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Low and late fertility is expected to continue: will new population policy measures interfere?

The fertility rates in many developed countries have dropped to below-replacement levels. Population ageing is on its way to reach new peaks within a few decades. Governments are anticipating on how to accommodate the ageing process. One of the main points is the shrinkage and ageing of the labour market. From that perspective it is essential to interest as many people as possible to enter the labour market or to have them shift from part time work to fuller contracts.

Focussing on possible changes in the future fertility rates this paper overviews the main demographic and non-demographic determinants of remaining childless (versus having at least one child), and the 'decision' to have a second child (versus ending in a one-child family). We used FFS data and conducted multivariate analyses.

The results indicate that in most countries no signs are visible of fundamental changes in the fertility levels. It means that the total period fertility will remain low. The impact of the results for future demographic trends (continued ageing) is discussed, as well as the wish for new policy measures on better harmonising family and labour market careers.

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Introduction

The period total fertility rates in many developed countries have dropped to below-replacement levels. In several countries the levels are more or less stable already for one or more decades. The lowest rates are registered nowadays in southern and eastern Europe as well as in for example Japan. 'Higher below replacement fertility' is found in some Scandinavian countries, but also in Australia and New Zealand, Canada and the United States.

And it is not only in period rates that drops have been registered. Also in cohort fertility rates decreases are rather general (Frejka & Calot, 2001). Up until now birth cohort fertility levels (most recent cohorts with completed fertility, for example cohort 1960) did not drop under 1.70 in Austria, Germany, Greece, Italy, Japan, the Russian Federation and Spain. However that is substantially lower than in France, Norway and Sweden, Australia and New Zealand, and the United States where the level was about or above 2.00.

Next to the lowering fertility level also a shift in the timing of fertility occurred almost everywhere in the western world. Currently fertile women have their first baby later than their mothers had and, as a consequence, also subsequent births arrive later nowadays if these arrive at all. While it was quite normal that women had their first child when they were around 22 to 24 years two to three decades ago, in many countries women nowadays have their first baby three or four years later in life than their mothers did. The Netherlands is most probably world champion in late (first) motherhood (with an average age of 29.1 years in 1999).

This paper gives an overview of recent research (with FFS data from many European countries). By means of multivariate analyses we have been searching for the main (available) demographic and non-demographic determinants of remaining childless (versus having at least one child) or to go for the first child (late versus early) and the 'decision' to have a second child (versus ending in a one-child family). Next to that we were surprised to find that respondents in a recent Dutch survey have only limited knowledge on the changing conception chances with rising age. We will devote a small section to this topic. In the final section we will discuss what is the prospect for low and late fertility, its contribution to

[1] We would like to thank Ingrid Esveldt, Kène Henkens and Aart Liefbroer (all at NIDI) for their contributions and comments on an earlier version of this paper.

population ageing and the likely contribution of these facts to coming closer to new population policy measures.

Remaining childless or having a first child

Frejka *et al.* (2001) write that childlessness is on the rise in western countries since the yearly (female) birth cohorts born around 1940 and in the cohorts of the 1960s "one fifth of the women are remaining childless. (..) In the former socialist countries, including the Baltic countries and the Yugoslav successor states, the proportions of childless women were low, i.e. usually below 10%, for the 25 or so cohorts from the mid 1930s to those born in 1960. Childlessness started to increase in the cohorts born during the 1960s in these countries but was still quite low in the 1965 cohorts, between 5 and 16%. (..) In the United States there was an increase in childlessness starting with cohorts born around 1930 through those born in 1950. Among those born during the 1950s and 1960s the rate of childlessness has remained in the order of 16 to 17%."

