Gender Specific Effects of Unemployment on Family Formation – Evidence from a Cross National View[1]

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Abstract

Fertility rates remain low among most western European countries. With a rising female labour market participation on one hand and the need to form an economic fundament prior to family formation on the other, the transition to parenthood currently takes place at a later stage in life-course than it did a few decades ago. The question is, what impact does the rising prevalence of precarious employment careers have on generative behaviour The aim of this paper is to answer this question by looking at unemployment cycles and their impact on the family formation behaviour of men and women.

At this purpose we observe a sample of four European countries, representing different welfare regimes – the UK, Germany, France and Finland. On the micro-level we incorporate different measures of unemployment in the model, with focus on the duration of the unemployment episodes. Furthermore information on the partner in form of income and educational attainment will be included in the analysis.

Applying a random effects probit model, we find different effects of unemployment on the transition to first-parenthood across the four countries. In the cases of France and Finland we can observe only minor effects, which result in an increased first-birth risk for Finnish women and a negative impact of unemployment for French men. In the UK and Germany however, we discover a distinct influence of unemployment on family formation, which is – in contrast to the theoretical assumptions of the new home economics – positive for both men and women.

Keywords: Family formation, fertility, unemployment, cross-national comparison

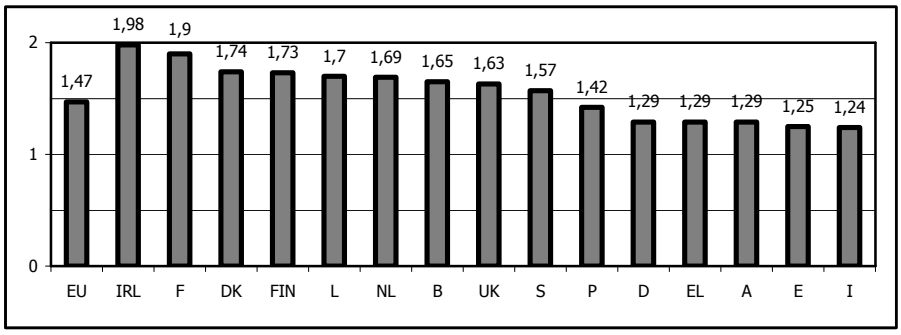
1 I'd like to thank Martin Kroh and Angela Fink for useful hints, support and patience.

INTRODUCTION

In most western European countries fertility rates remain at a below-replacement level. The potential causes can be traced back to an increasing female labour market participation (Blossfeld 1991, 1995), potential economic deprivation of young families (Beaujot & Liu 2002, D'Ambrosio & Gradin 2003, Finch & Bradshaw 2003, Jenkins, Schluter & Wagner 2003) and an increase in precarious employment careers (Kreyenfeld 2000, Kurz, Steinhage & Golsch 2001, Tölke & Diewald 2003).

These potential causes for the low fertility levels show two predominant patterns: First an increase in educational attainment, especially of women, has led to an increase in the costs of opportunity of parenthood for better educated women (Becker 1993). The status positions obtained in the educational system need to be transferred into save labour market positions within a certain time frame. Otherwise the investment into individual education might become obsolete. Secondly the formation of a family requires a certain amount of economic resources. The acquisition of these resources is - again – linked to labour market participation[2].

Figure 1: Total fertility rate (TRF) in EU countries 2001



Source: European Communities 2003.

But these cohesions do not affect both genders in a similar way: Though of the strong trend towards an increasing labour market participation of women, the division of labour in the household still remains rather traditional as far as childbearing and –rearing is concerned (Notz, 1994, Blossfeld 1995, Noonan 2001). The high levels of working women in Western Europe conceal that most of the women only manage to combine motherhood with a part time employment – if at all (see Fthenakis et al. 2002, Trzcinski & Holst 2003 for Germany). One result of this

2 Furthermore the influence of different family policy settings has been pointed out (DiPrete et al. 2003, Neyer 2003). These regulations mainly affect financial support and the ability to combine work and family. Hence they can be assigned to the second of the displayed causes, namely acquisition of economic resources and labour market participation.

squeeze between work and family is a sequential instead of a parallel combination of occupational career and motherhood (Lauterbach 1994: 71ff, Dornseiff & Sackmann 2003). Additionally, the male breadwinner principle still seems to be well in place (Tölke & Diewald 2003). This means that for men an economic backing - which in most cases goes hand in hand with a reliable occupational perspective - is a prerequisite for fatherhood (Kurz et al. 2001). The named effects result in a postponing of parenthood to an ever later stage in the life course. This delay is at least in part responsible for rising levels of childlessness in recent cohorts (Klein 2003, Schmitt 2004).

The question that stands is: What influence do precarious employment careers and especially periods of unemployment show under the illustrated conditions? As far as insecurities in the individual occupational history are concerned, the effect on the transition to parenthood has been analysed profoundly. Kurz et al. (2001) point out that (temporary) positions of insecurity (a fixed term contract e.g.) matter most for men who show a lower transition rate to parenthood as a result. For women the authors find an effect in the opposite direction: Positions of insecurity seem to promote the transition to motherhood. These findings are well in line with those of Tölke and Diewald (2003) who observe this transition for men being negatively associated with bad start into the occupational career or with fixed term contracts. Furthermore Oppenheimer and Lewin argue that for men "a lengthy and difficult career development process [...] tends to delay marriage" (1999: 193, see also Tölke 2004). *Gary Becker's* view of rational decisions on the household level (1981) states that bleak labour market prospects or even unemployment should have a different effect on family formation if either the male or the female are affected. To further investigate a possible connection between unemployment and family formation the focus of analysis remains on two major research questions: Firstly, do unemployed persons have a significantly different chance of entering parenthood than persons with continuous employment careers and secondly, is there a gender-specific difference in the effect of unemployment on the transition to parenthood.

BACKGROUND AND THEORETICAL CONCEPTS

Unemployment can be seen as a very drastic experience of labour market related insecurity. It stands to reason that the experience of a period of unemployment will therefore show similar effects as the forms of occupational insecurity mentioned above. However the imminent financial effect and the depreciation of human capital especially with an increasing length of the unemployment spell might produce different results as far as the transition to parenthood is concerned. There are several studies, which focus their analysis on the relation between labour market performance and family formation. Most of them consider unemployment as covariate with focus on a special population. Liefbroer and Corjin (1999) find in an analysis of Dutch and Flemish young adults that non-employment hampers family formation

for Flemish men but promotes the rate of entry into parenthood for women significantly. For German men and woman Kurz et al. find similar results with gender specific opposite effects, as do Tölke and Diewald (2003). Kreyenfeld (2000) is also able to replicate the positive effect of unemployment on first-birth risk for East German women but doesn't recognize any sizeable effects for men.

Theoretical concepts

To capture the gender specific effects of unemployment on the transition to parenthood in a theoretical framework several approaches have been made. Zimmerman and DeNew (1990) argue from a neoclassical perspective that female unemployment would reduce the costs of opportunity of parenthood and would therefore increase the probability for a rational decision towards family formation. Friedman, Hechter and Kanazawa (1994) come to the same conclusion but emphasize that women have to met a decision between labour market attainment and the career as a homemaker. In a discouraging employment-situation women would therefore make a choice for motherhood, taking into account not only the momentary situation but also their bleak future perspectives on the labour market. For the analytic coverage of the relation between unemployment and family formation Happel, Hill and Low (1984) specify a theoretical model, which also considers the effect of the duration of unemployment. According to this model the decision for a birth occurs when the negative impact of the duration of the woman's unemployment offsets the amount of her accumulated human capital.

