

Grasping the diversity of cohabitation:  
Fertility intentions among cohabiters across Europe

---

Nicole Hiekel\* & Teresa Castro-Martín<sup>o</sup>

\* Netherlands Interdisciplinary Demographic Institute (NIDI), The Netherlands

<sup>o</sup> Spanish National Research Council, Spain

September 2012

Preliminary Draft – Please do not quote or circulate without authors' permission

Submitted for the Population Association of America Annual Meeting 2013

Sessions: 211. Non-Marital and Diverse Family Forms (Smock)

122. Unions Status and Fertility (Guzzo)

## ABSTRACT

---

Non-marital childbearing has increased considerably in most European countries, largely due to increasing births to cohabiting couples. Yet there is no broad consensus on how cohabitation fits into the family system, whether cohabitation is seriously challenging the hegemony of the legal and social institution of marriage as the proper setting for reproduction and socialization and whether the reasons underlying the recent fertility increase within cohabitation are similar across Europe. This study investigates the fertility intentions of 3,006 cohabiters aged 18 to 45 years across nine European countries using data from the Generations and Gender Surveys. We argue that different meanings attached to cohabitation influence cohabiters' plans to have a child in the near future. We propose a typology of cohabitation, based on attitudes towards marriage, intentions to marry and feelings of economic deprivation, and we explore whether the links between cohabitation type and fertility intentions differ across Western and Eastern European countries. We find that the meaning of cohabitation, net of other covariates (i.e., education, occupation, children from prior unions, age, union duration) does influence short-term fertility intentions and that, although cohabitation is quickly overtaking direct marriage as the leading form of union entry, there is little empirical evidence supporting the view that marriage and childbearing decisions are about to detach completely. In all countries examined, cohabiters who view cohabitation as a "prelude to marriage" are the most likely to report short-term fertility intentions.

## INTRODUCTION

---

Before the 20<sup>th</sup> century, extramarital fertility was normatively discouraged and socially stigmatized across most of Europe. The institution of marriage kept the monopoly over the regulation of sex, the bearing and rearing of children and the transmission of resources from the older to the younger generation (Coontz, 2004). Births out of wedlock were considered illegitimate and devoid of rights, although the contribution of non-marital fertility to overall fertility levels was far from trivial (Laslett, Oosterveen, & Smith, 1980). Most often, however, a non-marital conception led to marriage before the child was born. Although so-called “bridal pregnancies” still exist, particularly in Eastern Europe (Perelli-Harris & Gerber, 2011; Perelli-Harris et al., 2012), the link between union status and fertility has become more complex in recent decades.

Non-marital childbearing has increased in most of the European countries as well as the United States and Canada, largely due to increasing births to cohabiting couples (Bumpass & Lu, 2000; Carlson, McLanahan, & England, 2004; Kiernan, 2001; Musick, 2002; Raley, 2001; Sobotka & Toulemon, 2008; Thomson, 2005; Wu, Bumpass, & Musick, 2001).

Between 1995 and 2005, half of all first births in Norway, France and Eastern Germany (cohort born between 1971 and 1973) and around one quarter of all first births in Austria, the Netherlands, Western Germany, the United Kingdom and Bulgaria took place within cohabitation. In the same time period, childbearing within cohabitation was less prevalent in Russia and Hungary (18%), Romania (12%) and Italy (8%) (Perelli-Harris et al., 2012). In 2010, 36% of births in Spain were to unmarried mothers, of which two thirds were cohabiting at the time of the child’s birth (Castro-Martín, 2010).

Prior research suggests that examining the fertility behavior of cohabiters constitutes a promising avenue for understanding the role that cohabitation plays in an individuals’ union career, how it is related to marriage, and thus finally to uncover how cohabitation fits into the

family system (Heuveline & Timberlake, 2004; Kiernan, 2001). Yet there is no broad consensus whether cohabitation is seriously challenging the hegemony of the legal and social institution of marriage as the proper setting to bear and rear children. Some claim that marriage is increasingly decoupled from the childbearing process (Heuveline & Timberlake, 2004; Kiernan, 2001; Perelli-Harris et al., 2012). Others conclude that cohabitation is far from replacing marriage, even in the Scandinavian countries which are characterized by a high prevalence of cohabitation and high proportion of births in cohabiting unions (Wiik, Bernhardt, & Noack, 2009). Although couples are increasingly entering unions by cohabiting rather than directly marrying, and in most countries the legal status of the parents' union is not important for defining a child's rights, for many couples, cohabitation is an alternative to marriage only until children come along (Sassler & Cunningham, 2008). The intention to have children remains a prominent reason to move from cohabitation to marriage (Moors & Bernhardt, 2009). These patterns suggest that marriage might not necessarily become irrelevant in the family formation process, but instead postponed along the life course. The sequencing norms structuring the "ideal" life course (Liefbroer & Billari, 2009) seems to have shifted in such a way that marriage is no longer a prerequisite for making childbearing plans, but might coincide with or follow the decision to have a child.

In this study, we aim at increasing our understanding on the diversity of cohabitation by studying differences in the intentions to have a child for cohabiters attaching different meanings to their cohabiting union. By doing so we build extensively on previous work in which we proposed a cohabitation typology that captures how cohabiters conceptualize their relationship. This typology is based on cohabiter's intentions to marry, attitudes towards the institution of marriage and subjective economic deprivation. We studied the prevalence of different types of cohabitation varies within and across European countries (Hiekel, Liefbroer, & Poortman, 2012). In the present study, we examine how the different types of cohabitation are associated with the likelihood to intend having a child in the near future. We focus on

cohabiters who do not yet have a child with their current partner and study short-term fertility intentions (within three years) rather than actual fertility behaviour because already present children are likely to have caused a change of the meaning of cohabitation prior to the moment of interview. Our first research question therefore is: How is the meaning that cohabiters attach to their unions associated with the intentions to have a child in the near future?