In an earlier paper we explored childlessness in Europe extensively by making use of FFS data[2] on 16 countries (Beets & Dourleijn, 1999). We conducted multivariate analysis (logistic regression) in order to predict whether a woman will have a child or not. The dependent variable had two categories (childless or not) and the independent variables were both continuous and categorical. Three ideas were tested. First we explored the cohort-effect to see whether younger women have a higher probability to remain childless compared to older women. This effect is only found in a few countries (see *Table 1* with a logit model explaining childlessness by year of birth, education, some control variables and partner characteristics for each country separately). Reason for this could be that the growing tendency to remaining childless does not exist in most countries, but only a growing trend to postpone childbearing. Another reason for this may be that the cohorts in this study are 'too old', and that the phenomenon is not yet visible, since most of the surveys were taken in the beginning of the 1990s. The trend of abstaining from childbirth possibly took place in the cohorts of women who were not 35 years of age at the interview, in other words among the women who were still in the midst of their reproductive phase at the moment of interview. Only more recent surveys can tell us whether that assumption is correct. It would mean that postponement turning into refraining from childbearing will become visible in many countries only in surveys yet to come.

The second hypothesis to test was the influence of the educational level: to explore whether higher educated women have a higher probability to remain childless compared to lower and medium educated women. In all western European countries, except in Belgium and Sweden, higher educated women have a higher probability to remain childless compared to lower educated women. For the eastern European countries this is only the case for Poland. An extra step taken, was to test whether the effect of education would also hold when controlling for partner-characteristics. This hypothesis turned out to be true for France, West Germany, the Netherlands and Spain only. Furthermore, the results showed that in all FFS-countries women who never had a partner had a much higher probability of remaining childless than women who had a partner at the moment of interview.

The non-significant influence of education in the former Eastern bloc countries may have to do with the labour market structure in these countries, where being economic active was common among both the lower and the higher educated women. Moreover lower and

[2] FFS = Fertility and Family Surveys in countries of the ECE region. ECE stands for the United Nations's Economic Region for Europe (Geneva, Switzerland).

The FFS was a sample survey conducted in 24 countries. In this study we used data from 23474 women of 35 years or over in 16 countries.

We would like to thank the Advisory Board of the FFS-programme of Comparative Research for its permission (granted under identification 41) to use the FFS data on which these studies are based.

higher educated women had similar drives towards parenthood, given the state-organised facilities for parents (housing, childcare, etc.). In Poland the significant effect of education almost disappeared when controlling for partner-characteristics, indicating that this country probably does not have a very exceptional position. Also in Austria, Italy and in the Scandinavian countries the effect of the education did not remain significant after controlling for partnership. In these countries, higher educated women abstain from childbearing more frequently, because they more often do not have a partner. Reasons for this could be that higher educated women view being in a partnership as an obstacle for their labour market career or that they cannot find a (suitable) partner. On the contrary, in France, West Germany, the Netherlands and Spain, the effect of the educational attainment did not disappear. This means that in these countries higher educated women refrain from childbearing more frequently, even if they have a partner. This most probably reflects the incompatibility of having a working and a family career (with young children) at the same time. These ideas can also explain why in Belgium, Sweden and in eastern Europe no effect of education on childlessness is found. These countries are well known for the more extensive possibilities they offer to mothers (and fathers as well) to combine parenthood and labour market participation.

The expectation that the socialising variables (size of municipality up to or at the age of 15, the number of brothers and sisters, a possible divorce of the parents, the religious denomination and church attendance) would have had clear effects in large parts of the European region did not hold. In some countries they showed an additional significant effect on the probability to remain childless, and always in the expected direction (except the size of municipality in Italy).

The results showed lower levels of childlessness and no difference between women of various levels of education for the eastern countries. Obviously, for these countries, the surveys were held too early after the fall of the Iron Curtain to find 'modern' fertility behaviour. The growing trend of delayed childbearing in these countries point out that research among women who had part of their reproductive career in the 1990s possibly will show increased levels of childlessness while also larger differences between lower and higher educated women may appear. For the western countries, the pattern of spreading modern demographic behaviour from North, via West to southern Europe is not confirmed by this study. However it is possible, that the small differences between higher and lower educated women in the Scandinavian countries point out that lower educated women in these countries have adapted the fertility behaviour of the higher educated women and abstain from childbearing more than lower educated women in other countries. Besides extensive facilities to combine work and family-care, this could be an explanation for not finding an effect of educational attainment in these countries.