All of these theoretical concepts refer directly or indirectly to the works of Becker (1981). According to Becker's concept the utility to be maximised is found on the household and not on the individual level. This maximisation requires an optimal allocation of time spend for market work and for household production of commodities. Furthermore an efficient division of labour between household and market work includes a specialisation with one of the partners focusing on the occupational career and the other on the role of a homemaker. This would result in either the man or the woman specialising in household work if one of them becomes unemployed or has bleak labour market prospects. But in Becker's theoretical framework the role of the homemaker normally falls to the woman, in part because of "biological differences" (Becker 1993: 30) and because of lower human capital investments of women, as compared to men (and the resulting man's comparative advantage in attaining market income). But these arguments for a gender specific effect are problematic. While the point of biologically determined gender roles has earned much critic, the argument of lower human capital investments of women has become obsolete, as far as younger cohorts are concerned. However in an extension to his own theory Becker points out that in a case of negative assortative mating (1993: 114ff.), this means if one partner produces high and the other low human capital investments (and thus has a high or low expectancy of market income), a prerequisite for maximising the household utility would be that the one with lower investments specialises in household work – independently of gender. But in a case where the woman is able to earn rather high market wages and the man faces a de-

preciation of his human capital in the form of an unemployment episode, a family formation is not a appropriate – as it would be vice versa – as this would mean an interruption of the woman's employment career and further reduce household income.

One major point of critic on Becker's theory, which remains is its focus on the maximisation of the *household* utility (Ott 1998: 73), without taking into account individual notions or an unbalanced power situation in relationships. The latter might enable one of the partners to improve his position on cost of the other (Bielby & Bielby 1992: 1244), no matter if this increases or reduces the household utility. Exchange theoretical frameworks (Blau 1967, Homans 1967) and bargaining models (Ott 1989, Sen 1990, Beblo 2001) consider the *interaction* between both partners, who are understood as actors in a cooperative game. In this perspective cooperation will only occur if *both* partners can expect an individual maximum reward from this behaviour (Homans 1968: 110). Therefore we would expect a rather traditional division of labour in a household, in which men have a relatively high bargaining power (which can be comprehended as amount of human capital accumulated) as compared to the woman. Women with high educational attainment on the other side would try to prevent a discontinuity of their labour market participation due to motherhood, as this would decrease her income capacity and results in further costs of opportunity due to forgone income during childcare (Ott 1995). Yet a forced interruption of the employment career in the case of an unemployment episode might reduce the costs of opportunity decisively. Again this would not apply in the case of male unemployment, as the cost of childbearing would still burden the women who – being in an advantageous bargaining position – might reject this. The decisive difference to the view of the new home economics is that a mere reduction in the costs of opportunity for childbearing – as in the case of unemployment – might be insufficient to decide in favour of a family formation. For the last two decades we can observe an increasing female labour force, which displays shorter interruptions of the occupational career due to motherhood (Brose 2003). This observation is inconsistent with the assumption of a specialisation between *either* household *or* market work and consistent with the major role that is ascribed to *individual* human capital investments in bargaining models.

Rational decisions and biographical planning

All of these illustrations of potential paths to family formation imply to be based on a rational decision making processes. This however is not an unproblematic assumption (see Burkart 1994, Kühn 2001). But if the occurrence of a birth is just a random event – in the sense of not necessarily having been planned – it wouldn't make any sense to model an effect of unemployment on family formation. In fact it stands to reason that an unquantified number of births occur unplanned. But aside from theoretical considerations there is empirical evidence that a significant number of births are result of a decision making process: The widespread introduction of effective contraceptives by the end of the 60ies followed by a decline in fertility rates supports this assumption, just like the close relation between labour market

participation and the postponing of parenthood (Chen & Morgan 1991, Blossfeld 1995). In a study utilizing qualitative and quantitative data on family formation and occupational attainment, Schaeper and Kühn (2000: 142) come to the conclusion that a major proportion of family formation processes can be understood as a result of a "rational choice".

But aside from imminent rational decisions, Schaeper and Kühn also find evidence for the relevance of biographical planning. So it is not only the immediate situation, which matters, but also the notion, how different spheres like occupational career and family should be interconnected during the life-course and with which *timing* of events like childbirth e.g. (Rupp 1996). Furthermore every decision with a biographical context, met during the life course, also influences the basis for future decisions (O'Rand 1996). Applied to a theoretical framework of rational decisions this means that the value of certain spheres like parenthood and career development does not only vary across individuals but may also change during the life-course. Hence the utility, which the individual assigns to these spheres is dynamic, not static. So an initial disposition to have a child might change over time: Continuous career development processes may lead to a point, at which also a longer period of unemployment cannot reduce the costs of opportunity sufficiently to realise the notion of parenthood. On the other side the wish to have a child could become that dominant that even a minor occupational insecurity is sufficient for the transition to parenthood. Hence an ideal modelling of the path to family formation also has to consider the individual appreciation of different spheres and the stability of this appreciation over time.

FROM MICRO TO MACRO PERSPECTIVE – THE CROSS NATIONAL VIEW

The theoretical assumptions displayed, underline the thesis that there's a gender specific effect of unemployment on family formation. Aside from the contextual factors, mentioned so far, which play a role in this relation, social structure and especially social policy settings are of major importance. If empirical evidence for our thesis can be found, it still stands to question if the causal effect is universal. Different social policy settings – in our case unemployment- and family related benefits – may produce different outcomes. To establish the generality of possible findings, a cross national frame of analysis is necessary. As Melvin L. Kohn puts it: "...cross national research is valuable, even indispensable [...] In no other way can we be certain that what we believe to be social-structural regularities are not merely particularities, the product of some limited set of historical or cultural or poltical circumstances" (1987: 77).

A welfare state typology as frame of the analysis

The sample of countries to be analysed should preferably cover a broad range of social policy settings. For the cross national analysis Esping-Andersen's differentiation of welfare regimes (1990, 1999) into three principal types will be used as frame of reference. Esping-Andersen views the basic principle of the welfare state in the bolstering of risks (among others class risks, life-course risks and intergenerational risks) and the compensation of family and market failures (1999: 36). The different types of welfare regimes however produce different approaches in generating solidarity and in managing these risks:

The *liberal welfare regime* prevails among the Anglo-Saxon countries. Market sovereignty and encouragement are the prominent characteristic of this type. It is based on a narrow definition on who is eligible for social support, covering only severe risks. Long-term benefits are excluded and the repertoire of social transfers is small, which in some cases like the US excludes national health care or maternity benefits or reduces these transfers to a minimum.

The *social democratic regime* aims – in contrast to the liberal regime – at the minimisation of market dependency and the de-commodification of welfare (Esping-Andersen 1999). The geographic incidence of this type is basically synonymous to the Nordic states, especially Scandinavia. It's features include the compensation of risks by pooling. Entitlement is rather attached to citizenship than to an employment relationship (Palme 1990). Aside from extended health care services, catering to family needs, childcare and care for the aged is a primary objective of this welfare regime.

The *conservative welfare state*, also described as the Continental European type, shows strong corporatist traits. It shares the notion with the social democratic regime, that protection, aside from market mechanisms is required, yet eligibility is most often limited to extensive prerequisites. Attribution to the conservative regime has been much criticised as referring to a residual that sums up all non-liberal and non-social democratic regimes (Manow 2002). Yet the predominance of familialsim under this regime is a mutuality that is shared by all conservative welfare regimes and which is of special importance for our topic. The "male-breadwinner bias of social protection" (Esping-Andersen 1999: 83) promotes a traditional family model, in which the family is at the same time care-giver and unit of eligibility. Paradoxically in this type of regimes, the more pronounced the familialsim the less generous are the family benefits. This is especially true in the case of daycare and results in the difficulties of combining labour force participation and motherhood.