It could be that cross-national differences in the fertility intentions of cohabiters are related to the different composition of the cohabiting population across countries linked to the changing meaning of cohabitation in various periods and contexts. European countries moreover do not only differ in their predominant meaning of cohabitation (Heuveline & Timberlake, 2004; Kiernan, 2001; K. Kiernan, 2002), but also the within-country diversity in the types of cohabitation: Cohabitation is a more heterogeneous living arrangement in some countries than in others (Hiekel et al., 2012). Our second research question therefore is: Does the way in which the meaning of cohabitation is associated with the likelihood to have fertility intentions vary between Western/Northern Europe and Central/Eastern Europe?

We use recent data from the Gender and Generations Surveys (*GGS*) conducted between 2004 and 2009 in nine European countries. To unravel the existing variety in the meanings of cohabitation across Europe, we distinguish several ideal types of cohabitation that incorporate the dominant views in the existing literature on the nature, meaning and motives underlying cohabitation. We then choose a set of empirical indicators to identify each of these meanings of cohabitation and compare the distribution of different types of cohabitation and the prevalence of positive fertility intentions by cohabitation type cross-nationally. By using logistic regression analysis, we test whether and how the meaning of cohabitation is associated with the likelihood to intend having a child in the near future, net of a number of prominent control variables associated with fertility intentions.

## THEORY AND HYPOTHESES

---

### *The meaning of cohabitation and intentions to have children*

There are two prominent views on cohabitation that have been put forward in the literature: cohabitation as a stage in the marriage process and cohabitation as an alternative to marriage. Both perspectives on cohabitation can be further distinguished as will be explained below.

According to the view that cohabitation is a *stage in the marriage process*, marriage remains a highly accepted institution, but cohabitation is becoming increasingly popular as a normative stage in the transition to marriage. It is well established in sociological theory that there are so-called sequencing norms that concern the order of events in the life course (xxx). In the past decades, new standards of demographic behavior have emerged, which favor marriage to be preceded by a period of unmarried cohabitation (Liefbroer & Billari, 2009). In the Nordic countries, for instance, forming a union through direct marriage has become an exceptional behavior and is likely to be a manifestation of particular religious or other convictions (Hoem and Hoem, 1992).

First, cohabitation can be considered as a form of “engagement”, a “contemporary extension of courtship” (Spanier, 1982), and thus a *prelude to marriage* in which couples have plans to marry their partner (Bianchi & Casper, 2000; Brown, 2003; Brown & Booth, 1996). The cohabiting union is then expected to be relatively soon transformed into marriage, on average within two years after the couple started to live together (Brown, 2003).

Second, cohabitation can be viewed as a testing ground for marriage. Cohabitation as a *trial marriage* responds to uncertainties regarding whether the dating partner is a suitable potential spouse (Bumpass & Sweet, 1989; Klijzing, 1992; Seltzer, 2004). Hence, cohabitation might be a way to find out, for instance, whether partners’ personalities match, or whether partners have similar views about the desired ways of living. Cohabitation is ideal as a testing ground as it offers all the advantages of co-residence with an intimate partner,

without having to commit as yet to expected marital roles (Clarkberg, Stolzenberg, & Waite, 1995). The difference between prelude to marriage and trial marriage is thus the presence of intentions to marry in the near future in the former and their absence in the latter type of cohabitation.

Third, the choice for cohabitation can be related to constraints rather than preferences, namely one's socioeconomic situation. The timing of entry into the labor market as well as employment, financial and housing circumstances have been argued to strongly influence the timing and choice of union formation (Bernhardt & Hoem, 1985; Hoem, 1986; Kravdal, 1999; Oppenheimer, 1988) and thus also the meaning of cohabitation and intentions to have a child. People may opt for cohabitation because their economic situation prevents them from getting married in the near future, although they aspire to get married one day (Baizán & Martín-García, 2006; Gibson-Davis, 2009; Gibson-Davis, Edin, & McLanahan, 2005; Kalmijn, 2011; Kravdal, 1999; Manning & Smock, 2002). According to this view, some people cohabit because they have the perception that they are *too poor to marry*. For some a big wedding party might simply not seem affordable (Kravdal, 1997), whereas others might feel that their financial situation is not secure enough to warrant the step to marriage with its inherent normative role expectations (Clarkberg, 1999; Oppenheimer, 1988, , 2003) and the implied claims on each other's property. Hobcraft and Kiernan (1995) argued that parenthood in contemporary Europe depends on a number of pre-conditions: Having a partner, having completed education, having secure employment and a sufficient income, and having suitable housing as well as a general sense of certainty regarding one's future. Qualitative studies moreover found that the lack of money can be a substantive source of conflict within a couple and can affect the perceived stability of the relationship and the confidence in a stable common future (Smock, Manning, & Porter, 2005).

In contrast to considering cohabitation as a stage leading to marriage, another view on cohabitation understands it as an *alternative to marriage*. This view suggests that marriage is

losing its predominant status and unmarried cohabitation increasingly substitutes for it. Two main reasons are mentioned in the literature.

First and foremost, ideological reasons are suggested. Marriage might be viewed as a bourgeois institution or as an unwarranted interference of Church or State in one's private life, and be perceived as being outdated (Casper & Bianchi, 2002). Couples thus might cohabit as an ideological *refusal of marriage*. These cohabiters are considered to be in stable long-term relationships (Bianchi & Casper, 2000), to value personal autonomy and have liberal attitudes with regard to gender roles and the division of labor (Clarkberg et al., 1995).

