

Subsequent marriage formation and childbirth among cohabitators in West Germany (and France)*

*Katja Köppen
Max Planck Institute for Demographic Research
Konrad-Zuse-Str. 1
18057 Rostock
Germany
tel:+49-381-2081-181
fax:+49-381-2081-481
koeppen@demogr.mpg.de

Structure

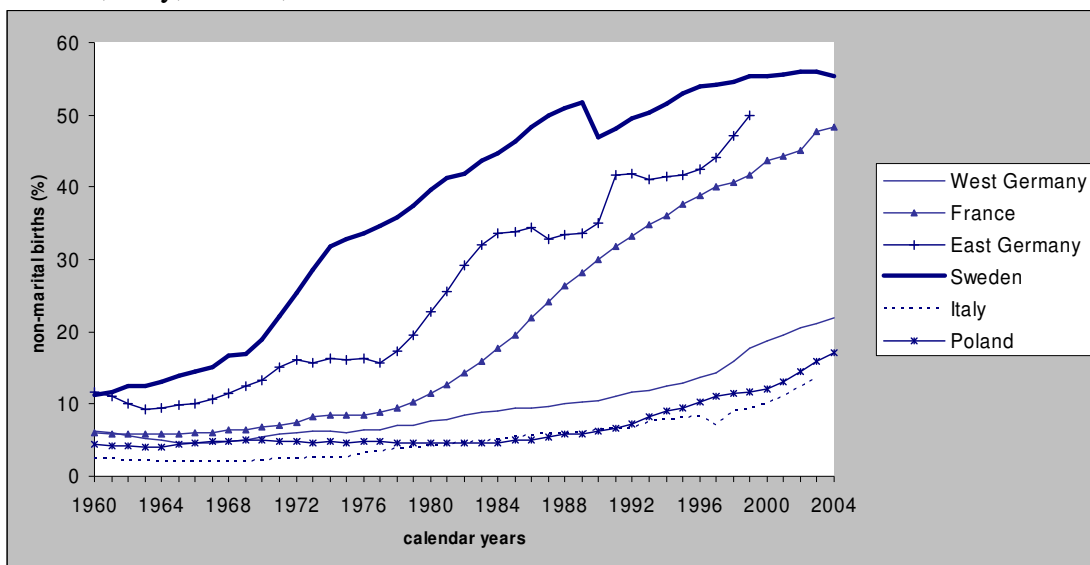
1. Introduction	2
2. Theoretical Considerations	5
3. Data	7
4. Method	9
5. Results	11
6. References	20
7. Appendix	22

1. Introduction

First birth and first marriage in West Germany seem still to be very closely connected with each other. While the number of non-marital unions increased during the last decades, the proportion of non-marital unions with children is still relatively small in comparison to other European countries: 22 % of all children were born out of wedlock in 2004, in France, though, more than 48% of all new-born children had no married parents. In East Germany, even every second child is born outside marriage.

In Figure 1 we see the percentage of non-marital births among all live births for several countries. The number of children born out of wedlock has increased in West Germany in the last 20 years but is – compared to countries with a high proportion of non-marital births - still very small. Regarding non-marital child bearing behaviour, West Germany belongs rather to quite traditional and mainly catholic countries like Poland or Italy, where births outside a marriage are seldom.

Figure 1: Share of extra-marital births in West Germany, East Germany, France, Sweden, Italy, Poland, 1960-2004

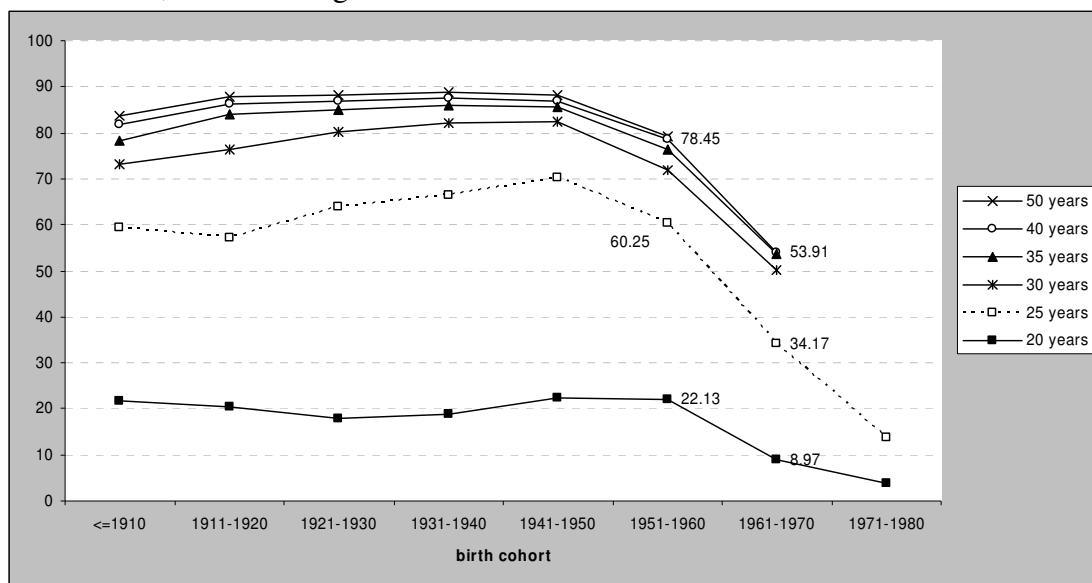


Source: Council of Europe, Demographic Yearbook 2006; Statistisches Bundesamt 2006; INSEE 2004 and 2005

Next to the changes in non-marital fertility, union formation changed. Marriage has been delayed in both countries. In West Germany the mean age at first marriage increased from 23 in 1970 to 28.5 in the year 2000 (Huninik and Kreyenfeld 2004). Also in France people delay their first marriage – from 22.6 in 1970 to 28 in the year 2000 (Council of Europe 2006). But it is not only a delay of marriage but also the

proportion of people ever married got smaller. Figure 2 and 3 show the proportion of men and women in France and West Germany ever married during a first union. In both countries the proportion is shrinking above all age groups. Particularly the young hesitate to marry during a first union. People being born in the 1940s still got married to almost 90%. For those born in the 1960s the proportion declined to 54% (at the age of 35, so they eventually will marry later). The delay of marriage is also clearly visible: while 60% of the people born between 1951 and 1960 had been married by age 25, this accounts to only 34% for those born during the 1960s.