In conclusion we see that having no partner is the most relevant variable for remaining childless, which is no more than an open door. Cohabiting women are much more likely to remain childless than married women are. That is what we found for central and eastern Europe, but elsewhere higher education contributes to the explaining although less convincing than we had assumed it would do. Only in a few countries other variables add further to the explanation of childlessness.

Having one or also a second child

The previous section focussed on remaining childless, but those who did not remain childless had of course at least their first child. However, that does not necessarily mean that they would have only one child. Remaining with only one child is the complement of having a second child.

However the only child family is rather unpopular. The frequency may have risen somewhat due to the fact that starting later with trying to go for the first child made that women are also older when they can expose to the second. Frejka *et al.* (2001) report that "the proportions of women with (ultimately) one child increased between the cohorts of the 1930s

and 1960 in Norway, the Netherlands and the United States and settled between 14 and 18%. In Finland the proportion of women with one child at first increased. In the 1945 cohort its proportion was as high as 30%. In subsequent cohorts it has been declining considerably and in the 1960 cohort its proportion is equal to the other countries at 16%."

McDonald (2001) concludes that "having the first child provides the benefits of the status of being a parent, of 'being a family', of having offspring who will carry on the family name, of meeting expectations of others, of having a baby who will be fun and grow up and love you, of fulfilling childhood dreams, of providing vicarious pleasure from the child's success, etc." However the majority of people does not stop with only one child. An overwhelming share of couples continues to the second and, currently, stops then. Frejka *et al.* (2001) show that at age 40 two is the modal number of children for women in birth cohorts from 1940 onwards in many countries (Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Finland, Germany, Hungary, Italy, Latvia, Lithuania, Macedonia, Netherlands, Norway, Romania, Slovakia, Slovenia, United States of America, and Yugoslavia). As they did not give figures for other countries one can only assume that this pattern is similar elsewhere in Europe.

In previous days probably mainly *economic* reasons made people choose for *many* children (high infant mortality, old age insurance). Nowadays more *emotional* reasons may lead people to choose for *only a few* children (Nebenführ, 1995). Every extra child means an extra burden (investment) in raising the child up to adulthood. Why would one continue to a second? It is likely that most people continue to a second child because they view one child as 'too lonely'. Moreover they may prefer to have children of both sexes. Maybe there even is a 'natural' tendency towards replacement.

Our research question was to know whether we may have to expect that less, the same number of or more couples will go for a second child in the near future, and if so, when? And additionally, is the choice for a second child different over time and by place?

The data were again coming from the FFS. We could, again, use only 16 of the 24 countries that participated, either because we had no access to some of the country-specific standard recode files or because the files did not contain enough variables that we needed to do the analysis. We used only information on women who were born between 1953 and 1967 with at least one child (exposure-occurrence). Women with multiple births were excluded from the analysis and so were women who had a first child that died before the second child was born, since the background of the choice for the second child was more doubtful in those cases.

We used a different analytical method since we were mainly interested in the timing of the second child. The Cox regression life course analysis assumes that individual circumstances change with age. It uses information of those who have not and those who have experienced a certain event, here second child birth. It estimates the impact of time varying characteristics. In this case the dependent variable is the risk of conception of the second child in a certain month (monthly hazard rate), given that it had not previously occurred. The starting time is the moment of the birth of the first child and from that moment onwards women are considered to be at risk of conceiving their second child. The period of observation ends at the second conception (= 9 months before the birth of the second child) or at the interview. It means that censoring takes place if no conception of the second child has occurred yet.

The conception of the second child is expected to depend on birth cohort, type of relationship, age at first birth, educational attainment and labour force participation after the first child, parental family size, urban environment at age 15, being religious and church attendance.