Second, cohabiters may also decide not to marry because *marriage is not relevant* for them. This view on cohabitation does not imply the rejection of the institution of marriage, it is just not considered important to get married. Marriage would not make any difference for their commitment and feelings towards their partner; they perceive themselves as married, just not in the legal sense.

Intentions to have children signal commitment to the relationship and the partner. We thus hypothesize that plans to have children are postponed until a relationship proves to have a long term perspective. Cohabiters in a trial marriage are expected to be least likely to intend having children in the near future.

Starting a family might be an expensive enterprise for which significant financial means need to be accumulated and other material preconditions such as appropriate housing have to be obtained. For cohabiters who feel they are too poor to marry, children might be viewed as part of that expensive and therefore postponed enterprise of marriage (Clarkberg et al., 1995).

Cohabiters who view their living arrangement as an alternative to marriage are not expected to link their intentions to have a child to marriage plans at all. We would expect that these cohabiters do not consider marriage as a prerequisite to have a child and may form intentions to have a child they feel that their relationship is ready for it. Given that we assume



these types of cohabitation to be long lasting and committed unions we expect cohabiters in these cohabitation types to be more likely to intend having children than cohabiters in the previous two types of cohabitation.

We hypothesize that intentions to have a child are most likely among cohabiters who intend to get married in the near future. Marriage could be viewed as a traditional precondition for having children or a legitimizing institution for family formation. For individuals who view cohabitation as a prelude to marriage, the intention to have a child might be intertwined with their intentions to get married (Musick, 2007).

#### *Cross-national variation*

Cross-national differences regarding the role of cohabitation in the family system can be explained by cultural as well as economic diversity across countries. The cultural explanation emphasizes the role of individual preferences in explaining why people cohabit, what it means to them to be in a cohabiting union and whether they envision themselves raising children in these unions.

Individual preferences are central to the Theory of the Second Demographic Transition (SDT) that presumes that new demographic behaviors spread from the Northern European countries to the rest of the developed world. At different points in time and with different speeds, most societies are assumed to experience the consequences of increasing secularization, weakening family ties, and growing individualization. The increase of cohabitation and its rising significance as a context for family formation is one central feature of this transition. Cross-national differences in the meaning of cohabitation have been explained by societies being situated at different stages of the SDT (Heuveline & Timberlake, 2004; Kiernan, 2001; Kathleen Kiernan, 2002).

Western and Northern Europe are regions where the SDT is further advanced and where unmarried cohabitation and non-marital childbearing are more socially approved and legally protected than Central and Eastern Europe. Intentions to have children might be less

linked to the aspiration of marriage and more influenced by the level of commitment of the union and thus more likely reported by individuals who cohabit as an alternative to marriage than in low-SDT countries of Central and Eastern Europe.

Cross-national differences in the association between meaning of cohabitation and intentions to have a child can also be explained by economic variation across countries. The economic explanation emphasizes the constraints that individuals might experience in the process of union formation. Recent economic developments have been argued to be potentially strong forces behind the rising popularity of cohabitation (Kravdal, 1999; Oppenheimer, 1988). Increasing levels of economic uncertainty might have led more people to postpone marriage and family formation. This line of argumentation suggests that the “too poor to marry”- type of cohabitation should more prevalent in less prosperous countries, such as in Central and Eastern Europe, than in wealthier countries in Western and Northern Europe (Bernhardt & Hoem, 1985; Hoem, 1986). Childbearing intentions are expected to be particularly weak in countries where cohabiters in the too poor to marry group have little prospects that the economic situation will improve. Note that economic explanations are silent about the other types of cohabitation, because these other types are based on preferences rather than constraints.

#### *Control variables*

Socio-demographic characteristics and the prior union history might be associated with the meaning that cohabiters attach to their unions as well as the likelihood to intend having children in the near future.

*Educational attainment* implies actual or prospective socio-economic resources and could be considered as a proxy for work orientation, career aspirations and earnings potential. Once established in the labor market, high educated individuals often have larger resources to balance work and family by profiting to a higher degree from family policies (xxx) or being able to outsource child care. Educational level is also linked to cultural resources and

progressive attitudes towards alternative living arrangements such as cohabitation. Therefore, highly educated cohabiters could be more inclined to view their cohabiting union as a long lasting, committed alternative to marriage and a suited context for family building. Both arguments lead us to expect that higher educated individuals are more likely to report positive childbearing intentions.

*Full time employment* indicates a stronger attachment to the labor market than working part time or not working. It might also imply a stronger career aspiration, since full-time employment tends to be a more stable work arrangement and a potential career stepping stone compared to part-time employment. It has been argued that pursuing a career and consolidation in the labor market leads to a postponement of marriage and childbearing aspirations (Blossfeld & Huinink, 1991; Clarkberg et al., 1995), but once established in the labor market it increases the odds of family formation (Kalmijn, 2011; Thornton, Axinn, & Xie, 2007). In line with this argument, we expect cohabiters who are fulltime employed to be more likely to have positive fertility intentions than cohabiters who are not fulltime employed.

*Divorce and children from prior unions.* Prior research has mainly focused on actual fertility behavior of previously married cohabiters with or without children from their marriages (biblio). On the macro level, the sign of the correlation between divorce and fertility rates turned from negative to positive since the 1990s (Billari & Kohler, 2004). This has been explained by divorce having a fertility stimulating effect at the individual level because divorced individuals have large re-partnering rates that increase the likelihood of births that would not have occurred if the first marriage would have lasted. Some studies find that children from prior unions do not affect the childbearing behavior in the current union, drawing the conclusion that having a biological child with the current partner helps to strengthen the new conjugal bond (Griffith, Koo, & Suchindran, 1985; Vikat, Thomson, &

Hoem, 1999). Other studies, however, find a negative association between prior children and subsequent births in a new union (Buber & Prskawetz, 2000; Toulemon, 1997).

