in early adulthood. Once the choice to have children has been made the family logic leads to lesser or/and interrupted involvement of women on the labour force.

This can be true for the member countries but it is not the case of France, which is not in NIEPS's study. The trend of female employment in France is original in comparison with the other European countries. Although French women have more children than their European sister members they are massively present on the labour market. As Jeanne Fagnani (2001) emphasises it, this paradox changes the general idea about the negative impact of female activity on fertility.

⁶⁰ The first Workshop of NIEPS on gender relations, "Family and Work", held in Zahradky, 15-16 September 2000.

France is a very interesting country as far as the analysis of the interaction between work and family choices is concerned. MOCHO does take into account France in comparison with the other European Union countries. Although both projects' research topics are very close, they do not adopt the same point of view in terms of the countries compared. They are complementary.

NIEPS is also studying gender issues from the point of view of women and men as the balance between men's work and their family careers. Men's traditional roles, especially as anchored in the institution of marriage, constitute a mechanism behind low fertility in rich countries.

Finally, the mechanisms that explain the difference in fertility patterns across European countries are multiple. Therefore, it is fundamental to have various different approaches of these questions.

The MOCHO members would like to fill the knowledge gap concerning the impact of gender, employment and family policies on life-course dynamics. Family policy on its own cannot explain the differences in fertility between countries. Indeed, considerable diversity exists also within countries where people are subject to the same policies. As a result, multiple factors must be taken into account, such as: the differential take-up of policies by different social groups, under different socio-cultural conditions; the way in which policies are implemented and supported by associated measures (social security provisions linked to part-time work and payment of parental leave). The whole Welfare State is concerned. MOCHO's partners (Belgium and France) propose to build an indicator for each European country that would allow to compare family policies in Europe. With such an indicator, we will be able to compare the level of government support towards families and to evaluate the generosity of each national system. In a next stage, we will look at the evolution of these policies for each country during a certain period and we might be able to trace a possible convergence of the European Welfare States through the same pattern. Finally, we will test the explicative power of these measures on motherhood choices.

2. DynSoc⁶¹: the Dynamic of Social Change in Europe

Ties to MOCHO's objective:

DynSoc focuses on a different problem than MOCHO's (see table 1). Its three main objectives are wide and they chiefly concern the question of guaranteeing a minimum standard of living. Nevertheless, both projects are close, because both deal with Welfare State, employment, and family organisation. But, whereas DynSoc does not adopt a gender point of view, MOCHO is concentrated on women's choices (motherhood and employment). DynSoc analyses the effects of

⁶¹ The project will last 4 years.

public policy that assists individuals in their choices of employment and family formation. These kinds of benefits are intended to offer resources to people who have no earnings of their own or no support from other family members. The MOCHO's point of view is concerned precisely with this women's dilemma (work and family) and how the different European Welfare States try to help them in this choice by active public family policies. Nevertheless, DynSoc comes close to this aspect of the family problem in comparing the dependency of women across the European countries. However, the participating countries are not the same : France and Belgium are not directly implied in DynSoc.

Preliminary findings and future MOCHO contribution:

As the objectives are quite different, MOCHO's contribution relative to DynSoc's findings is obvious. Both are complementary. For what concerns the part of DynSoc that is the closest to MOCHO, some interesting observations have been made. In general, as European women are more and more active, their dependency on their partner decreases. This change in the social division of employment has led to a polarisation of jobs and incomes and transformation of lines of dependency. The rise in the number of two-earner families has been offset by the growth of no-earner families. The reduction of dependence of women on men coincides with the increase of the dependence of whole families on the state. These trends vary considerably across the countries. A part of MOCHO is devoted to the intra-family time allocation decisions.

3. FENICs⁶²: Female Employment and Family Formation in National Institutional Contexts

Ties to MOCHO's objective:

The objective of the FENICs project is double. Firstly, it analyses the impact of the flexibilisation of labour markets on the dynamics of family formation. Secondly, it studies the consequences of changes in the family formation process on female labour supply and employment structure. The aim of the project is very close to that of MOCHO. But as we have already mentioned, in MOCHO, we test the reverse relationship (the role of public policy and labour market functioning on motherhood choices). FENICs is supposed to answer two questions: Are women's life-course patterns converging across national contexts? What is the impact of historically patterned institutional structures on women's decisions in the areas of education, work, and the family?

⁶² This project is supposed to stop at the end of 2002.

These questions are related to the MOCHO's research subject, even if this last one is focused more on the interaction between female labour supply and their fertility decisions taken into account the effect of public family policies.

Preliminary findings and future MOCHO contribution:

The FENICs project points out the increasing segmentation of the labour market. Well-educated women retain good jobs and keep links with their employers during their pregnancy. On the contrary, poorly educated women find temporary jobs, low paid with difficult schedules, and they have to withdraw from the labour market when they have children. Family policies appear to benefit, disproportionately, the more highly qualified employees. Some countries have implemented strong institutional supports to facilitate attachment to the labour force through the period of family formation. The declining birth-rate in most European countries appears to be related to these factors. In MOCHO, our future indicator will help in comparing correctly the differences in family policies across Europe: in terms of generosity or of the different ways used to assist families. It will then be easier to find a clear answer to this question: Are weak family policies responsible for the decrease in fertility or for the exclusion of mothers from the labour market? Moreover, a chapter of MOCHO's State of the Art is devoted to the relationship between motherhood and work status.