Germany and France are two examples of conservative welfare states. But they differ drastically in terms of family benefits, which enable mothers to work. The public child-care coverage is distinctively higher in France. This is probably one of the reasons, why France produces a fertility rate that comes close to replacement level. Due to these differences in fertility and family policy, Germany as well as France will both be included in the empirical analysis as they display tow different examples of the conservative welfare regime. The United Kingdom will serve as

unit of analysis for a liberal setting and Finland[3] will represent the social democratic type of states.

Table 1: Institutional variation of welfare regimes

	Germany	UK	France	Finland
Labour market				
Regulated	✓		✓	✓
Deregulated		✓		
Welfare state				
Employment based support	✓		✓	
Citizenship based support				✓
General low support		✓		
Extensive family services			✓	✓
Traditional family services	✓	✓		
Role of state				
Non-interventionist		✓		
Regulatory	✓			✓
Public ownership			✓	
Continental conservative welfare state	✓		✓	
Liberal market state		✓		
Scandinavian social democratic welfare s.				✓

Source: Mayer (2001) for Germany, UK and France.

Unemployment and fertility in Germany, the UK, France and Finland

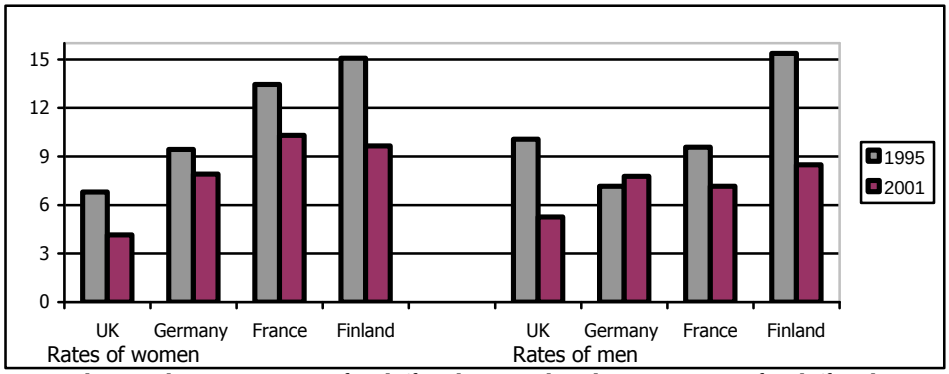
The countries selected for a cross national comparison will now be observed in detail. This observation will consider features of the social support system with regard to employment, unemployment and family benefits, especially maternity leave regualtions. First of all, prominent features of the social structure, which are relevant to the topic of research, will be discussed briefly.

Unemployment rates in 1995 were distinctively higher than those on 2001 – independently of gender. The only exception here are German men, for which the unemployment rate rose slightly. Noticeable are the very high unemployment rates in Finland in 1995. This is due to a deep recession, the country experienced in the 1990s. As a result unemployment rates shot up from a mere 5 percent to over 16 percent in 1997 (Ollikainen & Lahtonen 2003). In most of the selected countries gender specific unemployment rates rest at a balanced level in 2001. The exception here is France where female unemployment rates are much higher than male unemployment rates (nearly 150% of the male rate). This difference in unemployment patterns in France can be traced back to the end of the sixties. Having one or two

3 The selection of Finland among other Scandinavian countries is mainly indebted to reasons of data structure (see description of data and methods below).

children increases the probability of unemployment even more and this though of a comparatively extensive daycare system in France.

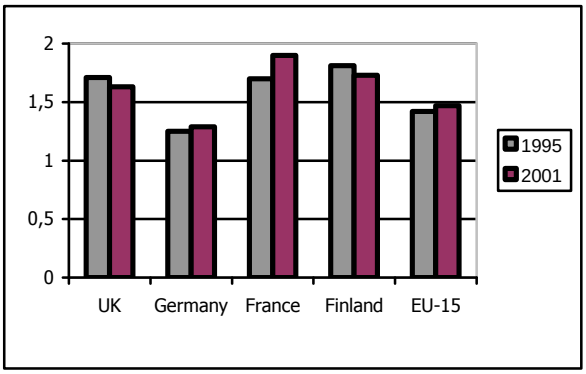
Figure 2: Gender specific unemployment rates in 1995 and 2001



Note: Values apply to percentage of male/female unemployed as proportion of male/female labour force.

Source: OECD 2004.

Figure 3: Total fertility rates (TFR) in 1995 and 2001



Source: OECD 2004.

A view on the total fertility rate (TFR) produces no decisive changes between 1995 and 2001. France shows the greatest differences with a fertility rate of 1,7 in 1995 - which was an exceptional low rate for this country - and almost reaching the replacement level with a TFR of 1,9 in 2001. Germany has by far the lowest TFR in the quartet and lies also distinctively below the EU-15 average. Special attention should be pointed to the fact that the two countries with the most decisive reduction of unemployment between 1995 and 2001, Finland and the UK, face also a cutback in fertility. France however has a slight reduction of unemployment, which is opposed by a decrease in TFR. The German values remain mostly stagnant although

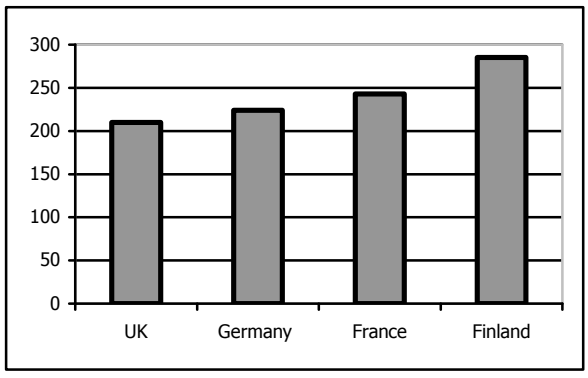
there has been a temporary increase in unemployment rates after 1995. While the view on UK and France support the presented theoretical assumptions of a connection between unemployment and fertility on the macro level, the results from France are contradictory. The displayed data however only draws a rough sketch. Several other factors, especially the different institutional settings in the examined countries need to be considered.

Social policy settings

The social policy settings within the compared countries manifest different historical legacies. The resulting country-specific policies stress different forms of solidarity as well as different institutions what makes a comparison difficult (in detail Neyer 2003). The most important regulations for our topic include unemployment benefits and a wide range of family related benefits[4].

In the field of family policies two major pathways can be identified: On one side certain countries promote regulations, which are making it easier to combine work and family. They do so by encouraging flexible working hours, establishing an extensive day- and infant care system. We can find these conditions in Finland and in part in France. On the other side there are family policies, which financially encourage women, to leave the labour force. This includes generous child benefits, wages for housework and generous maternity leave arrangements with no commitment to return to work. In our sample such regulations can be found in Germany. In case of unemployment such settings produce different and sometimes contradictory results, which will be addressed later on.

Figure 4: Family related cash benefits in Euro after housing and service



Source: Bradshaw & Finch (2002).

4 Another instrument is an employment policy that encourages female labour force participation in the public sector like in the case of Finland. These policies will not be discussed in detail here (see Esping-Andersen 1999, Gornick & Jacobs 1998).

The amount of spendings on family related benefits differs decisively among the observed countries. Finland displays the most generous system of family support with a clear aim of enabling the combination of family and work. This is in part also true for France. Germany, which also spends large amounts on family support, still follows a policy, which favours the male breadwinner-principle. (Pfau-Effinger 1996: 479). This package of financial and childcare support tends to detract women from the labour market and establishes strong dependencies from the male. So in case of a previous unemployment episode and a subsequent transition to parenthood, one situation of dependency is followed by another. Thus it can be concluded that the decision to perform the transition to motherhood strongly depends on the future labour market perspectives, which are linked to the duration if the unemployment spell.