*Gender.* Although the decision to have a child is usually made by the couple together, fertility decisions often imply different consequences for men and women. Therefore, the role of cohabitation in the family building process, but also other factors influencing childbearing decisions might be different depending on gender.

*Age and union duration* are likely to be correlated and both are expected to influence fertility intentions directly, or via other predictors. A relationship is likely to have lasted longer when the respondent is older. However, age also increases the likelihood of a prior relationship or having children from prior unions and thus might explain a shorter union duration with the current partner. Age also influences fertility intentions directly by age norms concerning parenthood. A U-shaped relationship is likely. At younger ages, each year of age might increase the odds of intending to have a child turning into a negative association at higher ages.

## DATA AND SAMPLE

---

We use data from the *Generations and Gender Surveys (GGS)* on nine countries. The *GGS* is a set of comparative surveys of a nationally representative sample of the 18-79 year old resident population in each of the participating countries (Vikat et al., 2007). To date, harmonized Wave 1 data collected between 2004 and 2009 are available for 15 countries: Austria, Australia, Belgium, Bulgaria, Estonia, France, Georgia, Germany, Hungary, Italy, Lithuania, the Netherlands, Norway, Romania, and the Russian Federation. The overall size of the main samples differs by country but in most cases is about 10,000 respondents. Data was usually collected by a computer assisted personal interview (CAPI) and in some countries by a paper and pencil interview (PAPI). We had to exclude Australia, Belgium, Estonia, Italy and

the Netherlands from our analysis. In these surveys, crucial variables for our analysis were not available. We also excluded Georgia because the analytical sample was too small ( $n=75$ ). The overall response rates vary between 49.7% in Russia and 78.2% in Bulgaria.

Of all respondents who live together with their partner ( $n=63,686$ ) we exclude those who are married to this partner ( $n=54,120$ ), those with an unknown marital status ( $n=77$ ), those with a partner is of the same sex ( $n=87$ ), and those whose partners' sex is unknown ( $n=4$ ). We furthermore exclude female respondents older than 45 years ( $n=1,075$ ) and male respondents with a partner older than 45 years ( $n=957$ ) in order to cover the fertile years of a woman considering the prospective nature of the question on fertility intentions (3 years). Although the target sample for the question on fertility intentions in the GGS Questionnaire is 50 years, we want to assure sample comparability with the Austrian survey, where only respondents aged 18 to 45 years were interviewed. In addition, we exclude respondents who are pregnant or have a pregnant partner ( $n=381$ ), who are infertile or have an infertile partner ( $n=444$ ). We moreover leave out respondents who did not provide a valid answer on the question whether they intend to have a child within three years ( $n=243$ ) and the key indicators defining the typology of different meanings of cohabitation, namely intentions to marry within three years ( $n=158$ ), agreement with the statement that marriage is an outdated institution ( $n=506$ ) and subjective economic deprivation ( $n=5$ ). In Norway, the question on attitudes towards the institution of marriage was part of a self-administered questionnaire that respondents were requested to submit via mail. Thirty percent of them did not return this questionnaire. We additionally exclude cohabiters who have already biological children with their current partner ( $n=2,568$ ) because we are interested in whether cohabiters perceive their current union as a setting to become a parent with their partner. Cohabiters in our sample might however have children from a prior union. Overall, missing data on the control variables were rare ( $n=55$ ) and finally excluded from the analysis (additional analyses with extra categories for missing data did not change the results and are available upon request).

Our final analytical sample, hence, contains 3,006 cohabiters, ranging from  $N=129$  in Romania to  $N=515$  in Hungary.

## DISTINGUISHING DIFFERENT TYPES OF COHABITATION

---

In order to translate our theoretical typology of cohabitation developed in the theory section into an empirically measurable classification, we use three key indicators, namely (1) intentions to marry, (2) attitudes towards the institution of marriage and (3) measured of subjective economic deprivation, to distinguish between types of cohabitation. By doing so we build extensively upon previous work (Hiekel et al., 2012).

A first indicator used to unravel the different types of cohabitation is intentions to get married in the near future. The theory of planned behavior (Ajzen, 1991) suggests that intentions predict subsequent behavior. Cohabitors with marital intentions have been found to be four times as likely to actually marry within three years than cohabiters without marriage plans (Manning & Smock, 2002). In the *GGGS*, cohabiters were asked: “Do you intend to marry your partner within the next three years?” In Norway, respondents were asked for marriage plans within two years. Respondents who answered *definitely yes* or *probably yes* are considered to have marriage plans. Those who responded *probably no*, *definitely no* or *does not know* are treated as having no marital intentions. Norwegian respondents could only choose between *yes* and *no*. In Hungary a negative answer could only be *no*.

A second indicator to distinguish different types of cohabitation is how cohabiters think about the institution of marriage. The attitude one holds about the institution of marriage is likely to be intertwined with how relevant it is for oneself to get married. In other words, a crucial element of the meaning of cohabitation is how it is conceptualized in relation to marriage. Cohabitors who consider marriage an outdated institution might be less likely to marry themselves than cohabiters who are in favor of the institution of marriage. In the *GGGS*,

respondents were asked: “To what extent do you agree or disagree that marriage is an outdated institution?” The 5-point scale takes the values 1= *strongly agree*, 2= *agree*, 3= *neither agree nor disagree*, 4= *disagree* and 5=*strongly disagree*. Respondents with values 1 or 2 are classified as agreeing that marriage is an outdated institution. Respondents with a value 4 or 5 are considered to disagree with the statement and respondents with a value 3 are classified as being indifferent in their opinion about marriage.