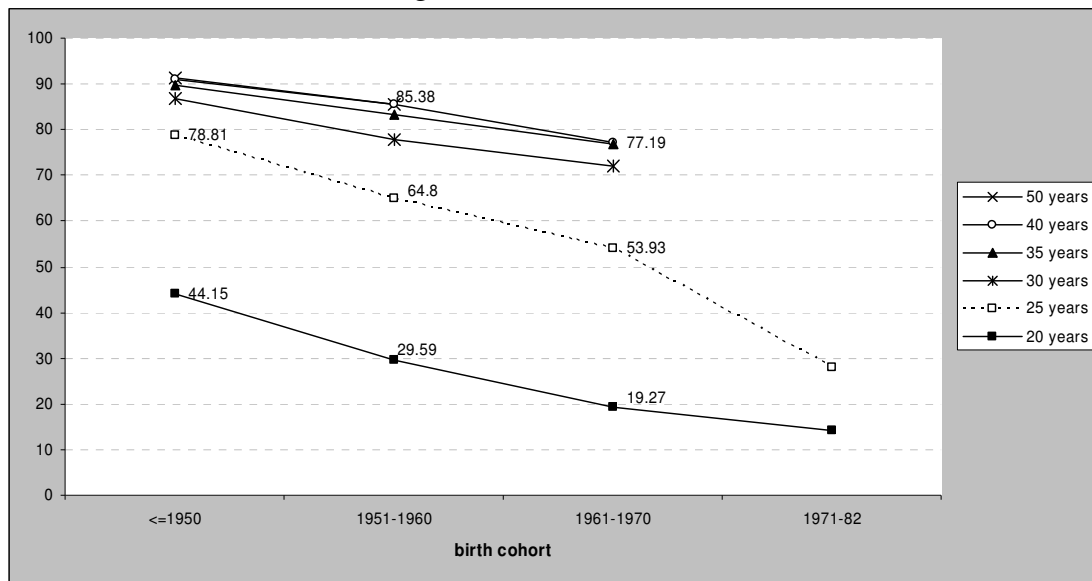
Figure 2: Proportion of men and women in France ever-married during a first union over cohorts, at selected ages



Source: Etude de l'histoire familiale 1999, own estimations

The same is true for West Germany, however, not as strong as for France. The majority of men and women born before 1950 married almost universally. This number declined to 85% at the age of 40 for those being born between 1951 and 1960. Also in West Germany we can observe a delay in marriage: while 79% of those born before 1950 have been married at age 25, only 54% of the members of the cohort 1961-1970 were married at this age. Though we find a decrease, compared to France these numbers are much higher.

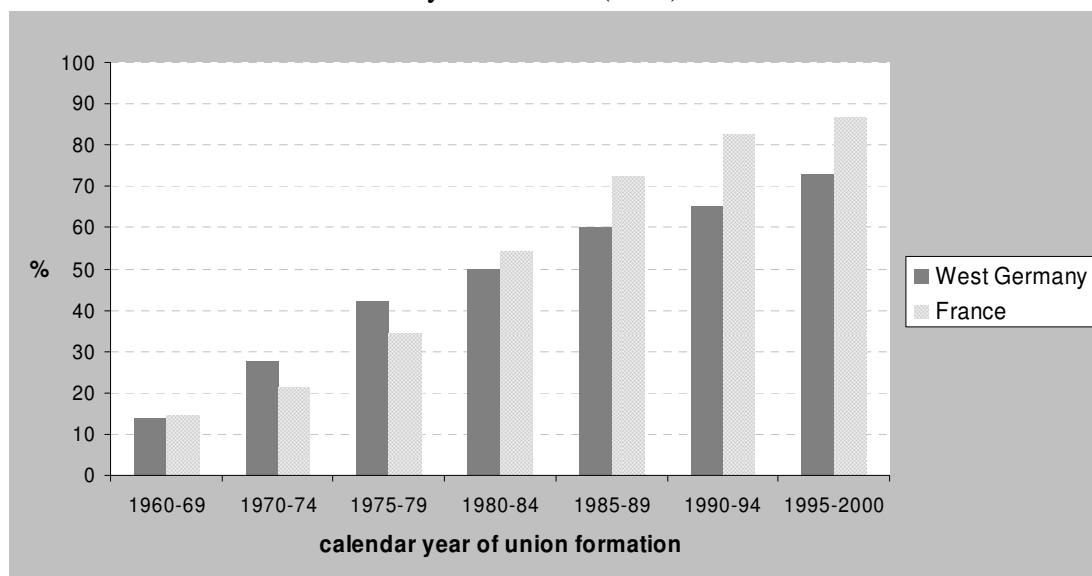
Figure 3: Proportion of men and women in West Germany ever-married during a first union over cohorts, at selected ages



Source : Familiensurvey 2000, Etude de l'histoire familiale 1999, own estimations

Parallel, non-marital unions have been increasing. In both countries, the proportion of unions that began as cohabitation increased over time. In the 1960s and the beginning of the 1970s it was common to start a union with a direct marriage. Until the end of the 1970s the proportion of non-marital unions was higher in West Germany than in France. France experienced major changes during the 1980s: direct marriages represented only one first union out of ten at the end of the 1990s (Figure 4).

Figure 4: Proportion of first unions beginning by cohabitation across calendar year of union formation in West Germany and France (in %)



Source: Familiensurvey 2000, Etude de l'histoire familiale 1999, own estimations

Indeed, to be married, to live in a cohabiting union or to have a child outside of marriage does not mean the same in France and Germany. Within my doctoral thesis I am going to shed some lights on these differences by

1. analyzing the contextual impacts on union formation,
2. looking at the timing and order of union formation in the life course
and
3. interpreting key factors, particularly the effect of female education and employment and the incidence of a pregnancy, and their influence on the decision to marry or not to marry.

In this paper, I constrict myself on the analysis of the relationship between the birth of a first child and marriage formation in West Germany, using an intensity regression model. I will examine cohabiting women and their decision to marry and/or to give birth to a child. For the purpose of this paper, I exclude single women. That is why I disregard the additional competing risk process of union formation and only examine already-cohabiting women.

For the regression analysis, I take a look at West Germany only. The Eastern part of Germany will be excluded from the analysis, since the FRG and GDR had an entirely different political, cultural, and demographic background before reunification in 1990. Even 16 years after the transition process, men and women in East Germany still behave different than their western counterparts. Results for France will be included soon.