The maternity and childrearing leave regulations among the observed countries underline this picture of the German family policy cultivating a traditional division of labour. Only France and Finland actively include the father into the parental leave regulations by offering a paid paternity leave. Germany has the most generous parental leave benefits, under which the time off work can be shared among the partners. This resembles Finland and France, which however offer much lower rates of financial transfer. In the UK there are no transfers at all for parental leave. Germany therefore produces a rather strong incentive for at least one of the partners to stay away from the labour market. The take-up of parental leave in practice however is almost limited to mothers and only a marginal proportion of the fathers takes up part of the leave. In France and even more in Finland the proportion is distinctively higher, but still decisively below the proportion of women taking up parental leave. In Germany, and Finland also unemployed persons are eligible for maternity leave payments (respectively a payment by health insurance in Germany). The childrearing leave transfers also address unemployed parents in Germany, Finland and France as they are delivered as (in Germany a means tested) flat rate. In France however the comparatively high parental leave payments only apply for the 2nd and further children, fostering the trend towards two children-families.

Table 2: Parental leave regulations

	Duration of leave		Percentage of net wage replacement		Parental/childrearing leave
	maternity	paternity	maternity	paternity	
UK	18 weeks	none	90 (1)		13 weeks, unpaid
D	14 weeks	none	100		3 years with moderate flat rate for 2 years (~300€, means tested)
F	16 weeks, 26 weeks with 3rd child	3 days, (2 weeks since 2002)	100	100	3 years with unpaid, high flat rate for 2 years for the 2nd child or further children (2)
Fin	17,5 weeks	1 to 3 weeks	~65	~65	26 weeks, flat rate, childrearing leave up to the childs 3rd birthday with reduced flat rate

(1) 90 percent for or 6 weeks, then low flat rate.
(2) 1995 extension of parental leave regulations.
Sources: Kamerman 2000, MISSOC 2002.

Just like the parental leave, the child allowance benefits in France only apply to children after the first. Aside from this we again find the highest benefits in Germany and France, with the UK showing the smallest family transfers in this section, with even decreasing allowance for additional children. Among the observed countries, also unemployed parents are entitled for most of the family related transfers except for the UK in the case of case maternity leave. Considering the financial burdens of rearing a child we can assume that there is a slight negative incentive for a couple of one or even two unemployed persons. In the case of the UK this disincentive can even be considered grave. However the vital variable when trying to combine occupational career and parenthood is available time, which is needed for childcare as well as for market work. Gornick, Meyers and Ross (1996) point to a close relation between labour supply of infant mothers and the availability of childcare. The authors highlight the Scandinavian nations as well as France to provide conditions in favour of employed mothers – in opposition to the Anglo-Saxon nations.

Table 3: Child allowance in 2000

	Child allowance	
	Entitlement	Benefits
UK	1st chlid	100€ for the 1st, 67 for 2nd and additional children.
Germany	1st child	138€ each, increase for the 3rd and 4th child
France	2nd child	105€ for the 2nd child, increase up to the 6th child
Finland	1st child	90€ for the 1st, increase up to the 5th child

Source: MISSOC 2000.

In our sample Finland has by far the most elaborate system of external care for infants and young children with a high level of coverage. This complies to the Scandinavian model of subsidizing family services to enable the combination of work and family. With a lower level of coverage than Finland, the childcare system in France is also able to disburden parents in this regard (Neyer 2003). The UK follows the principle of encouraging diversity and dynamics on a widely privatised care system (Mahon 2002: 354). Although there's some financial support with regard to childcare in the UK, the costs of childcare for working parents remain among the highest in the EU (Bradshaw & Finch 2002). Nevertheless the amount of female labour force participation in the UK (45,0%) rests only marginally below the levels in France (45,1%) and Finland (47,6%, OECD 2001b). Just like in the UK, German parents face increased costs of external childcare combined with a low level of coverage, which is at least true for the West of Germany. This is compatible with the view of the German family policy, discouraging female occupation, which lay at 43,2% in 2000 (OECD 2001b).

The lack of an extensive child- and daycare system does probably contribute to a connection between unemployment and parenthood. In an environment where parents are not able to combine work and childcare without cutbacks, a condition with bleak labour market prospects poses a special incentive for parenthood as the time

spent for childcare poses a comparatively cheap resource in this case. This is further aggravated by the fact that especially in France and even more in Germany and the UK, infant care is supplied mainly by intra-familial networks (Büchel & Spieß 2002). Those networks however are likely to be torn a apart by a labour market situation, demanding high levels of geographic mobility (Hank et al. 2004).

If it comes to unemployment benefits it is again Finland, which displays the most generous regulations of entitlement. Here also persons under special training conditions are entitled to insurance, whereas in Finland and France the benefits include family supplements. In France seasonal unemployment and voluntary unemployment are excluded from insurance benefits. While the amount of unemployment insurance is rather low in the UK this is also the only country in the quartet without unemployment *assistance*. Unemployment assistance in the Finland, France and Germany offers reduced payments compared to the amount of insurance benefits. Out of the displayed countries Germany and Finland are the ones, which increase the amount of unemployment payments with dependent children in the family (MISSOC 2002). These transfers represent significant[5] payments in both cases and might well encourage the transition to parenthood. The lack of unemployment assistance in the UK however, could be a disincentive in the decision for a child. The British *income support* (the system guaranteeing minimum resources) follows the short duration of unemployment insurance payments of only 6 months, reducing household income decisively. In case of income support, the partners income will also be considered. It can be assumed that this exerts a strong pressure to re-enter the labour market as quickly as possible. For long-term unemployed who already receive income support however, it still stands the reason that the amount of available income will diminish the probability of deciding to have a child.

Table 4: Unemployment benefit regulations in 2002

	Unemployment benefit duration in months		Entitlement conditions: Insured months within period:	Amount in percentage of previous earnings	
	Insurance (1)	Assistance		children	no children
UK	6	none	none	74€ flat rate	
Germany	6-32	unlimited	12 within 36	67 of net	60 of net
France	4-60	unlimited	4 within 8	57,4	57,4
Finland	23	unlimited	10 within 24	20 to 42 + high flat rate (2)	

(1) The duration of unemployment insurance may vary according to the duration of the employment record (contribution period), the age and the family situation of the beneficiary.

(2) Finish unemployment benefits are calculated from a flat rate of ~20€/day + 42% of daily wage or ~50€/day + 20% of daily wage in case of higher incomes. Additional child related benefits apply.

Source: Carone et al. 2003, MISSOC 2002.

5 Seven percent of previous net income in the case of Germany and 4€ to 18€/day with 1 to 3 children in the case of Finland (MISSOC 2002).

DATA AND METHODS

The European Community Household Panel

Basis of the empirical analysis will be the European Community Household Panel (ECHP). This longitudinal data set, providing representative data on the EU population was collected from 1994 to 2001. Its advantage rest in the ex ante harmonisation of the data and the availability for all EU-member-states (Günther 2003). Hence the ECHP poses a unique base for cross national research with comparable national information across the EU. The sample of countries, which will be considered for empirical analysis consists of the UK, Germany, France and Finland. The data considered for Germany and the UK is based on cloned data from national panels, namely the British Household Panel Study (BHPS) and the German Socio-Economic Panel (SOEP) what results virtually in an ex post harmonisation of the ECHP in these cases. This harmonisation however is strictly oriented on the ECHP questionnaire and data-structure, providing comparability in almost all areas. For the selected countries all eight waves of the ECHP are available except for Finland[6], which has been taking part in the ECHP since 1996.