Finally, the meaning that cohabiters attach to their unions could be linked not only to their preferences but also to perceived constraints. Facing a difficult economic situation might lead people to postpone any further institutionalization of their union although they aspire to marry one day. Economic deprivation might lead to the assessment that one is not ready yet to marry. One way to adapt to that situation is opting for non-marital cohabitation. Therefore we use a third indicator that captures subjective economic deprivation, using two questions from the *GGS*. First, respondents were asked: “Thinking of your household’s total monthly income, is your household able to make ends meet ...” The 6-point scale ranges from *with great difficulty* to *very easily*. Second, respondents were asked: “Considering your household’s income as well as expenses: Is there normally some money left that you could save?” The answer categories were *yes* and *no*. We consider respondents who answer *with (great) difficulty* to the first question or *no* to the second question as feeling economically deprived.

Table 1 illustrates how we construct an empirical classification of cohabiters based on their responses to our three main indicators. Cohabiters who intend to marry in the near future and disagree that marriage is an outdated institution are classified as viewing cohabitation as a “*prelude to marriage*”. Cohabiters who have no marriage plans in the near future but do not regard marriage outdated are considered as not ready for marriage yet. Reasons for not contemplating marriage in the near future could be related to preferences as well as perceived constraints. Those who *do not* feel economically deprived are classified into the “*trial marriage*” type of cohabitation. We assume that they do not have short term marriage plans

because they are still in the process of assessing the suitability of their partner as a potential spouse. Cohabitors who *do* feel economically deprived are classified as belonging to the group that is “*too poor to marry*”. Since they do not consider marriage outdated, we assume that they would marry if they would have the economic resources to do so. Feelings of economic deprivation are not relevant in distinguishing other types of cohabitation.

Cohabitors without marriage plans in the near future and who consider marriage an outdated institution are classified as *refusing marriage*. Finally, cohabitors without intentions to get married but who “neither agree nor disagree” that marriage is an outdated institution are classified as considering *marriage irrelevant*.

One of the central findings in our previous work on the meaning of cohabitation was that we identified a sixth cohabitation type that has not been previously discussed in the literature (Hiekel et al., 2012). Although the majority of cohabitors could be classified in one of these five cohabitation types, a significant proportion of cohabitors did not fit in this classification. These are respondents who ideologically feel disconnected from marriage by either agreeing that marriage is an outdated institution or being indifferent to it (i.e. “neither agree nor disagree”). At the same time, though, they still have plans to marry in the near future. We suggested to term this group “conformists”. This group is particularly large in some countries of Central and Eastern Europe and thus more than a residual category. This finding clearly shows that the fact that marriage is a prominent social institution that will strongly influences how cohabitors view their unions, even those who are not in favor of marriage. As a result, some cohabitors plan to marry in order to please their family, friends or society in general. In addition, the economic theory of marriage views marriage as a rational choice that is pursued when benefits of getting married are higher than the benefits of other living arrangements. These cohabitors thus might intend to marry for very rational reasons, such as tax benefits or the legal protection of their union despite their unfavorable opinion about marriage. These considerations might be particularly relevant when children are



contemplated. We will thus test an additional hypotheses, namely that cohabiters who intend to marry despite their unfavorable view on the institution of marriage might be more likely to intend having children than cohabiters who view cohabitation anything else than a prelude to marriage.

[Table 1 about here]

## MEASUREMENTS

---

### *Dependent variable*

Short term fertility intentions have been measured by asking respondents “Do you intend to have a child during the next three years?” with the answer categories 1= *definitely not*, 2= *probably not*, 3= *probably yes* and 4= *definitely yes*. In Hungary the only answer categories were 1= *yes* and 2= *no* and in Norway 1= *definitely yes* and 2= *definitely no*. We created a dummy variable for fertility intentions that takes the value 1 if positive (*definitely yes*; *probably yes*; *yes* in Hungary) and the value 0 if negative (*definitely no*; *probably no*; *no* in Hungary).

### *Control variables*

The data provide an international comparable measure of *educational attainment* using the International Standard Classification of Education *ISCED* (UNESCO, 2006). We distinguish three levels: 1=*low*, 2=*medium*, and 3=*high*. The first category groups people with primary and lower secondary education, the second category comprises upper secondary and post-secondary non-university education and the third category represents lower and upper tertiary university education.

We moreover distinguish individuals with *full-time employment* from all other work statuses including part-time employment (less than 30 hours a week), unemployment, studies,

retirement or maternal leave. Although we are aware of the heterogeneity of the latter group, they are all more likely to lack economic independence and security than full-time employees.

Respondents have been furthermore asked about intimate relationships prior to the current relationship and to report children from past unions. We include a number of dummy variables that distinguish respondents who have *biological children with a former partner*, whether the *youngest of these children is less than ten years old*, whether the *partner has a biological child with a former partner* and whether the respondent has been *married to a prior partner*. Each of the four dummy variables has been coded to take the value 1 if the situation is true for the respondent.

We include *age* and *age squared* as continuous variables measured in years to identify non-linearities in the effect of age on fertility intentions. *Union duration* has been measured as the time in years between the date when the couple started to live together and the interview date and is included as a continuous variable. Finally, *gender* is included as a dummy variable taking the value 1 if the respondent is female.

## ANALYTICAL APPROACH

---

We were interested in examining the relationship between different meanings of cohabitation and the intentions to have a child in the near future, controlling for socio-demographic characteristics and events in the prior union history. The dependent variable is “intending to have a child within three years”.

First, descriptive statistics are presented for each of the countries separately. These results give insight in the differences in the composition of the group of cohabiters across countries as well as in cross-national variation in fertility intentions and the distribution of different meanings of cohabitation.

Next, the results of a logistic regression analysis are presented to test our hypotheses about the relationship between different meanings of cohabitation and reporting intentions to have a child in the near future. Given the small number of countries that does not allow applying multilevel analysis, we pooled the data, adding country dummies and testing interaction effects between living in a country of Central and Eastern Europe and each of the cohabitation types.