The main results show that the demographic variables prevail (*Table 2*). It is mainly birth cohort, type of relationship, age at first birth and the parental family size that determine whether a woman would have a second child or not. The analysis shows that in West-Germany, Latvia, Sweden and Finland the chance of having a second child is significantly larger when the woman is from a younger birth cohort; however, in Belgium, East-Germany, Lithuania and Spain to the contrary the chance is much smaller if she is younger compared to

older women. The type of relationship shows that in all countries a higher chance for first marriages and non-first relationships (=small N) exists, but also a higher chance (compared to women without partner), although lower than for married people, for those who are in their first (non-married) cohabitation. The last result is quite different from the chance for having a first child. It probably indicates that people do not mind anymore if they had already a (first) child in cohabitation to have a second one. Choosing to have the first child in cohabitation or in another living arrangement (marriage) is of course a completely different matter.

The age at first birth is an even stronger indicator. The tendency that a higher age at the first child leads to a lower chance for a second child is registered in all central and eastern but also in southern European countries, but much less so in western and northern Europe. In West-Germany and Norway there is no effect at all, in France, Sweden and Finland only to a lesser extent.

The last demographic variable that is of interest is the parental family size: a larger number of siblings gives a larger chance to proceed to a second child in almost all countries. However this is not the case in Finland and Sweden, and we do not know for France since the variable was not available in that country.

Next to that several other control variables were used, although these were not always available in all countries.

Fortunately information on education and employment was present in the 16 countries in our research. Higher education yields lower chances in Belgium, Norway, Sweden and Finland, and in Slovenia but a higher chance in France! No effects were found in the other countries. A larger number of years in education adds to this effect by giving a higher chance in Belgium, West-Germany, Norway, Sweden and Finland, Italy and Slovenia. But again France has a lower chance. In Austria and Spain as well as in the other central and eastern European countries (but Slovenia) education has no effect at all on the chance for having a second child.

Employment gives a similar result. Having a job does not contribute to the second child chance at all in central and eastern Europe, probably because almost all women used to combine the labour market with the family career. However, in western and southern Europe as well in Norway (but not in Finland and Sweden) being employed after the first child adds to a 20 to 30% lower chance for having a second.

An urban environment at age 15 leads only in several eastern countries to a lower chance. Being religious and a higher church attendance rate contributes to higher chances in many countries.

In general we could say that the results are straightforward. Demographic variables are by far most important, as are education and employment (after the first child) to a lesser extent and not everywhere. As the parental family size is dropping in younger birth cohorts, as the age at first birth is rising and higher education and employment are becoming more widespread there is hardly any reason to believe that the incidence for having a second child will rise. And the case in central and eastern Europe may start to resemble the other European regions more in the younger cohorts which were not yet interviewed in the FFS since most surveys there were taken only shortly after the fall of the Berlin wall.

Having a family with three or more children

Our research unfortunately does not include yet an analysis of those who proceed to a third or subsequent child compared to those who do not. This is left for the near future. That research will also include an analysis of having the last child, i.e. why the first, second or third child would be the last child. We still need some time to develop these sections since the exposure to these chances comes only at higher ages and censoring is obstructing easy analyses.

Only a few Europeans continue to a third and fourth child. We would like to support McDonald (2001) who assumes that “those who have a third child may value at least three children as a ‘real’ family, or they may be still trying for the other sex that they don’t have

yet. Those who have a fourth child may simply love children, or it may have been a mistake. It is likely that the level of the net psychological benefits threshold falls as birth order rises. That is, the highest psychological threshold relates to the first child. Also, it is very likely that the level of the threshold falls as people get older. That is, all other things being equal, a woman at age 29 may feel more inclined to have a second child than a woman at age 39. Psychological costs probably rise with age or (..) increased age leads to shifts in the utility function towards other goods. Accordingly, as ages at childbearing increase, people will be less likely to have additional children."

Half of the rise in late fertility stems from the changing educational levels

That most people have children probably means that people, in general, like to have children. However, with so many other challenges and commitments many are confronted with the question when to have them in their life. Especially higher educated women seem to struggle with the dilemma of the combination of labour market and family career responsibilities. They have stronger preferences for participation in both careers than other women. Since they entered the labour market after finishing education at more advanced ages than lower educated women and want to spend there a few years before family commitments start, they often have their first child not before their early thirties. Lower educated women may already have children before they enter the labour market.