2. Theoretical considerations

Since the mid-1980s, a multitude of studies have been published which dealt with comparative welfare state research. Assuming that particular welfare regimes influence and structure life courses by shaping the educational and employment systems, many researchers compared the different systems in Europe and tried to detect systematic patterns. France and Germany have often been classified as conservative-corporatist welfare states (Esping-Andersen, 1990, 1999). Employment related and marriage related entitlements, the "male breadwinner model" as the predominant family model, the exclusion of non-employed, non-married women from social security and insufficient availability of public childcare are main characteristics of countries belonging to conservative welfare regimes. However, many studies found

strong differences between single countries within one regime type, especially concerning gender and family dimensions (Anttonen and Sipilä, 1996; Gornick et al., 1997; Langan and Ostner, 1991; Lessenich and Ostner, 1995, 1998; Lewis, 1994; Sainsbury, 1999). The grouping of the conservative welfare-state regime in particular has been criticized, as combining all countries that are neither liberal nor social-democratic. Comparisons between France and Germany add more information to the different country-specific patterns that exist within this type of regime. Both countries differ immensely in terms of their family models, the extent of maternal labor force participation, the level of fertility, the share of non-marital births and the spread of cohabiting unions. This and the apparent contrast to western German family policy provide a strong incentive to study France and West Germany in a comparative perspective. There are several institutional constraints and economic incentives in Germany that support the model of the married couple: co-insurance of married housewives by the health insurance of their husbands, higher tax reliefs for married couples in which one of the partners is not employed or works part-time (*Ehegattensplitting*), weak father's rights in connection with illegitimate children before changes in legislation in 1998. Due to a low provision of child care facilities for children under six years of age and only half-day-schools for school age children, it is hard for West German women to combine their employment and their family life. Therefore they often quit or interrupt work for a few years to dedicate themselves to their family. The male breadwinner model with a non-working or part-time working mother is still very frequent. A marriage serves therefore also as financial coverage for the woman herself and her children. In France we find family policies and an institutional framework that also support marital unions, but set a high value on the support of families with children as well. The number of children reduces the tax burden in French households. We find an almost complete assimilation of rights and duties for children, independently of the legal situation of their parents. France is nowadays an international leader in the provision of full-day preschools, allowing French mothers to be engaged in gainful employment and therefore be not dependent of their husbands' income anymore. The extent and meaning of cohabitation also differs among both countries. While cohabitation in West Germany has become a socially accepted, but only short-term prelude to marriage and is typically transformed into marriage when couples have a child (Blossfeld et al., 1999; Huinink, 1995), in France cohabitation has become an accepted alternative to marriage connected with a

high rate of nonmarital births (Leridon and Toulemon, 1995; Toulemon, 1997). German women live in consensual unions almost as often as do French women when they are young, but marriage is still much more dominant when they get older and particularly when children are involved. These so-called "*child-centered marriages*" (Matthias-Bleck, 2006; Nave-Herz, 1997) are explainable through a comprehensive system of historically grown family policies and institutional structures that hamper the economical independence of women. Due to insufficient child care arrangements, a tax system that prefers marriages where one partner is not or little employed and parental leave schemes which support a longer exit from work after childbirth, for western German women marriage does not only mean a personal commitment but it represents also an institution in which children can be raised and which provides financial coverage in case of separation. The interrelationship between marriage and parenthood seems to be very strong. Therefore, we expect a high correlation between marriage and birth. In France, however, the higher share of French women working fulltime, the greater possibilities of getting child care, the better acceptance of non-marital relationships in law and the earlier equalization of marital and non-marital births are factors that enable women to be independent from their husbands earning. The strong increases in non-marital cohabitation in recent years, particularly in later life, as well as the high share of non-marital births indicate a changing paradigm - union status is not that important anymore, the interrelationship between marriage and childbearing seems to be much weaker than in West Germany.

3. Data

I used the Family Survey of the DJI (Deutsches Jugendinstitut – German Youth Institute), a panel data set with three waves (1988, 1994 and 2000). The data contains information about changing family forms, dynamics and histories of partnerships and births, employment histories and their effects on the family life (Bien, Marbach 2003).

The third wave of the year 2000 consisted of the panel population and additionally of a cross-sectional sample (aged 18-55, N=8.091), which I used for the analysis. The sample for West Germany covers around 6.200 respondents. After excluding cases with missing values on the main variables and some necessary data clearing (see

Table 1 in the Appendix), we obtained a sample of 1.110 women who were cohabiting and under the risk of a first conception or a first marriage respectively.

Eight time-constant and two time-varying covariates were analysed, see Table 2 for the distribution of the respondents according to the time-constant variables and Table 3 for the time at risk according to the time-varying covariates.

Table 2: Distribution of respondents according to the various levels of the time fixed covariates. Absolute and relative number of respondents

Variables	absolute	relative
<i>cohort</i>		
1944-57	224	20.2%
1958-67	494	44.5%
1968-82	392	35.3%
<i>partners education at start of union</i>		
missing	109	9.8%
In education	203	18.3%
No or secondary degree	89	8%
vocational degree	595	53.6%
University/technical college degree	98	8. %
Other degree	16	1.4%
<i>number of siblings</i>		
0	166	15%
1	399	36%
2+	545	49%
<i>religiosity</i>		
missing	4	0%
religious	122	11%
somewhat religious	670	60.4%
not religious	314	28.3%
<i>foreign background</i>		
German	1013	91.3%
foreign background	97	8.7%
<i>parents divorced?</i>		
no	1019	91.8%
yes	91	8.2%
<i>mothers education</i>		
missing	107	9.6%
no or secondary degree	316	28.5%
vocational degree	653	58.8%
university/technical college degree	34	3.1%
<i>fathers education</i>		
missing	144	13%
no or secondary degree	71	6.4%
vocational degree	803	72.3%
university/technical college degree	92	8.3%

Table 3: Distribution of time at risk according to the various time-varying covariates. Absolute and relative number of person-months.