## DESCRIPTIVE RESULTS

---

Table 2 shows the percentage of cohabiters that report positive fertility intentions within three years, as well as the percentage distribution of the different types of cohabitation and the control variables by country. In all countries except Germany (40%), at least half of the cohabiting couples report intentions to have a child in the near future. Their proportion is largest in Bulgaria, Hungary and Romania, where around two thirds of cohabiters have short term fertility intentions.

With the exception of Bulgaria, Lithuania and Norway, the *prelude to marriage* type of cohabitation is the most common meaning that cohabiters attach to their unions. Whereas 30% of cohabiters in Norway and 13 to 16% in Austria, Germany and France are classified into the *trial marriage* type of cohabitation, this meaning of cohabitation is rare in countries of Central and Eastern Europe. The proportion of cohabiters classified as *too poor to marry* is relatively small in most countries, and contrary to our expectations, their proportion is larger in Western and Northern Europe than in Central and Eastern Europe, with the exception of Russia, where it reaches 14%. Viewing cohabitation as an alternative to marriage either because *marriage is considered outdated or irrelevant* is clearly more common in the Western European countries and particularly in Norway. We find relatively few cohabiters in Central and Eastern Europe classified as *refusing marriage* (i.e. not having marriage plans and

considering marriage outdated), with the exception of Bulgaria. By contrast, a considerable proportion of cohabiters in Central and Eastern Europe are classified as “*conformists*”, ranging from 29% in Russia to 43% in Lithuania. In Western and Northern Europe this group is very small.

With regard to other predictors and correlates of fertility intentions, it is particularly noteworthy that current cohabiters in Central and Eastern Europe are more likely to be divorced and have either own biological children with a former partner or stepchildren from their current partner than their counterparts in Western and Northern Europe. Russia clearly stands out with about one third of cohabiters being divorced from a previous partner, 52% having children from a prior union, and 45% having stepchildren.

## MULTIVARIATE RESULTS

---

Below, we present results based on a logistic regression model on pooled data on 3,006 cohabiters across Europe. We tested whether fertility intentions are associated with different types of cohabitation, controlling for a number of precursors and correlates of intentions to have a child and the country of residence. The results are presented in Table 3.

In a first step, we included only the different types of cohabitation, controlling for country of residence (Model 1). The results show that the likelihood of intending to have a child within three years varies by the type of cohabitation. Across Europe, cohabiters who view cohabitation as a *prelude to marriage* type (=reference category) are most likely to intend having a child in the near future. In line with our hypothesis, viewing cohabitation as a *trial marriage*, significantly decreases the probability of plans to have a child with the current partner. As predicted, to cohabit because one is too poor to marry also makes it more unlikely that cohabiters report positive fertility intentions. In contrast to our hypotheses, we find that cohabiters who cohabit because they either refuse the institution of marriage or consider it

irrelevant to marry are significantly less likely to have short term fertility intentions as well. Conformists do not differ significantly from cohabiters who view cohabitation as a prelude to marriage, although their odds to report positive fertility intentions is lower.

We had formulated hypotheses on the association between the meaning that cohabiters attach to their unions and the likelihood that they intend to have a child in the near future suggesting a hierarchical order: The prelude to marriage type being associated with the highest probability of intentions to have a child, and trial marriage as the cohabitation type associated with the lowest probability of fertility intentions. Our findings partially confirm our assumptions. Cohabiters who view cohabitation as a prelude to marriage are indeed most likely to intend having a child in the near future whereas cohabiters who cohabit as a trial marriage are very unlikely to intend having children. Also in line with our expectations, we find conformists to be as likely as cohabiters viewing cohabitation as a prelude to marriage to report intentions to have a child. We find nevertheless all other types of cohabitation to not statistically significant differ from each other in their association to fertility intentions.

Taking France as the reference country we see that cohabiters in Germany, Romania, Lithuania and Russia report significantly less frequently intentions to have a child in the near future whereas cohabiters in Bulgaria significantly more often report fertility intentions. Fertility intention patters in Austria, Hungary and Norway do not differ significantly from the French data.

In a next step we tested whether the association between cohabitation types and fertility intentions is affected by including control variables into the model as well as to examine whether these control variables are associated with intentions to have a child in the near future (Model 2). The results show that the likelihood of fertility intentions is not associated with the educational attainment of the cohabiter but by the occupational status. Cohabiters who are working fulltime at the time of the interview are more likely to report intentions to have a child in the next three years than cohabiters who do not work fulltime.

Whereas the experience of a divorce from any prior union does not affect intentions to have a child with the current partner, the presence of children from prior unions are related to the fertility intentions in the current union. Both own biological children as well as stepchildren reduce the probability of intending to have child. If the own biological child is younger than ten years old, the likelihood of wanting a child with the current partner is higher than if that child is older. The effect of age is non-linear as expected. Every year of age initially increases the odds for positive fertility intentions. It becomes however increasingly unlikely that a cohabiter reports intentions to have a child in the near future after having reached age 35 (not reported) as indicated by the negative effect of age square. Finally, the longer a union has lasted at the time of the interview, the less likely a cohabiter reports intentions to have a child. Including control variables in a model did not change the statistically associations between meaning of cohabitation and fertility intentions (although the size of the effect became a little smaller). This implies that the meaning that cohabiters attach to their unions, influences the likelihood that they intend to have child, net of other covariates that are associated with fertility intentions.

Finally, we tested whether the association between the meaning that cohabiters attach to their unions and the likelihood of intentions to have a child differ across countries. Given the small number of observations of certain types of cohabitation in some countries and the number of interactions it would require to run, we included a dummy variable indicating whether the cohabiter is from Central/Eastern Europe (1= *yes*) and interacted the variable with each type of cohabitation (Model 3). When interaction terms are included, the main effect of cohabitation type on fertility intentions measures only the association between meaning of cohabitation and fertility intentions of the reference group, hence, cohabiters who live in one of the Western and Northern European countries.