From recent research we know that the increased levels of education over the past decades attributed to about half of the increase in the age at first birth in the Netherlands (Beets *et al.*, 2001). We estimated the median age at first birth that would have occurred if women born in 1961-1965 would have had the same level of education as those who were born in 1931-1940. In the Netherlands 50% of those born in 1931-1940 were mother for the first time by age 26.0 years, while the median age was 3.3 years higher for those born in 1961-1965. However, if the educational level had not changed during those three decades then the 1961-1965 cohort would have had their first child on a median age of 27.6 years.

It means that about half of the rise in the age at first birth (20 of the 39 months) during those three decades is to be attributed to the rising educational levels over the past few decades. Although it also means that the other half is caused by probably a set of other factors, it is remarkable that one factor has such an enormous impact. It is reasonable to believe that this outcome will not be much different in other countries. It also means that the policies which led to much larger shares of people (and especially women) to participate in educational curricula have been successful and that the effects on the fertility patterns have been significantly large. However, next to the rise in educational levels and the subsequent changing orientations on the labour market other developments have contributed as well, although these may be related to the changed orientations on schooling and labour market participation. Gender roles and family values towards union formation and childbearing have changed significantly as well as the aim for having a solid social security for starting a family.

Conclusions

This paper gave a bird's-eye overview of research that took place in the past few years on several fertility-related issues. Increases in childlessness are on stake and childlessness is much more prominent among the higher educated women and among women who never had a partner. Since, on average, educational levels are rising and partner selection has become more of an obstacle we may conclude that these indicators only face in the direction of increasing levels of childlessness. Also in the central and eastern European area, where the surveys were taken shortly after the economic transition and did not show yet any significant effect of education on childlessness –probably because labour market and family commitments used to be as strong among the higher and the lower educated– childlessness will rise.

This paper did not analyse (yet) the choice for only one child. However, we also conducted a multivariate analysis on the timing of a second child. The conclusions are very straightforward. Mainly demographic variables are important, like the age at first birth, the type of relationship and the parental family size. As all these variables are changing, on the aggregate level (towards later, looser and smaller, respectively) we can conclude that the incidence of second children will certainly not rise, more likely reduce further. To these facts add that the population seems to be badly informed about the reducing conception chances with rising age. Although gynaecologists may help many of those who are unable to reproduce naturally to ultimately have a (more or less) healthy baby the combination of delayed parenthood and assisted reproductive techniques will keep fertility levels low. Unwanted childlessness is probably rising, as well as the unwanted one-child family. In that sense late fertility leads to even lower fertility than otherwise had been the case.

Low fertility is the main determinant of the ageing process. Delayed parenthood contributes extra to this process. In many countries the shortages on the (ageing) labour markets have become so acute that calls for labour immigrants rise under the assumption that replacement migration may help to stop or alleviate the ageing process (United Nations, 2000). Next to that many governments try to call to the labour market, under special conditions, more people: those who are currently unemployed, unable to work or not working at all. Among those are many mothers with small children who can afford to stay at home to care for their small children themselves. From Dutch research we know that these women prefer to continue this situation rather than start a part time job. Also those who are employed part time do, in general, not prefer to start working more hours next to their family commitments (Esveldt and Moors, 2001).

It was striking to find out at about the moment of finishing the writing of this paper that the Dutch Ministry of Social Affairs and Employment (May 2001) had made a fundamental shift. A new leaflet tells us now that *the Netherlands is in need of new appointments*. This new call comes after an earlier that stimulates young girls to smartly prepare for their future. That call focussed exclusively on an educational and a labour market career without even mentioning the possibility of also having a family. The new call asks for a good balance between private and work commitments and gives an overview of policy measures and regulations that already exist or are coming soon into practice. “Do not feel a prisoner of your agenda.” The leaflet overviews the arrangements with respect to maternity leave, parental leave, adoption leave, calamity leave, childcare, and more flexible work shifts. It also addresses arrangements for people who want or have to care for fragile elderly or an ill fellow human being. It is curious to know that the government focussed for years and years on labour, labour and again labour without giving much attention to private life and that the accent shifted now to primary attention for private life affairs if that (temporarily) conflicts too much with work. It is the new expression of trying to bind as many people as possible to the labour market with tailor-made contracts: employers want you, so you say under which conditions you want to share how much of your precious private time on the labour market.