FENICs's partners find that education plays an essential role in providing access to well-paid jobs. Furthermore, they show the large impact of segmentation on the low skilled and on young women in some countries (UK).

5. Working and Mothering⁶³ : social practices and social policies

Ties to MOCHO's objective:

The main objective of this project is to analyse the effect of social policies on the reconciliation of family (mothering) and working life. It will put forward the differences between European countries. The double burden of women is now well known, but the strategies they use in order to manage this double life have not been studied exhaustively. This project focuses on these social practices and the differences between European countries. It is not really concerned with women's fertility decisions and, therefore, does not share the same point of view as MOCHO. The choice of participating countries has been made in order to cover four types of Welfare States : Nordic,

⁶³ The first seminar "Comparative Perspectives on Working and Mothering" held in 1998.

Continental, Liberal and Mediterranean. The typology of Welfare States used in the MOCHO project is quite different, because partners have chosen to adopt a classification that will clearly take into account the gender dimension and the family aspect of social redistribution.

Preliminary findings and future MOCHO contribution:

The first step of the project was to analyse the correlation between female employment participation, different kinds of childcare provisions and certain types of Welfare States. It was concluded that a broader approach was necessary to integrate cultural influences on diverse Welfare regimes. Working mothers are not only receivers of welfare provision, but also agents for reconciling labour and care work. The members of this project have developed a framework for conceptualisation of women's strategies and for their integration into the broader context of the division between the public and private spheres. Current social and economic changes have been studied with attention, specially the flexibilization of work and the shift in welfare concepts towards an individualized worker model. Despite a considerable diversification of women's work and family situations, women are still predominant for example in lower paid part-time work and precarious jobs (see also FENICs's results). They also stressed that intergenerational support still plays a constitutive role in welfare systems as well as in everyday practices. Empirical contributions provided evidence that there is an active and balanced exchange between generations, which can serve as an example for intergenerational solidarity whereas the continuing deficits with regard to gender solidarity remain hidden in the context of today's debates on intergenerational issues.

Conclusion

All these projects are required for having a clear and complete view of the huge question of Women's employment, Motherhood choices and Family life. The EU has no competence in the field of "Family policies", which fall under national remit and are defined and implemented exclusively by the EU's members. Even though the EU has no common family policy, it nevertheless attaches great importance to it, as evidenced by its legislative activities in a number of areas : migration and free movement, equal opportunities, labour law and working conditions and social protection. With different directives since 1989⁶⁴, the European Community tries to guide each national government in implementing measures that will improve women's independence in all their choices (employment and motherhood). In order to do this, the EC first needs to have a state of the art on these different points: what is the situation in each member state? Secondly, some

normative conclusions must be drawn to improve each country's system. All these projects are indispensable and complementary in this task.

⁶⁴ « Communication on family policies », COM (89) 363 final of 8.8.1989.

Table 1

European Projects in progress on Motherhood and female employment

Project / Network	Countries involved*	Institution	Contacts	Fields	Data	Aim
MOCHO	Belgium, France, the Netherlands, Greece, Italy	ULB (DULBEA), Belgium	D. Meulders	Motherhood choice, female employment, fertility, childcare system and public policies	ECHPS (European Community Household Panel Survey), FFS(Fertility Family Survey) and LFS (Labour Force survey) every data sources that is available in each members countries	The triple objective is: Prediction on fertility rates; study the impact of employment conditions on fertility decisions; investigate the influence of social policies on parenthood choices.
NIEPS	Belgium, Germany, Italy, the Netherlands, Austria, Czech Republic, Estonia, Finland, Hungary, Latvia, Poland	CBGS, Belgium	T. Jacob	Gender relations, family building and pattern of work; demographic and cultural specificity, integration of migrants; ageing, intergenerational solidarity and specific vulnerabilities of groups	FFS (carried out from 1989 to 1999). Respondent were men and women. Total sample size is 47,000 men and 96,000 women.	The first objective is to identify gaps in core knowledge in these different fields. NIEPS is looking for innovative perspectives on interactive relationships between these fields in a view to develop integrated approach.
DynSoc	1. The UK, Germany, Denmark, Ireland, Italy, the Netherlands	Institute for Social and Economic Research, University of Essex, the UK	R. Berthoud	It follows the European Panel Analysis Group (EPAG). Changing patterns of partnering, childbearing, ageing, and co-residence; changing capital and institutions in an increasingly global labour market; changing impact of taxes and social security benefits on the distribution of income.	ECHPS	The first aim is to study these fields directly and in their own right. None of them can be understood properly without reference to the others.
FENICs	The UK, France, Germany, the Netherlands,	Institute for Employment Research,	P.Elias	Process of family formation, (or dissolution) female employment patterns,	ECHPS, FFS and LFS	The members have set out to quantify and qualify the impact of change in the early stages of family