The main effect of the dummy variable distinguishing Central and Eastern European cohabiters from Western and Northern European cohabiters is positive but not statistically

significant. Two of the five interaction effects reach statistical significance. Cohabitors in Central and Eastern European countries, who refuse the institution of marriage as being outdated or consider it irrelevant to marry, are more likely to intend having children in the near future than their Western and Northern European counterparts, despite that these types of cohabitation are relatively rare in these countries.

## DISCUSSION

---

This study on 3,006 cohabiters from nine European countries makes a number of important contributions to the field of comparative research on the role of cohabitation in the family formation process. We examine the association between the meaning that cohabiters attach to their unions and the likelihood that they report intentions to have a child within three years.

A key finding of this study is that the various meanings that cohabiters attach to their unions influence short term fertility intentions differently, net of other covariates. This finding confirms prior research emphasizing the importance to account for the heterogeneity of cohabitation (Heuveline & Timberlake, 2004; Kiernan, 2001). Across Europe, cohabiters who view cohabitation as a prelude to marriage are clearly more likely to report positive intentions to have a child than cohabiters in any other cohabitation type.

It might not be surprising that cohabiters who view their union as a trial marriage are less likely to have short term fertility intentions. Any significant investment into the relationship is likely to be postponed – just as marriage – until the relationship proved to have a long term perspective. As we expected, feeling economically deprived discourages cohabiters to form intentions to have a child as well. Seriously considering having a child is postponed – just as marriage – until the economic situation allows proceeding to such expensive enterprises.

In contrast to our theoretical expectations, we find cohabiters who cohabit as a refusal of the institution of marriage or because they consider it irrelevant to marry to be significantly

less likely to intend having a child in the near future. It could be that these cohabiters constitute a selective group that rejects not only marriage but traditional concepts of family life altogether.

An important implication of the study's outcome is that our empirical results support the idea that cohabiter's intention to have a child are still closely associated with plans to get married in the future. We find no empirical support that marriage and childbearing are about to detach completely. In all countries examined, cohabiters with plans to marry, even if they do not hold a particular favorable opinion about the institution of marriage, are the most likely to report intentions to have a child with their partner. This result corroborates prior research that emphasized that union formation and family formation are likely to be strongly intertwined by arguing, that the aspiration of marriage increases the willingness of cohabiters to make relationship specific investments, such as having children, to further strengthen the commitment between the partners (Musick, 2007). From our findings, we conclude that the weakening linkage between marriage and childbearing that has been observed in a vast variety of countries thus does not mean that cohabitation is about to replace marriage. Cohabitation nevertheless seems to be increasingly common as a context where fertility intentions are formed. This is not only the case in countries, where cohabitation is widespread. We namely find that cohabiters who view their union as an alternative to marriage to be more likely to intend having a child when they live in Central and Eastern Europe. Although cohabitation as an alternative to marriage is far from being the predominant meaning of cohabitation in these countries and most cohabiters seem to favour marriage as the context in which their child will grow up, some cohabiters do not attach a specific significance to marriage as a precondition to form intentions to have a child.

Another key result of this study is that, despite the different composition of the cohabiting population by cohabitation type, the way in which a particular meaning of cohabitation is associated with the likelihood to have fertility intentions hardly differs



between Western/ Northern European countries and Central/Eastern European countries.

Across Europe, cohabiters who perceive their union as having a long term perspective, who do not cohabit because they economically cannot afford to marry, who value the institution of marriage and particularly those who plan to marry in the near future, are more likely to intend having a child, regardless of the country context.

We were surprised to find relatively few cohabiters in our Central and Eastern European sample to cohabit because they are too poor to marry. Given that Central and Eastern European countries were facing strong economic deprivation since the end of the Cold war we hypothesized that in these countries economic constraints would play a more significant role in the reasons for cohabitation than individual preferences. One explanation could be that marriage is still universal in these countries and everyone marries, regardless one's financial situation. On the other hand, this finding could at least partially be related to our sample selection. Additional analyses (not reported) show that cohabiters are classified as being too poor to marry and live in a country of Central or Eastern Europe, do more often already have biological children with their partner at the time of the interview and are thus excluded from our analysis. Facing economic hardship thus selects a large proportion of cohabiters in Central and Eastern Europe into (early) non-marital parenthood.

Finally, our study replicates some well established findings in the research on fertility intentions. Full time employment increases the likelihood of having fertility intentions. This suggests that integration as well as consolidation in the labor market and the availability of material resources might make cohabiters feel confident to warrant the step to parenthood. Having children from a prior union decreases the likelihood to report fertility intentions. This finding proposes that realizing own biological offspring is more relevant than confirming the current relationship by having a biological child with a new partner.

We note a number of limitations of the present study. First, we rely on cross-sectional data. Our classification of cohabiters into different types of cohabitation is a snapshot of the

current state of the cohabiting union. Both the meaning of cohabitation and fertility intentions however are dynamic processes and change over the individual life course as well as over the course of an intimate relationship. Measuring the meaning of cohabitation and intentions to have a child at the same point in time, implies that we cannot effectively address processes of selection as well as reverse causality that could be at play. First, individuals who do not intend to have any (more) children could opt for cohabitation as a less traditional living arrangement compared to marriage, the latter union type being normatively stronger associated with having children. Second, cohabiters who want to have children could be more likely to view their current union as a stage towards marriage and thus select themselves into cohabitation types that favor marriage. Finally, intending to have a child could encourage cohabiters to pursue plans to marry. Only longitudinal data could effectively address these issues.