Description of data and population of analysis

To investigate a possible gender specific effect of unemployment on *family formation*, we consider solely the transition to first-parenthood. One of the main predictors of second and further births is the timing of the first birth. Most parents show a tendency to place first and second birth into a rather narrow time frame what results in the increased probability of childbirth if a very young child already lives with the parents (Kreyenfeld 2002, Kreyenfeld & Huinink 2003). In this context many mothers show a different labour supply behaviour, if they already have a young child and stay away from the labour market for a longer duration. To minimise such influences of family structure on the research topic we observe only the first birth. The identification of parent-child relations in the ECHP is somewhat difficult. There's no information on children who have left the household (or in case one of the parents changes the household, leaving the child behind with the partner), what results in an underestimation of the number of children of men and women. When considering if a person is already is mother or father a parent or not, we also take step-, adopted- or foster children into account, as the existence of these children also influences the probability and the timing of further births. Furthermore the

6 From the Scandinavian countries Norway as a possible candidate for the empirical examination was excluded as not being member of the EU and therefore not taking part in he ECHP. Sweden was excluded for not providing longitudinal data, Denmark for reasons of availability of certain items and small number of cases in general.

number of adult household members will be integrated into the model. Adult household members other than the partner might serve as informal networks, which are capable of reducing the strain of childcare (Hank et al. 2004) and might thus reduce the costs of opportunity of having children.

The individual centred variables include the net personal income, which is of major relevance for the ability to support a family as well as the educational attainment. In the ECHP this level is displayed in form of the ISCED[7] classification. This indicator is derived from the level of formal as well as from the level of vocational education. Unfortunately a differentiation between formal and vocational education, which will most probably provide different kinds of information, is not possible on basis of the ECHP as this data is not included. The same is true for information that indicates biographical planning. Above it was pointed out that these planning might be of relevance in a rational decision making process, when the transition to parenthood is considered. But information, from which such a biographical planning might be derived from (like the appreciation of parenthood or self-realisation, e.g.) is not collected with the ECHP.

A further group of variables to be considered, regard the labour market participation.8 We will control for the fact if a person has ever been part of the labour force during the last year to take into account, persons who are still in education or other persons who are excluded from the labour force. Special attention will be paid to different measures of unemployment, which will be tested against labour market participation. To account for precarious employment situations, we observe if the individual experienced any unemployment episodes prior to the last occupation. As different effects of unemployment on childbirth will be investigated, variables, which represent different concepts in measuring unemployment will be verified. It was pointed out before that the *duration* of an unemployment spell might play a decisive role in the decision for or against family formation. Hence this duration of the unemployment spell will be included in the multivariate model. This information is derived from the ECHP calendar of activities, which is built on a monthly base. As the information within the calendar of activities is subject to self ascription it is not necessarily congruent with the ILO-concept of unemployment. To account for this and because some of the calendar-based data is limited for Germany and France[9], information on unemployment from the personal questionnaire will also be verified as an alternative.

An important element of the empirical model is the supplementation if individual data with partner data. The decision for or against a child is in almost all cases being made by both partners (Thomson & Hoem 1998). Thus the resources and situation of both partners have to be taken into account when calculating the probability

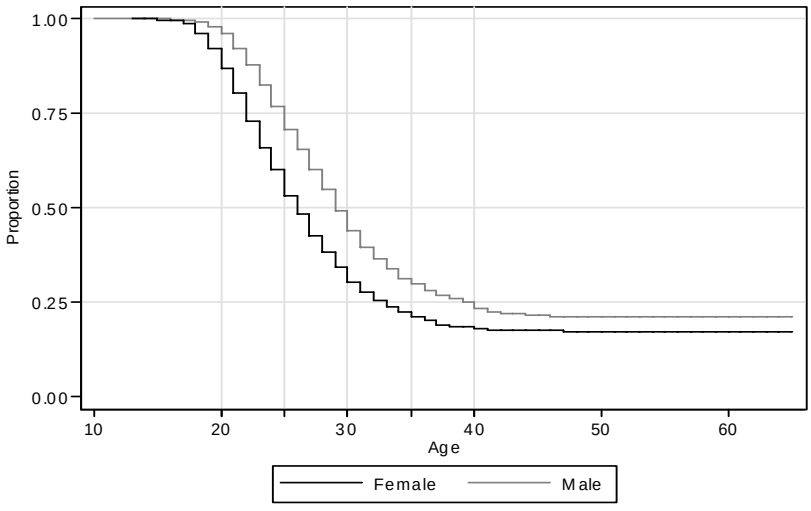
7 „International Standard Classification of Education“, for details see OECD (2001).

8 ILO-labour force indicator cannot be used in the analysis, as the corresponding information on Germany and the UK is seriously limited.

9 Regrettably this retrospective information is limited in the case of Germany and France: For Germany, only episodes, reported to the Federal Employment Office are included. For France, the calendar data is incomplete in some cases (for details see Eurostat 2003: 300).

for the transition to parenthood (Klein 2003). Furthermore the resources of the partner, especially income and education can be grasped as bargaining power when important decisions have to be made as has been pointed out before. Finally an unemployment episode of the partner might well diminish or increase the probability for childbirth depending on the gender of the unemployed. The integrated partner-variables include income, education, and information on unemployment. This analysis excludes all persons, not living together with a partner in the same household. This means also the transition to lone-parenthood will be blinded out. Although the prevalence of this population still remains decisively lower than the number of parents living in consensual unions and especially marriages, this group faces special occupational and financial hazards. A separate model, which also integrates persons, who are not living in a consensual union will be estimated. All partner data will be excluded from this model. The focus on the population at risk requires to exclude persons who are widely inhibited from the childbirth due to age. The age limit is set below 45 years. Although we can find a postponing in the timing of births throughout all Western societies (Chen & Morgan 1991, Blossfeld 1995), the transition to parenthood beyond the age of 45 is very rare, which is true for both genders (see figure 5). As the delay in the timing of births also includes a catching up at higher ages – especially for the higher educated – age has to be an integral part of the model.

Figure 5: Transition to first-parenthood in Germany by gender – Kaplan-Meier survival estimates



Source: *SOEP* 2002, own calculations n = 8.019.

Longitudinal design of the multivariate analysis

The central event of the analysis is the occurrence of a birth. In almost all cases the month of birth is available. As we assume a rational decision to be the basis of this event (what should be true for at least some of the births) a rough time frame for this decision can be derived. The point of decision is set 10 months prior to birth[10]. For this point of decision, adjacent or overlapping unemployment spells are considered with regard to their length up to a maximum of 27 months. All other relevant information like income or educational attainment is collected from the last point of interview that was taken *before* the point of parental decision, to account for a causal effect. This constitutes a panel model, as the birth in t1 (or the decision for this birth in t0) is investigated with reference to the status *prior* to the point of the decision (t-n).[11] As this model is based on monthly information, we need a reference point (as a replacement for the month of birth) for *all* observed persons, to unveil if the occurrence of birth is distributed independently of a previous unemployment episode or if there is a link between unemployment and the childbirth decision. Hence, also such couples without a birth in a given year need to receive a point of reference, which is missing in form of a birth. To solve this, a random month is selected for each couple. This selection is based on the distribution of observed births across the year, as the occurrence of births is not uniformly distributed across the year (Lerchel et al. 1993, Skirbekk et al. 2003).