Variables	First conception		First marriage	
	absolute	relative	absolute	relative
<i>highest education achieved</i>				
missing	1930	3.6%	1085	2.6%
no secondary degree	1125	2.1%	533	1.3%
secondary degree	16053	29.6%	14.775	35.9%
vocational degree	27221	50.2%	19.369	47%
university/technical college degree	4825	8.9%	3297	8%
other degree	3044	5.6%	2125	5.2%
<i>activity status</i>				
missing	1770	3.3%	832	2
in education	8292	15.3%	7703	18.7
employed full-time	34828	64.3%	23.762	57.7
employed part-time	4379	8.1%	3767	9.2
unemployed	1049	1.9%	1056	2.6
maternal/parental leave	481	0.9%	1423	3.5
inactive	3399	6.3%	2641	6.4
Total	54.198	100%	44.184	100%

4. Method

The kind of event studied is the transition to the first conception respectively the transition to first marriage. Both events are analysed as interrelated processes and it will be shown whether observed and unobserved individual characteristics simultaneously influence first birth and first marriage (Lillard 1993, Brien, Lillard and Waite 1999; Baizán, Aassve and Billari 2002/2003, Le Goff 2002). The starting point of both processes is the beginning of cohabitation. Cases are censored at the first conception or the first marriage. Censoring occurs also at date of the interview or at the dissolution of the union. The units I measure in are months. The model was estimated using the software aML version 2.04 (Lillard and Panis 2003).

I will apply hazard-models to analyse first conceptions and marriages of cohabitant women who were childless and not previously married before the beginning of the union. I will use the transition to first conception (9 months before first birth) instead of first birth because the incidence of a pregnancy determines the decision to continue cohabitation or marrying.

I want to know how the conception of a first child determines marriage rates: does the first pregnancy lead to an increase or a decrease? And vice versa: does the formation of marriage lead to increased first birth-intensities? With the background knowledge represented in the theoretical considerations, I assume that a first conception will increase marriage risks for cohabiting West German women. I assume as well that married women have higher first birth risks than cohabiting women.

Two intensities are examined: first conception intensity and first marriage intensity. The main mathematical formulas for each event (first conception or first marriage) look as follows:

→for the intensity of a first conception:

$$\ln h_i(t) = y_h(t) + \sum \alpha_{jh} x_{ijh} + \sum \beta_{jh} w_{ijh}(t) + c_h(u_{ih} + t) + z_h(t - v_{ih}) + U_i \quad (1)$$

→for the intensity of a first marriage:

$$\ln \mu_i(t) = y_\mu(t) + \sum \alpha_{j\mu} x_{ij\mu} + \sum \beta_{j\mu} w_{ij\mu}(t) + c_\mu(u_{i\mu} + t) + z_\mu(t - v_{i\mu}) + V_i \quad (2)$$

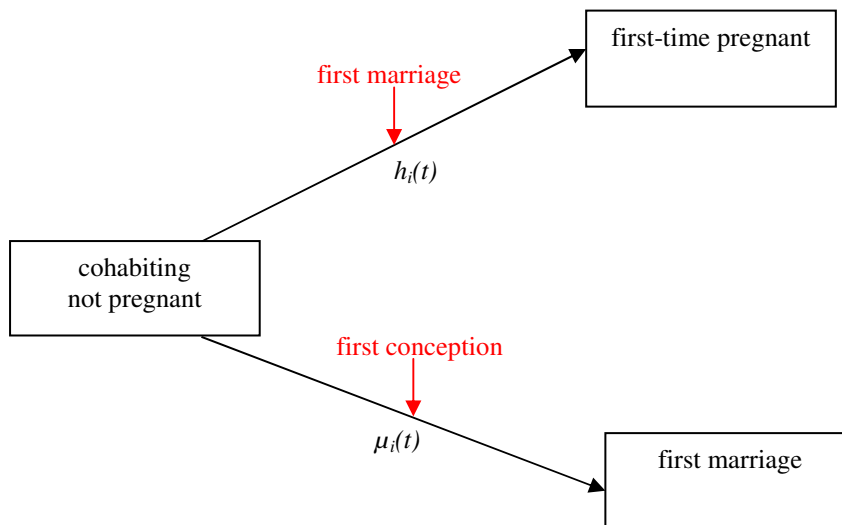
The log hazards h and μ at time t (time since the start of cohabitation) of individual i are estimated by the duration dependencies $y_h(t)$ and $y_\mu(t)$ (baseline log-hazard)¹ and a set of fixed and time-varying covariates. The effects of the fixed and time-varying covariates (x and w , respectively) are measured by α_{jh} and β_{jh} resp. $\alpha_{j\mu}$ and $\beta_{j\mu}$. The $(u_i + t)$ are splines that capture the effects of certain covariates that are continuous functions of t . One such duration spline will be the effect of current age of the woman - u_{ih} and $u_{i\mu}$ as the age at union formation.

Two further duration splines will be so-called conditional splines or “kick-in splines” $z_i(t - v_i)$: For the marriage equation, this spline represents the effect of duration since first conception: it kicks in when the woman becomes pregnant at union duration $v_{i\mu}$. In the case of first conception the spline represents the effect of duration since first marriage: it kicks in when the women marries at union duration v_{ih} .

¹ Each of these duration dependencies is represented by a piecewise linear spline that captures the effect of the duration on the intensity. A function is said to be a linear spline with the nodes t_1, t_2, \dots if it is linear over each interval and also continuous.

U_i and V_i are items that pick up any unobserved heterogeneity. They are normally distributed with means 0, variances σ^2_U and σ^2_V and a correlation coefficient ρ . I will check whether they are correlated with each other to show whether there are some unobserved individual characteristics that influence the first conception and marriage formation simultaneously.

A graphical representation of the two transitions is represented below:



5. Results

5.1 First conception risk

First, I estimated a model for first conception risk. The results for the covariates do not differ much when controlling for unobserved heterogeneity, the variables influence the transition to a first pregnancy in the same way. The risks for the time-constant and time-varying covariates are relative risks.

West German cohabiting women who started a consensual union before 1975 have lower first conception risk than women who cohabited later. In earlier times cohabitation and particularly having children in consensual unions was socially not much accepted.