	Spain	University of Warwick, the UK		opportunities at work and access to welfare.		formation on female transitions to work as a means of tracking converging or differentiation process in European societies over the past 20 years. They are interested in determining to what extent this segmentation is affecting the dynamics of family formation.
Working and Mothering	Germany, France, Italy, the Netherlands, Spain, Sweden, the UK, Norway	J.W. Goethe University, Germany	I. Jönsson	Social policies and the impact of social strategies on everyday life, families and the combination of work and motherhood.	-	The overall aim was to investigate a variety of care and work-related social policies as well as mother's everyday practices and the relevance of cultural values in different countries. A more specific objective was to build a new, pan-European base of information and expertise for academics and policy makers on the realities of how mothers combine working and motherhood in everyday life.
FADSE	The UK, Austria, Germany, Greece, Portugal, Norway	Centre for Research in Social Policy, Loughborough University, the UK	S. Middleton	Processes of social exclusion and social reintegration in European Union; Gender, work and wages, single households. This research project was launched in 1997.	Policy analysis for each country undertaken by each project partner; analysis of waves 2 and 3 of the ECHP and waves 1 and 2 of the Norwegian Living Standards Survey	The research focuses on 4 transition or risk groups : young adults, lone parents, people experiencing sickness or disability and people retiring from employment.
CHER	Belgium, France, Luxembourg, Germany, Greece, Italy, the Netherlands, the United-Kingdom, Hungary, Poland, Switzerland	DEPS/ INSTEAD, Luxembourg	A. Haag, G. Schaber, G. Schmaus	Building of a European data set	It ended in 2001.	Develop and enhance a comparative database for longitudinal households studies by harmonising and integrating micro data sets from national panels and from the (ECHP)
IPOSEC	The UK, France, Germany, Greece, Italy, Sweden, Estonia, Hungary, Poland	European Research Centre, Loughborough University, the UK	L. Hantrais	Socio-demographic/economic change, policy challenges, policy response, cross-national comparative research process.	Various sources of data (Eurostat, multinational datasets, contextual data collection , surveys and in-depth interviews with families, focus groups and	The aim is to inform policy makers by developing a greater understanding of socio-economic change with particular reference to changing family structures and relationships, the social and

					vignettes).	economic challenges they present, and the policy response formulated by National governments and at European level
HWF	Austria, the Netherlands, Sweden, the UK, Bulgaria, Czech republic, Hungary, Romania, Slovenia	Institute for Advanced Studies, Vienna	C. Wallas, C. Cousins	Flexibility in the Western European Countries and its implications on labour market and social policies.	Construction of a questionnaire for representative sample survey of at least 1000 individuals in each countries	The aim is to analyse the flexibility and its effect on labour market, wages working condition, and on standard living and family life. They indicate that flexibility can be regulated or unregulated, legal or illegal.
TSFEPS	France, Belgium, Germany, Italy, Spain, Sweden, the UK, Bulgaria	Laboratoire de sociologie du changement des institutions, CRIDA-LSCI-CNRS, France	B. Eme	Childcare systems, use of different solution: private, public, association. The project, started in 2000, will end in 2003.	-	The overall aim is to examine comparatively in 8 countries how the relationships are constructed in three areas: the changing balance between public administration and the market economy; the far-reaching changes occurring in the private sphere; the social and community forces.
SOCCARE	Finland, France, Italy, Portugal, the UK	University of Tampere, Finland	T. Kröger	Social care in single-parent families, in multicareer families, in migrant family, in multigenerational families. A state-of-the-art report is available since 2001.	Interviews data analysed locally by each national team	The aim is to examine on the one hand what kind of implications public social policies have for private family life in different European Welfare State and how the agency of citizens operates within the constraints and opportunities provided by changing family and labour market structures.
WORC	Germany, Finland, the Netherlands, Portugal, Greece, Italy, France	University of Tilburg, the Netherlands	G. Frinking and T. Willemsen	European Network on Policies and the division of Paid and unpaid work	-	Survey realised in each members countries; more specifically for France. The survey has been build in order to be as fit as possible from the <i>Enquête emploi du temps</i> of Insee.

MOCHO: The Rationale of Motherhood Choices: Influence of Employment Conditions and Public Policies.

NIEPS: Network for Integrated European Population Studies;

DynSoc: The Dynamic Social Change in Europe;

FENICs: Female Employment and Family Formation in National Institutional Context.

Working and Mothering: Social Practices and Social Policies.

FADSE: Family Structure, Labour Market Participation and the Dynamics of Social Exclusion;

CHER : Consortium of Household Panels for European Socio-economic Research;

IPOSEC: Improving Policy Responses and Outcomes to Socio-Economic Challenges: changing family structures, policy and practice;
HWF: Household, Work and Flexibility;
TSFEPS: Changing Family Structure and Social Policy : childcare services in Europe and social cohesion
SOCCARE: Studying Care Strategies of European Families;
WORC : Work and Organisation Research Center.

* This column gives the countries that realise the project in question. But, in general, in each study, other countries are taken into account. For example, the MOCHO project concerns the 15 European countries and not only the involved countries.

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