Societies should be aware of all sides of the (in)compatibility of labour market and family careers. It means that politicians and ministries should have a rising interest in the relationship between labour market participation, primary family unions and fertility. In the Netherlands policy makers seem to show now that they are becoming more aware of the fact that it is much more the wish and care for children that directs women to shape their life course with small children than their labour market aspirations. Therefor family policies should much more direct to adapting labour market careers to family careers than vice versa. Such a new strategy could maybe bend the ongoing rise in the age at first birth. Such a policy shift could also be seen as a prelude to further policy measures that enable to accommodate the ageing process both for individuals (micro level) as for society (macro level).

We should also try to get the population better informed on conception chances with advanced age. In another paper presented during this IUSSP conference we showed that even the higher educated had no idea of the conception chances at age 30 nor of the reduction in conception chances up until age 35 (Beets, 2001). In the high school curriculum exchange of

information on sexual and contraceptive behaviour is normal in the Netherlands and effective: it contributes to low teenage pregnancy and low abortion rates. If these courses would also include information on the changing conception chances by age discussions could lead to more knowledge on the ideal circumstances to have a family and to have other careers as well. Moreover involuntary childlessness may be further reduced.

However, one should not have high expectations from new policies with regard to demographic behaviour. Although one may expect that under ideal circumstances of labour market regulations more people will be inclined to have their first baby a bit earlier –which would temporarily lead to a slight baby boom– there is no indication that the ultimate family size will increase. Moreover also the labour market may not profit too much from such new policies. It has to adapt to the employee's wishes, especially women, if they want to recruit more personnel. And even if mothers would start working much more than they are doing now it may be so that fathers are going to work less. It may sound old fashioned but in the Netherlands respondents still indicate that at least one of the parents should be at home a substantial numbers of hours per week when the children are young. It means that the one-and-a-half income family becomes much more popular. In the short run it may lead to slightly more people available for the labour market, in the longer run an even larger number may join since the share of families with small children is diminishing in an ageing society.

New policies should also accommodate the special wishes lower educated may have, as well as part timers, those who are not yet employed, and those without children (yet) or with only one child. Under more optimal conditions they may be stimulated to be employed more hours than they are now.

New could also be that women are rising on the labour market ladders. When male employers are increasingly confronted with partners and daughters who have different visions on labour contracts than these employers offer, and if women are increasingly becoming employers themselves, labour market regulations may become more female orientated. Up until now males invented most regulations.

It is questionable whether that will be enough. That of course is also dependent on other structural changes on the labour market, like globalisation, computerisation, mobile telephoning, the 24-hours economy, etc., i.e. will it be possible to increase productivity with less employees? However we also do not know what will be their effects on family formation and fertility. Since the issues of population ageing, (late) fertility and (replacement) migration are interrelated it would be wise if countries would develop a concise view on this interrelationship and operate cautious when making interventions.

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Table 1: Logit model explaining childlessness by year of birth, educational attainment, some control variables and partner characteristics for each country separately (women aged 35+ at interview)

	Northern Europe			Western Europe				
	Finland	Norway	Sweden	Austria	Belgium	France	W-Germany	Netherlands
Year of interview	1989-90	1988-89	1992-93	1995-96	1991-92	1994	1992	1993
Year of birth	1.007	1.037	.972	1.035**	1.087	.982	1.046	1.018
Education	1.046*	1.039	.995	1.059*	1.044	1.153***	1.143***	1.137***
Size of municipality		1.320	1.351	1.700***			1.116	.924
Divorced parents	.715		.978	.681	2.835***	1.129	1.064	1.391
# siblings	.932*	.893	.921	1.008	.907		.855**	.874***
Religion				***	***		ns	**
Catholic				.766	.800		1.462	.764
Protestant				.553	.003		.960	.468***
Other				1.739**	2.412*		.005	.955
Church attendance	1.042	1.106	1.000				.802*	.982
Cohabiting with partner	***	***	***	***	**	***	***	***
Never cohabited	150.703***	80.660***	57.078***	20.616***	42341.63	71.582***	25.646***	5.625***
Once cohabited	3.260***	2.999***	2.388***	.856	2.284**	3.849***	2.026**	1.756*
-2 Log Likelihood	1144.47	470.11	725.16	1230.59	474.16	699.45	602.53	990.12
Δ –2LL	504.64***	143.48***	137.62***	147.59***	127.13***	243.50***	73.09***	70.61***
Δ degrees of freedom	2	2	2	2	2	2	2	2
N	2223	1137	1305	2218	845	1376	624	1409