Table 4: Transition to first conception (without unobserved heterogeneity)

Calendar Year		
1962-1969	-0.0107	
1970-74	-0.0032	
1975-79	0.0029	
1980-84	0.0025	
1985-89	-0.0011	
1990-94	-0.0013	
1995-2000	0.0022	
Educational attainment		
missing	1.49	
no secondary degree	0.73	
secondary degree	0.98	
vocational degree	1	
university/technical college degree	0.86	
other degree	0.81	
Activity status		
missing	0.51	
in education	0.73	**
employed full-time	1	
employed part-time	1.00	
unemployed	1.57	**
maternal/parental leave	1.38	
inactive	1.19	
Partners education at start of union		
missing	1.12	
in education	1.03	
no degree or secondary degree	0.83	
vocational degree	1	
university/technical college degree	0.97	
other degree	1.97	**
Religiosity		
missing	0.33	
religious	0.97	
somewhat religious	1.16	
not religious	1	
Foreign background		
German	1	
foreign background	1.76	***
Parents divorced?		
no	1	
yes	1.04	
Mothers education		
missing	0.84	
no degree or secondary degree	0.91	
vocational degree	1	
university/technical college degree	0.99	
Fathers education		
missing	1.05	
no degree or secondary degree	0.91	
vocational degree	1	
university/technical college degree	0.83	
ln-L	-3884.38	

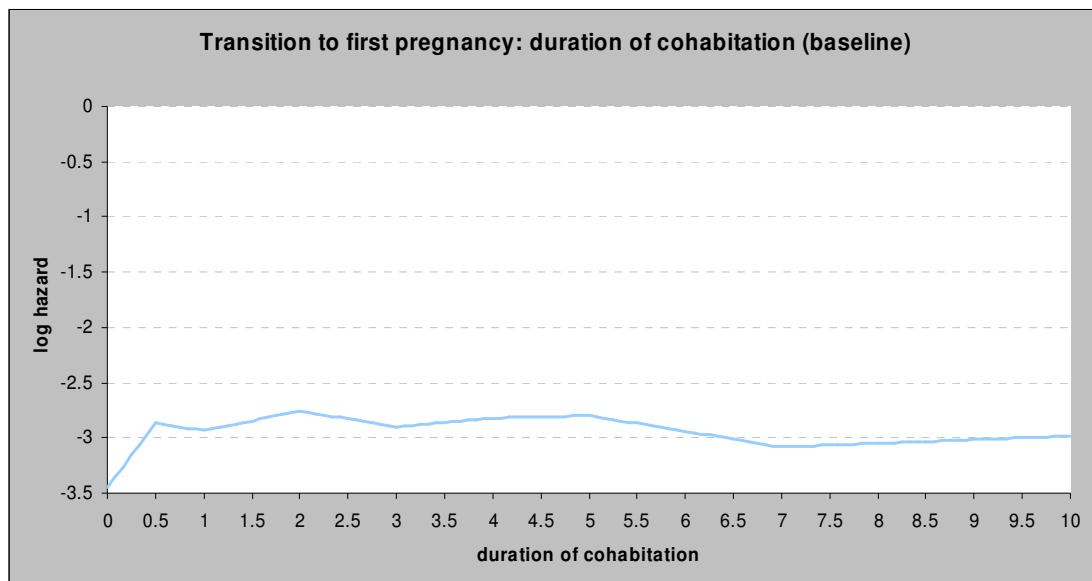
Significance: *=10%; **=5%; ***=1%

Surprisingly there are no significant differences between educational levels. Women having a vocational degree have the highest conception intensity. Being in education lowers the risk of having a first conception by around 30%. Being in school, university or vocational training reduces the probability of having a first child strongly – monetary and normative constraints delay parenthood. Women who are in a period of unemployment have a much higher risk than those being in employment. In an unstable and unsecured situation, most couples postpone childbearing.

I also controlled for some background variables, but only the foreign background has a significant influence on the conception risk. Having a foreign background (German nationality but not born in Germany or being born in Germany but without German nationality or being born in Germany, have German nationality but parents have been born abroad) increases the risk of a first birth. This is in line with the higher fertility of foreigners or people with a foreign background in West Germany.

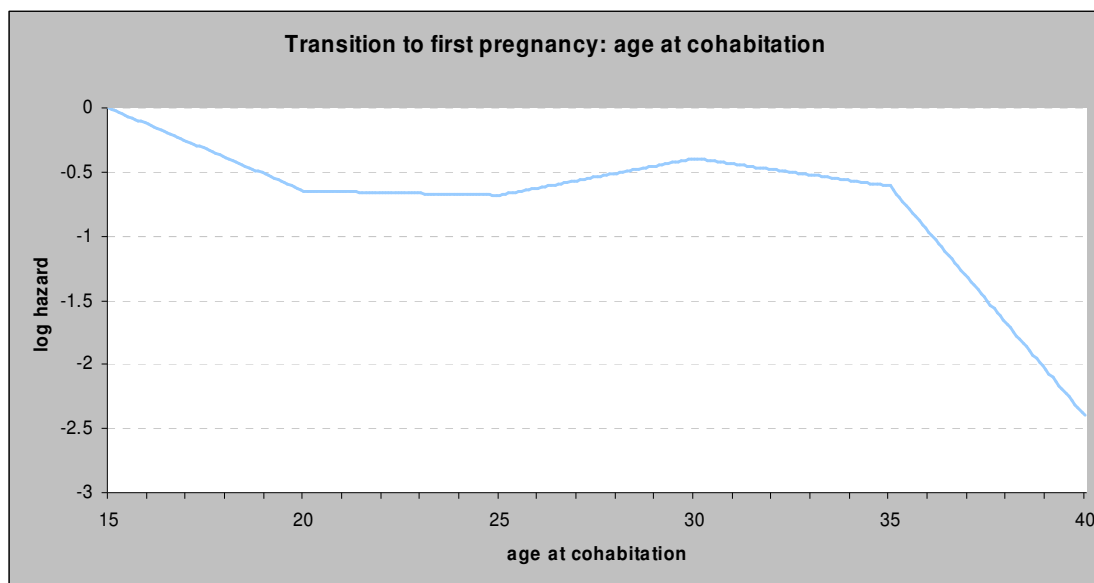
Looking now at the baseline log-hazard and the duration splines we find an increase in first conception intensities in the first six months after cohabitation which might be due to the fact that people move together because of the pregnancy. It decreases after six months but then increases again. It remains high until the first 5 years of cohabitation and decreases afterwards.