This modus operandi constitutes a longitudinal sample with a given year and month of birth of the child as point of reference and additional retrospective information taken from the two waves antecedent to the occurrence of a birth (or to be more exact antecedent to the time of decision, which is set at 10 months before birth). As parents in the sample may have several children, each person will be observed repeatedly[12]. To account for this repeated observation and for the longitudinal design of the analysis, a random effects model will be applied (Greene 2003). For each of the selected countries a separate model will be estimated with a further differentiation by gender, to be able to outline country specific, as well as gender specific effects.

10 Although it stands to reason that the decision making process may start much sooner, we still catch the relevant information, as the closest interview *before* this point of decision is utilised. They duration of the unemployment spell however might be underestimated, while very short unemployment spells might be lost in seldom cases.

11 Because we observe month rather than years the calculation becomes a bit more difficult. Hence the point from which the independent variables are collected may differ among persons according to month of birth and timing of the interview. Still the causal succession of events remains the basic principle of this model.

12 As there is only limited information on births, occurring in 2001 (only births, prior to the point of interview in 2001 can be identified), all observations from 2001 will be excluded from the analysis.

RESULTS OF THE MULTIVARIATE ANALYSIS

The multivariate analysis of the effect of unemployment on family formation indicates variations across gender and national context. The gender specific differences do not hold for all the countries however. The results of the random effects model show unexpected similarities among men and women in the case of Germany and the UK.

The first model incorporates partner information in the from of the partner's education, the partner's income and the partner's previous unemployment spells. While we did not discover any direct effects of education (except for French women, who show a negative probability of childbirth if the partner has a high education), we find prominent effects of post-government income on the transition to parenthood in Germany: Persons with higher incomes and *also* with higher income of the partner show more frequent a family formation. As German family policy encourages a traditional division of labour, we find a strong positive effect of income of the woman's partner as an indication of the continued dominance of the notion of a male-breadwinner. This effect does also apply to the partners income of German *men*, which is surprising, as we would expect women with higher income (or with income at all) to be more strongly integrated into the labour market and thus with a lower affinity for family formation. One cause for the observed effect might be that German couples estimate the financial constraints of family formation to be severe and therefore focus on the foundation of an economic basis prior to family formation. The described strong effect of income on childbirth is unique among the observed countries. Finland is the only nation, which also shows a positive income effect, which is however weak and applies only to men. In our second model, which considers not only the first birth risk of couples but also persons, who are not living in a union, we find a robust result of a highly significant positive income effect for Germany under utilisation of the OECD-equivalence scaled household income[13].

Taking a closer look at unemployment related variables, we find that *previous* unemployment episodes only seem to matter in France. These episodes that might indicate on an occupational history of precarious employment situations, produce a positive effect on the first birth risk and show the same direction of effect for both genders. Across the observed European countries, France is the only that generates any negative effect of unemployment on family formation[14]. Among French men, *short-term* unemployment (up to six months) results in a lower probability of the

13 Current post government household income (including transfers), equivalence weighted by persons in the household, according to the new OECD-scale (for details in composition of the OECD-scale see Faik 1997).

14 Due to the limited data quality of the French ECHP calendar data, unemployment spell might appear interrupted although they are actually continuous (see Eurostat 2003: 300). This might lead to a misjudgement of the effect of the duration of unemployment as longer unemployment spells are underestimated. Hence the results for France require further inspection in future research.

transition to parenthood. As we control for income, not the immediate income effect, but the lack of economic security might play a role. Bleak future prospects, which were nourished by the exceptionally high unemployment rates in France during the 90s seem to have prevented family formation in the cases where the ability to support a family was deemed precarious.

Distinguishing more precisely the duration of the unemployment episode antecedent to the decision for family formation, reveals the following results: *Long-term* unemployment (classified as more than 12 months of continuous unemployment) always produces a strong positive effect on the first-birth risk. What is unexpected is that this effects is robust and positive for *both* genders in the case of the UK and Germany. We do not find any gender specific differences in these countries in terms of opposite effect direction. But what does differ between German and British men and women is the impact of the duration of unemployment. For German women even a *short-term* unemployment (up to six months) increases the probability of undergoing the transition to family formation. For German men, the effect becomes significant for the *long-term* unemployed. In contrast, the dividing line in the UK runs between *mid-term* unemployment (seven months up to one year) for women and *long-term* unemployment for men[15]. This rather swift transition to motherhood among German women indicates exceptionally high opportunity costs of parenthood: The difficulty of combining motherhood and occupational participation shows through and even short unemployment spells are exploited.

A further link to the relation between unemployment and family formation might be found in the impact of unemployment insurance: In the UK, women only experience an increased risk in the transition to motherhood in the case of mid- and long-term unemployment. The unemployment insurance in the UK ends after 6 months, with no proximate unemployment assistance benefits. Perhaps a labour market reintegration is being anticipated, as long as the unemployment insurance regulations offer a link to the labour market. After a longer duration of labour market absence discouragement might set in, boosting the decision for family formation. A view on the duration effects for German men and women suggests that there might also be a link to the duration of unemployment insurance payments, which have been replaced after 6 to 32 months by unemployment assistance. This assumption of a connection between unemployment benefit payments and family formation requires further investigation.

Another parallel between Germany and the UK is the low level of coverage and availability and the high costs of infant- and childcare, which might be responsible in generating such a close link between unemployment and family formation especially for women. These high opportunity costs might even be responsible for encouraging the transition to parenthood in the case of *long-term* unemployed men in Germany and the UK. Although it is still the woman who invests most of the time in childrearing (Blossfeld 1995) a discouraging labour market situation for the man might foster a non-traditional division of labour in the household.

15 British men in the observed in model I, excluding the partner data, represent an exception with even short term unemployment generating a positive impact on family formation.

The most distinct result of the analysis is the lack of a decisive gender specific effect in the impact of unemployment on family formation, predicted by theory. But even though not very pronounced, we do find gender specific differences: In France we find a negative impact of short-term unemployment on family formation for men while a positive or negative influence for women is missing. In Germany and the UK, which share social and family policies that hamper the combination of labour market participation and family formation, we find a positive effect for both men and women. Women however seem to perform the transition to family formation much more quickly than men, when experiencing an unemployment episode. Finally in Finland, we find a positive effect of long-term unemployment on the transition to motherhood, while a similar effect for men is missing – and this even though the Finnish family policy fosters the compatibility of work and family.

SUMMARY AND CONCLUSIONS

In this sample of European welfare state regimes, we found positive effects of unemployment on the transition to family formation for all countries except for France. A gender specific impact however only manifests in France and Finland. While the former example is the only of the observed countries that produces any negative impact on family formation in the case of short-term unemployed men, the connection in Finland appears to be very vague, with only *long-term* unemployed women showing an increased first-birth risk. The otherwise missing link between unemployment and family formation is probably indebted to the Finnish family policy that aims – obviously rather successfully – in reducing family-work conflicts[16].

The view on the UK and Germany supports the assumption that family formation in these countries is closely related to two major factors: First the provision of a secure economic background, prior to family formation and second the burden of combining familial and occupational roles. These factors obviously play decisive roles when considering parenthood. The prevalence of the male-breadwinner-principle still shows its imprints in these countries. An increased probability for the transition to fatherhood is found only among the *long-term* unemployed. For this group however, the high availability of allocatable time might encourage a stronger participation in childrearing, thus disburdening the woman and increasing the probability of family formation. After all it is Germany and the UK, which produce the highest costs of opportunity for parenthood with high costs and low levels of childcare availability. Still women perform the transition to parenthood more swiftly in case of unemployment. In the UK, *short term* unemployment – a duration that is congruent to the duration of the reception of unemployment benefits – does not produce an increased probability for motherhood.