**** p<.01 ** p < .05 * p < .10, ns = not significant*

to be continued

Table 1: end

	Southern Europe		Central and Eastern Europe					
	Italy	Spain	Czech Rep.	E-Germany	Hungary	Latvia	Lithuania	Poland
N	2169	1567	574	585	1151	1289	1132	2029
Year of birth	1.052*	.981	.864	1.078	1.001	.978	.991	.990
Education	1.074*	1.165***	.932	1.032	1.080	.995	1.012	1.080*
Size of municipality	.608**	1.657**	1.519	1.440	1.323		1.758	1.560
Divorced parents	.304	.764	.000	2.208	1.061	1.172	.580	1.472
# siblings	.834***	.910	.593*	.977	.913	.915	.880	.770
religion	**	ns		Ns	ns		ns	ns
Catholic	.442	1.401		.085	.951		.839	.572
Protestant	.241*	.131		.282	.701		.012	.296
Other	.696	1.915		.003	.148		.768	.592
Church attendance	.950	.796**	.967	1.832	.956	1.153		.962
Cohabiting with partner	***	***	***	***	***	***	***	***
Never cohabited	367.880***	547.319***	543.662***	33.602***	463.33***	50.392***	149.614***	26.896***
Once cohabited	1.642*	4.143***	2.641	.899	2.557***	1.797*	2.512***	1.736*
-2 Log Likelihood	1000.45	573.67	116.72	78.35	419.12	497.33	475.98	808.16
Δ –2LL	533.00***	365.64***	59.93***	11.93***	159.71***	132.95***	258.90***	245.29***
Δ degrees of freedom	2	2	2	2	2	2	2	2
N	2169	1567	574	585	1151	1289	1132	2029

**** p<.01 ** p < .05 * p < .10, ns = not significant*

Tabel 2: Cox's regression-analysis of the interval between first and second child birth (conception) - selection women with at least one child