Figure 2: Baseline log-hazard of first conception



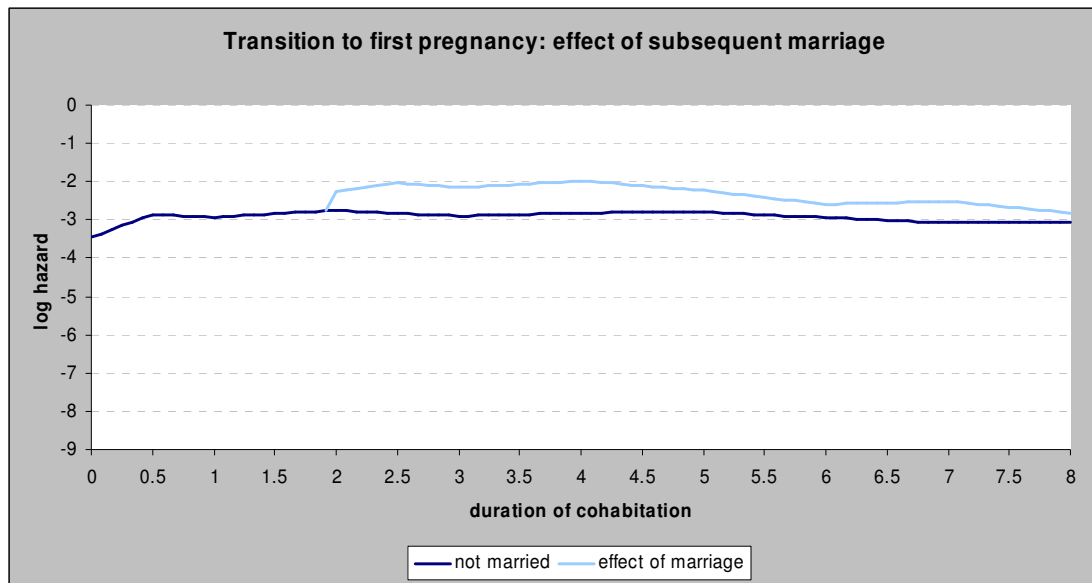
The pattern of conception can also be displayed by showing the effect of age (Figure 3). First conception risk is particularly high for those women who moved together with their partner very young. They are a very select group and might also be much more prone to become a child than their older counterparts. From age 25 until age 30 conception risk increases again and reaches its highest values around age 30. After that it decreases. As also Le Goff (2002) argued, this result suggests that there is a normative threshold after which births become rare. Having a first child later than age 35 is seldom.

Figure 3: Intensity of first conception: effect of current age



In order to investigate the effect of first marriage, I constructed a hypothetical example in which a non-pregnant and childless woman who lives in a cohabitation gets married after two years of union duration and I compared this effect with women who do not marry (Figure 4). We find a surprisingly low effect: getting married increases the conception risk for at least three years after marriage. After that time, conception risks decrease but are still slightly higher as for women who do not get married. It seems that women who marry get their first child relatively early after marriage, the longer they are married without a child the lower gets their conception risk but it remains always higher than for unmarried women.

Figure 4: Effect of first marriage on conception intensity



5.2 Subsequent marriage risk

The risks for the time-constant and time-varying covariates are again relative risks. There are no strong differences when we control for unobserved individual characteristics.

We again observe period effects in the way that women who started cohabitation before 1970 have higher first marriage risks than their younger counterparts. Falling first marriage rates support these findings. The effect of education is similar to the results I found for the conception intensity: there are no significant differences between the educational degrees, though higher educated women seem to have a slightly lower subsequent marriage risk than women with no degree. Again, the effect of current activity is much stronger. Being in education again has a negative impact on marriage – getting married or becoming a mother seems to be incompatible with educational participation. The effect of employment is contrary to the finding from the conception intensity: being in employment *increases* first marriage risks. Even more so, being full-time employed is connected to a higher risk of subsequent marriage than being in part-time employment or inactive. One explanation could be that there are normative constraints that influence couples who decide to marry. A secure financial background is often seen as a pre-condition for

Table 5: Transition to first marriage (without unobserved heterogeneity)

Calendar Year		
1962-70	0.0070	
1971-80	-0.0073	***
1981-90	-0.0007	
1991+	-0.0017	
Educational attainment		
missing	1.86	**
no secondary degree	1.08	
secondary degree	0.87	
vocational degree	1	
university/technical college degree	0.88	
other degree	0.86	
Activity status		
missing	0.58	
in education	0.60	***
employed full-time	1	
employed part-time	0.73	*
unemployed	0.72	
maternal/parental leave	0.61	**
inactive	0.72	*
Partners education at start of union		
missing	0.43	***
in education	0.90	
no degree or secondary degree	1.01	
vocational degree	1	
university/technical college degree	1.24	
other degree	2.55	**
Religiosity		
missing	0.45	
religious	1.53	***
somewhat religious	1.35	***
not religious	1	
Foreign background		
German	1	
foreign background	1.28	*
Parents divorced?		
no	1	
yes	1.28	
Mothers education		
missing	1.02	
no degree or secondary degree	1.11	
vocational degree	1	
university/technical college degree	0.97	
Fathers education		
missing	1.11	
no degree or secondary degree	0.90	
vocational degree	1	
university/technical college degree	0.92	
ln-L	-3314.87	

Significance: *=10%; **=5%; ***=1%

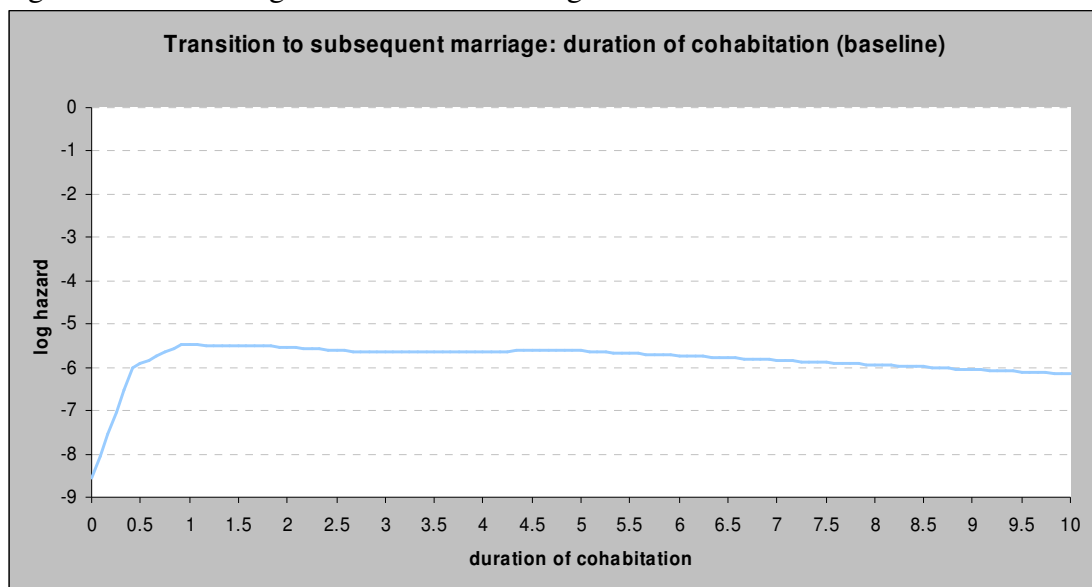
marriage. Uncertainty reduction that can be achieved by starting an employment also leads to higher marriage rates.