16 A concluding assessment of the French situation must remain pending, due to the limited quality of French calendar data in the ECHP (see also note 14).

Among the observed countries, we find the most striking effect of unemployment on family formation in the case of *long-term* unemployment. Obviously family formation becomes an option, after a close link to the labour market has been broken in terms of discouragement, e.g. When considering the duration of unemployment there is evidence that the reception of unemployment insurance benefits might also play a role. As we control for income, we can exclude a direct effect on the monetary transfers on family formation but the receipt of such unemployment benefits requires job search activities or at least availability for work as a prerequisite in Germany and the UK. If the eligibility becomes void after a certain time, the link to the labour market becomes more fragile as search activities are no longer compulsory. The probability of transition to parenthood depends on the duration of unemployment suggests such a connection.

Gender specific effects appear most prominent in their dependence on the *duration* of unemployment episodes. The results of our analysis show that the effect of unemployment on family formation for woman depends on several contextual factors, not considered by the new home economics including social policy settings and the increasing tendency of labour force participation of women. For men we could even find unpredicted positive effects of long-term unemployment on family formation, which might indicate a tendency towards a less traditional division of labour under the pressure of labour market restrictions. Further investigation in this direction might be beneficial.

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Appendix

Table 5: Model I – Determinants of the transition to first parenthood: Random Effects Probit estimates by country and gender for all adults

Country	UK		Germany		France		Finland	
Gender	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**
General information								
1995	0.087 (0.181)	0.006 (0.167)	-1.150 (0.444)***	-1.010 (0.423)**	-0.009 (0.156)	0.057 (0.157)	(1)	(1)
1996	-0.127 (0.184)	0.023 (0.166)	-1.112 (0.443)**	-0.942 (0.422)**	0.052 (0.156)	0.157 (0.157)	(1)	(1)
1997	0.055 (0.179)	0.038 (0.165)	-1.013 (0.442)**	-0.917 (0.421)**	0.123 (0.158)	0.173 (0.161)	(1)	(1)
1998	0.088 (0.179)	0.143 (0.164)	-1.013 (0.443)**	-0.944 (0.421)**	0.113 (0.161)	-0.024 (0.165)	-0.320 (0.152)**	-0.207 (0.152)
1999	0.111 (0.182)	0.179 (0.166)	-1.017 (0.443)**	-0.818 (0.422)*	0.221 (0.165)	0.082 (0.169)	-0.271 (0.149)*	-0.087 (0.146)
2000	-0.236 (0.200)	-0.099 (0.182)	-1.331 (0.446)***	-1.199 (0.424)***	-0.355 (0.216)	-0.170 (0.201)	-0.300 (0.168)*	-0.284 (0.178)
(Reference: 1994, 1996/1997 for Finland)								
Month of procreation	0.000 (0.010)	0.016 (0.010)	-0.001 (0.010)	0.020 (0.010)**	0.021 (0.012)*	0.028 (0.011)**	0.006 (0.015)	0.022 (0.016)
Distance to month of previo. interview	-0.014 (0.015)	0.018 (0.013)	-0.021 (0.013)	-0.038 (0.013)***	0.031 (0.016)*	0.031 (0.015)**	-0.006 (0.014)	0.019 (0.014)
Personal information								
Age	0.211 (0.054)***	0.131 (0.050)***	0.359 (0.060)***	0.348 (0.058)***	0.216 (0.065)***	0.293 (0.064)***	0.316 (0.089)***	0.192 (0.086)**
Age – squared	-0.004 (0.001)***	-0.003 (0.001)***	-0.006 (0.001)***	-0.006 (0.001)***	-0.004 (0.001)***	-0.005 (0.001)***	-0.005 (0.001)***	-0.004 (0.001)***
Country of birth:								
Foreign country, EU	(2)	(2)	(2)	(2)	0.005 (0.217)	-0.014 (0.228)	0.495 (0.307)	0.045 (0.400)
Foreign country, non-EU	0.335 (0.427)	(2)	(2)	(2)	-0.329 (0.339)	-0.543 (0.366)	0.126 (0.537)	0.339 (0.553)
Type of relationship:								
not living with a partner	-0.904 (0.086)***	-0.777 (0.087)***	-0.855 (0.076)***	-0.458 (0.074)***	-1.126 (0.087)***	-0.869 (0.081)***	-0.841 (0.125)***	-0.675 (0.125)***
3 or more adults in the household	-0.101 (0.094)	-0.074 (0.091)	-0.210 (0.088)**	-0.328 (0.089)***	-0.218 (0.106)**	-0.303 (0.101)	0.009 (0.147)	-0.254 (0.163)
Education high (ISCED 5-7)	-0.055 (0.067)	-0.052 (0.067)	-0.036 (0.081)	-0.095 (0.092)	-0.041 (0.080)	-0.029 (0.072)	-0.143 (0.126)	0.216 (0.124)*
Household income – OECD-scale (3)	0.390 (0.459)	0.400 (0.425)	0.646 (0.241)***	1.125 (0.275)***	0.051 (0.036)	0.042 (0.052)	0.099 (0.079)	0.091 (0.096)
Labour force participation								
Ever working	0.184 (0.216)	0.070 (0.161)	0.118 (0.159)	-0.084 (0.144)	0.251 (0.139)*	0.428 (0.108)***	0.475 (0.217)**	0.080 (0.172)
Working in public service	0.044 (0.091)	-0.003 (0.074)	-0.099 (0.084)	-0.053 (0.070)	0.010 (0.088)	-0.019 (0.087)	0.136 (0.135)	0.110 (0.130)
Unemployment								
Ever unemployed	0.013 (0.013)	0.003 (0.012)	0.014 (0.011)	0.020 (0.013)	0.020 (0.010)**	0.010 (0.009)	-0.008 (0.015)	0.000 (0.015)
Short term unemployment (1-6 mo.)	0.459 (0.206)**	-0.487 (0.384)	-0.038 (0.206)	0.386 (0.180)**	-0.503 (0.282)*	0.075 (0.139)	-0.537 (0.443)	0.298 (0.248)
Mid-term unemployment (7-12 mo.)	-0.006 (0.332)	0.502 (0.293)*	-0.552 (0.442)	0.879 (0.198)***	-0.032 (0.258)	-0.174 (0.215)	-0.235 (0.485)	-0.319 (0.477)
Long-term unemployment (13 mo +)	0.455 (0.255)*	0.637 (0.279)**	0.222 (0.229)	0.457 (0.248)*	-0.127 (0.293)	-0.101 (0.193)	-0.470 (0.509)	0.733 (0.403)*
Constant	-4.373 (0.872)***	-3.101 (0.771)***	-5.407 (1.032)***	-5.083 (0.949)***	-4.505 (1.024)***	-5.446 (0.960)***	-6.333 (1.380)***	-4.076 (1.278)***
	coeff. (std. error)							
n	**5993**	**5309**	**7958**	**6806**	**6304**	**5611**	**2325**	**2817**
Log-Likelihood	**-968.65**	**-1063.26**	**-1044.53**	**-1111.06**	**-878.09**	**-980.34**	**-368.69**	**-372.27**
Wald Test: chi^2	**252.24**	**195.92**	**342.82**	**271.38**	**428.50**	**402.97**	**97.21**	**110.87**

Note: Independent variable coded with '1' for birth; all dummy variables coded '0/1' with 1 when true, except specified differently.
Effects are significant on the basis of $p < 0.10$ (*), $p < 0.05$ (**) and $p < 0.01$ (***).

(1) Note: No *ECHP* data for wave 1 and 2 in Finland.

(2) Note: Dropped due to lack of observations in this group.