	Western Europe				Northern Europe			Southern Europe	
	Belgium	France	Austria	West-Germany	Norway	Sweden	Finland	Italy	Spain
N	1698	1337	1837	1232	1286	1524	1292	1807	1635
# episodes	8485	8232	11749	7482	7894	9602	7437	11198	9513
# events	1080	843	1302	692	773	1121	845	1129	1157
model fit	-7307,60	-6974,64	-7853,70	-5415,91	-4731,52	-7190,26	-5335,05	-7750,93	-7606,50
Birthcohort (1953-1957)									
1958-1962	0,994	1,021	1,041	1,254 *	1,016	1,237 *	1,135	0,972	0,871 *
1962-1967	0,782 *	0,880	1,034	1,053	0,846	1,343 *	1,317 *	0,894	0,736 *
Age at first child birth (< 20 years)									
age 20-24	0,948	0,855	0,921	1,021	0,907	0,914	1,050	0,747 *	0,831 *
age 25-29	0,773 *	0,708 *	0,828 *	0,872	0,777	0,943	0,945	0,567 *	0,742 *
age 30 +	0,373 *	0,750	0,635 *	0,687	0,949	0,829 *	0,569 *	0,451 *	0,515 *
Type of relationship (no union)									
first cohabitation	2,791 *	3,707 *	1,395 *	1,044	3,001 *	4,911 *	3,560 *	1,640	3,714 *
first marriage	3,215 *	4,836 *	2,551 *	1,410 *	8,494 *	6,033 *	5,619 *	2,089 *	4,478 *
next union	4,793 *	4,995 *	2,407 *	1,827 *	6,744 *	5,873 *	5,158 *	2,764 *	3,638 *
Socio-economic status (no participation)									
in education	0,140 *	1,808 *	0,942	0,784	0,544 *	0,767 *	0,771 *	0,937	1,098
in a job	0,752 *	0,797 *	0,755 *	0,757 *	0,721 *	1,115	1,078	0,712 *	0,801 *
# Years in education since age 15	1,169 *	0,948 *	1,009	1,033 *	1,062 *	1,027 *	1,033 *	1,027 *	0,994
Parents divorced (vs not)	0,976	1,239 *	0,978	1,227		0,997	1,108	0,882	1,208
unknown if parents divorced	0,004	0,936	0,928	1,211		1,241		1,201	1,379
Large parental family size (vs small)	1,391 *		1,201 *	1,425 *	1,280 *	0,955	1,094	1,551 *	1,214 *
Urban village at age 15 (vs rural)			0,851	0,856	1,137	0,953		0,946	0,897
unknown size of residence at age 15			1,630 *	1,737 *	1,161	1,585		1,146	1,333
Religious (vs not)	1,044		1,325 *	0,976				3,868 *	0,980
unknown if relgious	0,005		2,078	0,985				1,136 *	0,976
Visit church				1,163 *	1,235 *	1,131 *	1,279 *		1,059 *

Tabel 2. end

	Central and Eastern Europe						
	East Germany	Poland	Hungary	Czech Rep.	Latvia	Lithuania	Slovenia
N	1851	1702	2120	845	1243	1206	1580
# episodes	12605	8590	12558	5407	9785	8241	10691
# events	1116	1226	1531	668	832	824	1138
model fit	-8465,76	-8203,46	-10643,99	-4015,76	-5371,47	-5300,76	-7405,05
Birthcohort (1953-1957)							
1958-1962	0,975	1,039	0,975	1,038	1,275 *	0,920	1,005
1962-1967	0,806 *	0,949	0,945	0,929	1,077	0,813 *	0,890
Age at first child birth (< 20 years)							
age 20-24	0,763 *	0,893	0,824 *	0,987	0,953	0,803 *	0,767 *
age 25-29	0,464 *	0,712 *	0,614 *	0,566 *	0,623 *	0,568 *	0,529 *
age 30 +	0,217 *	0,423 *	0,498 *	0,273 *	0,688	0,375 *	0,324 *
Type of relationship (no union)							
first cohabitation	1,245	1,444	3,195 *	1,961	3,099 *	1,980	1,641 *
first marriage	1,888 *	1,651 *	3,951 *	3,212 *	2,542 *	2,557 *	3,094 *
next union	2,114 *	1,075 *	5,695 *	3,415 *	3,274 *	4,628 *	3,344 *
Socio-economic status (no participation)							
in education	0,822	1,075	1,070	0,914	0,857	0,782	0,819 *
in a job	1,029	0,948	0,948	0,930	0,902	0,899	1,053
# Years in education since age 15	1,025	0,976	0,993	1,021	0,996	1,018	1,025 *
Parents divorced (vs not)	1,064	0,892	0,907	0,748 *	0,905	0,971	0,953
unknown if parents divorced	1,052	1,480	1,931 *	0,000	1,169	1,380	1,332
Large parental family size (vs small)	1,430 *	1,416 *	1,143 *	1,248 *	1,175 *	1,228 *	1,179 *
Urban village at age 15 (vs rural)	1,028	0,785 *	0,809 *	0,856	0,519 *	0,684 *	0,902
unknown size of residence at age 15	0,821	1,287	1,105		0,616 *	0,873	0,936
Religious (vs not)	1,349 *	0,762	1,129		0,905	1,207	0,888
unknown if relgious	0,912	2,885	0,964		1,169	1,224	0,934
Visit church	0,964	1,150 *		1,122 *	1,048		1,256 *