Interrupting employment because of the birth of a child leads to lower marriage intensities. This is mainly due to the fact that we control for the effect of a pregnancy. Before having included the spline for pregnancy, being in parental leave increases marriage intensity.

Among the background variables, being religious and having a foreign background influence marriage intensity positive. Here, we find an effect that is contrary to those found in the conception intensity. Being very religious (this means belonging to a religion and attending church regularly) increases marriage risk by 50%. We found no such effect of religiosity for the transition to conception.

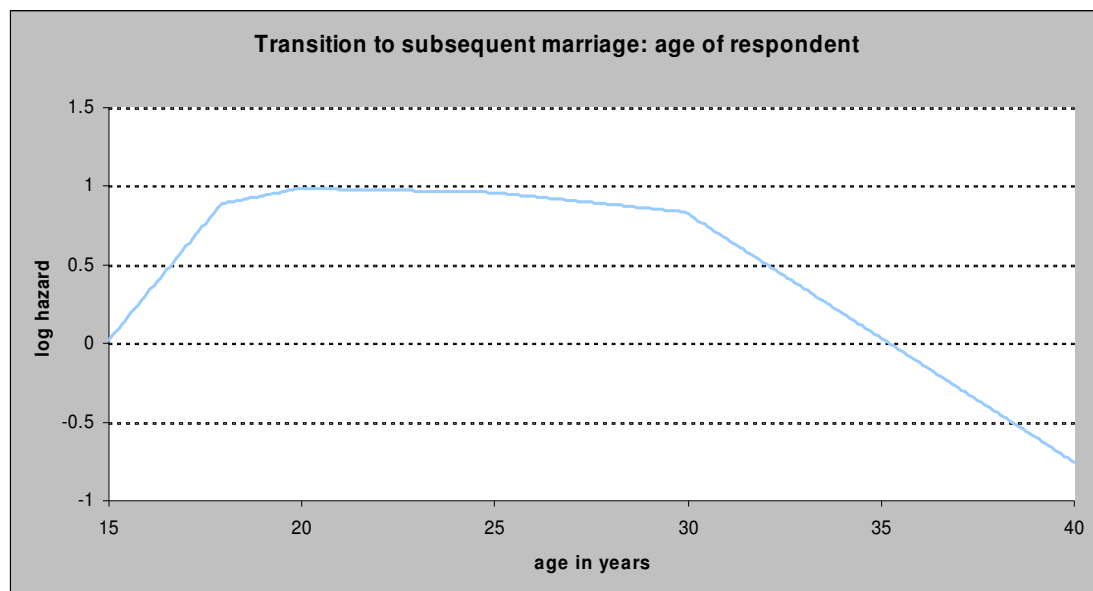
Looking now at the baseline log-hazard we find that subsequent marriage risk increases strongly in the first year of union duration and remains stable on a high level thereafter. West German women who move together marry very early afterwards, which points into the direction that those both processes are connected to each other. Another part of my dissertation therefore also includes a model that simultaneously analyses transition to cohabitation and the transformation of cohabitation into marriage.

Figure 5: Baseline log-hazard of first marriage



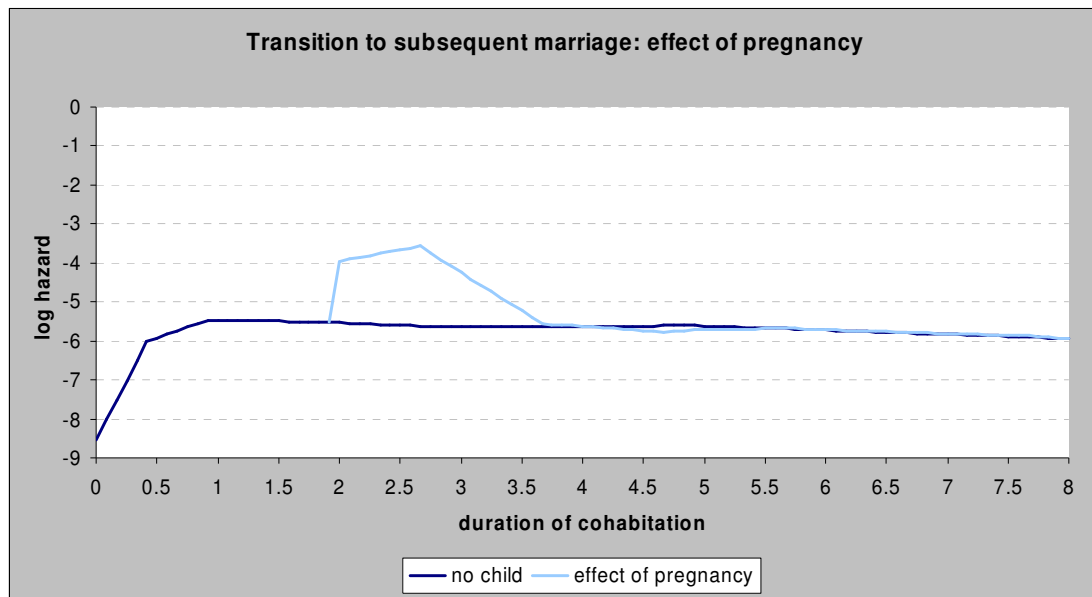
When looking at the marriage intensity in relation to current age of the women (Figure 6) we find the highest risks between the ages of 18 and 25. After age 30 subsequent marriage intensity decreases strongly - those cohabiting women who did not marry up to that age, have a lower willingness to marry at all.

Figure 6: Intensity of first marriage: effect of current age



To analyse the effect of a first conception and its impact on marriage formation, I constructed again a hypothetical example in which a non-married woman gets pregnant after two years of union duration. I compare this effect with the duration intensity for women who do not have a first conception (Figure 7). Becoming pregnant increases the marriage risk strongly for the first year after conception. The effect is stronger than the marriage effect in the conception equation. After the birth of the child, the marriage intensity decreases and falls to levels equal to the baseline log-hazard. This suggests that pregnant women try to legitimate the child before it is born by marrying their partner. It also shows that having a child and getting married is still very closely connected in West Germany. This interrelation process is further described by estimating a correlation coefficient between both unobserved heterogeneity factors.

Figure 7: Effect of first conception on marriage intensity



5.3 Interrelation between first conception and first marriage

I analysed both processes simultaneously and found a significant correlation coefficient with a value of 0.93 (S.E.=0.13***).