(3) Note: Current post government household income (including transfers) / 10000 national currency units (NCU); equivalence weighted according to the new OECD-scale (for details in composition of the new OECD-scale see Faik 1997).

Source: *ECHP* 1994 to 2001, own calculations.

Table 6: Model II – Determinants of the transition to first parenthood: Random Effects Probit estimates by country and gender for couples

Country	***UK***		***Germany***		***France***		***Finland***	
Gender	***Male***	***Female***	***Male***	***Female***	***Male***	***Female***	***Male***	***Female***
General information								
1995	0.080 (0.239)	0.053 (0.225)	-1.913 (0.634)***	-1.760 (0.603)***	-0.094 (0.209)	0.054 (0.207)	(1)	(1)
1996	-0.090 (0.241)	-0.025 (0.226)	-1.975 (0.634)***	-1.684 (0.602)***	0.070 (0.211)	0.177 (0.206)	(1)	(1)
1997	-0.325 (0.239)	0.0823 (0.223)	-1.800 (0.632)***	-1.613 (0.602)***	0.268 (0.216)	0.342 (0.211)	(1)	(1)
1998	0.126 (0.237)	0.143 (0.223)	-1.760 (0.632)***	- 1.579 (0.601)***	0.070 (0.224)	0.098 (0.224)	-0.291 (0.192)	-0.227 (0.197)
1999	0.141 (0.241)	0.217 (0.225)	-1.718 (0.632)***	-1.500 (0.602)**	0.271 (0.228)	0.368 (0.225)	-0.312 (0.189)*	-0.198 (0.194)
2000	-0.107 (0.258)	-0.046 (0.244)	-2.102 (0.635)***	-2.009 (0.606)***	-0.331 (0.295)	-0.129 (0.281)	-0.547 (0.228)**	-0.355 (0.222)
(Reference: 1994, 1996/1997 for Finland)								
Month of procreation	0.013 (0.013)	0.011 (0.012)	0.004 (0.131)	0.003 (0.013)	0.044 (0.016)***	0.032 (0.015)**	0.022 (0.019)	0.040 (0.020)**
Distance to month of previo. interview	-0.084 (0.019)	0.014 (0.018)	-0.031 (0.0178)*	-0.036 (0.017)**	0.041 (0.022)*	0.038 (0.021)*	-0.014 (0.019)	0.007 (0.019)
Personal information								
Age	0.081 (0.0796)	0.096 (0.073)	0.332 (0.095)***	0.318 (0.088)***	0.109 (0.104)	0.185 (0.097)*	0.0390 (0.139)***	0.230 (0.128)*
Age – squared	-0.019 (0.001)	-0.002 (0.001)**	-0.006 (0.014)***	-0.006 (0.001)***	-0.002 (0.002)	-0.004 (0.002)***	-0.007 (0.002)	-0.004 (0.002)**
Country of birth:								
Foreign country, EU	1.000 (0.885)	1.525 (0.884)	(2)	(2)	-0.628 (0.475)	-0.062 (0.427)	-7.804 (0.005)	1.263 (0.947)
Foreign country, non-EU	0.173 (0.577)	(2)	(2)	(2)	-0.371 (0.317)	-0.376 (0.378)	0.377 (0.425)	0147 (0.477)
Type of relationship: marriage (1) vs. consensual union (2)	-0.558 (0.085)***	-0.465 (0.085)***	-0.430 (0.081)***	-0.443 (0.008)***	-0.567 (0.094)*	-0.580 (0.093)***	-0.389 (0.139)***	-0.170 (0.144)
New relationship	-0.615 (0.142)	-0.116 (0.138)	0.013 (0.127)	0.057 (0.128)	-0.121 (0.142)	0.005 (0.138)	0.252 (0.178)	-0.219 (0.230)
3 or more adults in the household	-0.202 (0.157)	-0.267 (0.159)*	-0.246 (0.166)	-0.269 (0.180)	-0.691 (0.254)***	-0.565 (0.257)**	-0.288 (0.324)	-0.308 (0.344)
Education high (ISCED 5-7)	-0.029 (0.086)	0.025 (0.085)	-0.111 (0.107)	-0.032 (0.118)	-0.152 (0.113)	0.011 (0.101)	-0.163 (0.163)	0.207 (0.163)
Partners education high	-0.026 (0.088)	-0.054 (0.083)	-0.058 (0.113)	-0.113 (0.102)	0.131 (0.102)	-0.188 (0.109)*	0.134 (0.153)	-0.086 (0.164)
Income , net personal NCU/10000	0.048 (0.049)	0.0001(0.052)	0.070 (0.025)***	0.081 (0.033)**	0.014 (0.009)	0.003 (0.001)	0.017 (0.010)*	0.000 (0.017)
Partners income, net personal /10000	0.047 (0.054)	0.037 (0.051)	0.064 (0.032)**	0.059 (0.025)**	-0.006 (0.011)	0.012 (0.009)	0.004 (0.016)	0.015 (0.009)*
Labour force participation								
Ever working	0.004 (0.329)	-0.191 (0.250)	-0.112 (0.233)	-0.2232 (0.204)	0.296 (0.221)	0.223 (0.157)	0.257 (0.298)	0.111 (0.234)
Working in public service	0.024 (0.109)	0.022 (0.087)	-0.079 (0.105)	-0.1229 (0.917)	-0.083 (0.114)	-0.010 (0.119)	0.275 (0.162)*	0.124 (0.160)
Unemployment								
Ever unemployed	-0.003 (0.019)	0.010 (0.018)	0.009 (0.014)	0.017 (0.017)	0.008 (0.014)	0.014 (0.127)	-0.015 (0.020)	-0.006 (0.020)
Partner: ever unemployed	0.006 (0.013)	0.148 (0.014)	-0.007 (0.012)	0.010 (0.012)	0.026 (0.011)**	0.019 (0.011)*	-0.005 (0.016)	-0.005 (0.017)
Short term unemployment	0.127 (0.401)	(2)	-0.307 (0.363)	-0.079 (0.305)	-0.321 (0.339)	0.188 (0.202)	-0.297 (0.497)	0.305 (0.374)
Mid-term unemployment	-0.202 (0.567)	1.003 (0.446)**	-0.397 (0.499)	0.763 (0.314)**	0.448 (0.362)	-0.166 (0.303)	0.482 (0.736)	-0.102 (0.540)
Long-term unemployment	0.713 (0.343)**	0.792 (0.424)*	0.543 (0.309)*	0.224 (0.365)**	(2)	-0.359 (0.316)	-0.048 (0.681)	0.922 (0.481)*
Constant	-1.251 (1.355)	-1.432 (1.178)	-3.277 (1.678)*	-2.700 (1.453)*	-1.911 (1.692)	-2.654 (1.490)*	-6.577 (2.216)***	-4.438 (2.028)**
	coeff. (std. error)							
n	**2181**	**2342**	**2419**	**2949**	**1373**	**1602**	**822**	**853**
Log-Likelihood	**671.43154**	**-707.06079**	**-673.472**	**-672.528**	**-521.616**	**-553.016**	**-242.01795**	**-230.22397**
Wald Test: chi^2	**86.16**	**89.37**	**114.79**	**137.84**	**107.08**	**130.40**	**40.36**	**37.60**

Note: Independent variable coded with '1' for birth; all dummy variables coded '0/1' with 1 when true, except specified differently.
Effects are significant on the basis of $p < 0.10$ (*), $p < 0.05$ (**) and $p < 0.01$ (***).

(1) Note: No *ECHP* data for wave 1 and 2 in Finland.

(2) Note: Dropped due to lack of observations in this group.

Source: *ECHP* 1994 to 2001, own calculations.