The correlation in unmeasured factors suggests that conception and marriage are highly interrelated. Women who are most likely to marry for any unobserved characteristics have also a high risk of a first conception. And also: those who do not get pregnant have also a lower risk of getting married.

This model did not include the conditional duration spline for marriage (in the conception equation) or conception (for the marriage equation). When I control for these two splines, I got a correlation coefficient of 0.03, which means that we cannot find any correlation between the unobserved factors. This tells us, that those two factors, namely first conception for first marriage and first marriage for first conception, explain almost everything. There are not many unobserved individual characteristics left that might influence the transition to a first conception or first marriage. That is the reason that one cannot observe any correlation between unobserved characteristics of the women.

This result confirms the existence of “child-centered marriages” in West Germany. Either women marry and get children, or they remain single or within

cohabitation and do not get children. Marriage is still closely connected to childbearing.

6. References

Anttonen, Anneli / Sipilä, Jorma (1996): European social care services: is it possible to identify models?. In: *Journal of European Social Policy*, Vol. 6, Nr. 2, S. 87-100.

Baizàn, P., Aassve, A., Billari, F. (2003): Cohabitation, Marriage, and First Birth: The Interrelationship of Family Formation Events in Spain. In: *European Journal of Population*, vol. 19, pp. 147-169.

Baizàn, P., Aassve, A., Billari, F. (2002): Institutional arrangements and life course outcomes: The interrelations between cohabitation, marriage and first birth in Germany and Sweden. In: MPIDR Working Paper, WP 2002-026. Rostock.

Bien, W., Marbach, J. (Ed.) (2003): Partnerschaft und Familiengründung. Ergebnisse der dritten Welle des Familiensurvey. Leske+Budrich. Opladen.

Blossfeld, Hans-Peter and Klijzing, Erik and Pohl, Katharina and Rohwer, Götz (1999): Why Do Cohabiting Couples Marry? An Example of a Causal Event History Approach to Interdependent Systems. In: *Quality and Quantity*, 33, pp.229-242.

Brien, M.J., Lillard, L.A., Waite, L.J. (1999): Interrelated family-building behaviors: Cohabitation, marriage, and nonmarital conception. In: *Demography*, vol.36, no.4, pp. 535-551.

Council of Europe (Eds.) (2006): Recent demographic developments in Europe: Demographic Yearbook 2005.

Esping-Andersen, Gösta (1990): The three worlds of welfare capitalism. Polity Press, Cambridge.

Esping-Andersen, Gösta (1999): Social foundation of post-industrial economies. Oxford University Press, New York.

Gornick, Janet C. / Meyers, Marcia M. / Ross, Katherin E. (1997): Supporting the employment of mothers: Policy variation across fourteen welfare states. In: *Journal of European Social Policy*, Vol. 7, Nr. 1, S. 45-70.

Huinink, Johannes (1995): Warum noch Familie? Zur Attraktivität von Partnerschaft und Elternschaft in unserer Gesellschaft. Frankfurt/Main und New York: Campus Verlag.

INSEE (2004): INSEE Premiere, Bilan démographique 2004, Paris.

INSEE (2005): INSEE Premiere, Bilan démographique 2005, Paris.

- Langan, Mary / Ostner, Ilona (1991): Geschlechterpolitik im Wohlfahrtsstaat: Aspekte im internationalen Vergleich. In: Kritische Justiz, S. 302-317
- Le Goff, J-M. (2002): Cohabiting unions in France and West Germany: Transitions to first birth and first marriage. In: Demographic Research, vol.7, no.18, pp. 593-624.
- Leridon, Henri and Toulemon, Laurent (1995): France, In: Blossfeld, Hans-Peter (Ed.): The New Role of Women. Family Formation in Modern Societies, Westview Press, Bolder Colorado.
- Lessenich, Stephan/Ostner, Ilona (Hg.) (1998): Welten des Wohlfahrtskapitalismus:der Sozialstaat in vergleichender Perspektive. Frankfurt/Main und New York: Campus Verlag.
- Lessenich, Stephan / Ostner, Ilona (1995): Die institutionelle Dynamik „dritter Wege“ – Zur Entwicklung der Familienpolitik in „katholischen“ Wohlfahrtsstaaten am Beispiel Deutschlands und Frankreichs. In: *Zeitschrift für Sozialreform*, Nr. 47, S. 780-803.
- Lewis, Jane (1993): Women and social policies in Europe. Work, family and the state. Aldershot, Brookfield: Edward Elgar.
- Lillard, L.A. (1993): Simultaneous equations for hazards. Marriage duration and fertility timing. In: *Journal of Econometrics*, vol. 56, pp.189-217.
- Lillard, L.A., Panis, C.W.A. (2003): aML Multilevel Multiprocess Statistical Software, Version 2.0, User's Guide. Econware, Los Angeles, California.
- Matthias-Bleck, Heike (2006): Jenseits der Institution? Lebensformen auf dem Weg in die Normalität. Ergon Verlag, Würzburg.
- Nave-Herz, Rosemarie (1997): Pluralisierung familialer Lebensformen - ein Konstrukt der Wissenschaft? In: Vaskovics, Laszlo A. (Ed.): Familienleitbilder und Familienrealitäten, Leske+Budrich. Opladen, pp.36-49.
- Sainsbury, Diane (Hg.) (1999): Gender and Welfare State Regimes. Oxford: Oxford University Press.
- Statistisches Bundesamt (2006): Statistische Wochenberichte: Bevölkerung, Soziales und Arbeit, Wiesbaden.
- Strohmeier, Klaus Peter (1993): Pluralisierung und Polarisierung der Lebensformen in Deutschland. In: *Aus Politik und Zeitgeschichte*, vol. 43, no.17, pp. 11-22.
- Toulemon, Laurent (1997): Cohabitation is here to stay. In: *Population: An English Selection*, vol. 9, pp.11-46.

7. Appendix

Table 1: Number of cases included and excluded from the analysis.

<i>Excluded cases</i>	
additional sub-sample of adolescents within the households	225
male respondents	3.653
foreigners or born outside of Germany	171
East German respondents	793
women never living in cohabitation	1.955
step or adopted children	23
first pregnancies before age 15	14
first pregnancies before at directly at first cohabitation	188
missing information on year of union formation/ dissolution even though they have been married/cohabited/separated	176
first union before age 15	1
missing: Do you have children?	4
missing birth date of child	13
number of respondents	1.110
number of first conceptions	763
number of first marriages	725