Second, we rely on individual data when measuring the fertility intentions of individuals in cohabiting unions. Although intentions to have a child can be understood as an individual desire that might differ from the partner, in reality they might often incorporate to some extent the view of one's partner on having children (Thomson, 1997). Data on the fertility intentions of both partners would enable us to get a better grasp of dyadic nature of reproductive decision making in cohabiting unions, but couple-level data are unavailable in the *GGSS*.

Finally, although we rely on large scale data, our sample of cohabiters, particularly in the Central and Eastern European countries is rather small and some meanings of cohabitation that we identify are rather marginal. The small number of observations demands some cautiousness in interpreting our results on the role of cohabitation in the family formation process. Although we are aware of the drawbacks of pooling the data of countries that might still vary largely diffusion of cohabitation and its role in the family formation system, we did so in order to increase the statistical power of our analysis. If more countries would be available, multilevel analyses would have enabled us to get a better grasp of the effect of country contexts and account better for the heterogeneity of countries.

We suggest some promising avenues for future research. When the second wave data for the GGP countries will be released, a longitudinal approach could examine the likelihood that cohabiters in the different cohabitation types realize their fertility intentions. Another interesting research question could be whether the conception or birth of a child fosters transitions to marriage or another type of cohabitation differently by “initial” cohabitation types and across various European countries.

Table 1

*An empirical typology of different meanings of cohabitation based on three indicators*

	marital intentions within three years	agreeing that marriage is outdated	feeling economically deprived
prelude to marriage	yes	no	not relevant <sup>1</sup>
trial marriage	no	no	no
too poor to marry	no	no	yes
refusal of marriage	no	yes	not relevant <sup>1</sup>
marriage is irrelevant	no	neither agree nor disagree	not relevant <sup>1</sup>
conformists	yes	yes/neither agree nor disagree	not relevant <sup>1</sup>

*Note:* <sup>1</sup>this indicator is not used to classify respondents in that type of cohabitation

Table 2

*Percent distribution of fertility intention variable, meaning if cohabitation variables, demographic variables: Descriptive Statistics (N=3,006)*

	Western and Northern Europe				Central and Eastern Europe				
	Austria	Germany	France	Norway	Bulgaria	Hungary	Lithuania	Romania	Russia
positive fertility intentions within 3 years	54,5	40,2	58,1	49,8	68,7	64,4	58,8	63,4	54,8
prelude to marriage	30,3	28,1	34,8	11,9	26,1	38,7	31,8	52,0	32,0
trial marriage	14,6	15,9	13,0	30,3	0,0	7,1	2,4	0,0	3,3
too poor to marry	4,1	8,7	12,6	8,8	5,5	0,7	5,6	1,0	13,8
refusal of marriage	16,0	17,3	14,3	15,5	27,5	9,1	8,0	6,1	13,3
marriage is irrelevant	17,9	14,3	14,6	28,3	8,9	6,9	8,9	2,4	8,7
conformist	17,2	15,7	10,6	5,3	32,0	37,4	43,3	38,5	28,8
primary/lower secondary education	5,8	19,8	13,3	17,0	24,8	6,3	10,1	26,3	7,8
upper secondary/post-secondary education	68,6	56,9	44,6	41,0	52,9	69,8	58,2	54,8	60,9
lower/upper tertiary university education.	25,5	23,3	42,2	42,0	22,3	23,9	31,7	19,0	31,4
working full-time	80,2	59,4	71,7	67,9	63,0	78,9	74,1	67,8	76,9
with biological child(ren) from prior union	15,8	11,5	14,7	12,9	24,6	11,9	19,0	26,6	51,8
youngest child <10 yrs	5,5	3,6	4,1	5,3	8,5	5,6	7,4	9,3	16,8
with stepchild(ren)	12,3	9,4	14,3	15,7	19,7	13,0	12,1	23,1	45,6
divorced from any prior partner	9,4	8,5	9,1	8,3	16,7	17,2	12,9	26,8	38,7
mean age at interview (SD)	30,1	29,9	29,5	29,7	30,3	29,8	27,7	31,0	31,7
mean union duration (SD)	4,5	3,5	3,4	3,6	3,8	3,8	2,8	3,7	3,3
female	56,3	46,0	50,9	58,8	40,8	49,6	42,1	47,7	43,7
Total number of observations	471	319	400	429	209	515	268	129	266

*Note:* Table includes weighted percentages and unweighted number of cases

Table 3

*Summary of logistic regression analysis for variables predicting cohabiters' intentions to have a child within three years (N=3,006)*

	Model 1				Model 2				Model 3			
	<i>B</i>	<i>SE (B)</i>	<i>e<sup>B</sup></i>		<i>B</i>	<i>SE (B)</i>	<i>e<sup>B</sup></i>		<i>B</i>	<i>SE (B)</i>	<i>e<sup>B</sup></i>	
prelude to marriage												
trial marriage	-1,40	0,14	0,25	***	-1,41	0,15	0,24	***	-1,41	0,17	0,24	***
too poor to marry	-1,69	0,17	0,18	***	-1,50	0,18	0,22	***	-1,31	0,22	0,27	***
refusal of marriage	-1,76	0,13	0,17	***	-1,64	0,14	0,19	***	-1,65	0,18	0,19	***
marriage is irrelevant	-1,60	0,13	0,20	***	-1,49	0,14	0,23	***	-1,51	0,17	0,22	***
conformist	-0,10	0,11	0,90		-0,08	0,12	0,92		-0,19	0,20	0,82	
low education												
medium education					-0,08	0,14	0,92		-0,07	0,13	0,93	
high education					-0,04	0,15	0,96		0,10	0,15	1,11	
fulltime working					0,29	0,10	1,34	**	0,31	0,10	1,36	**
child from prior union					-1,45	0,19	0,23	***	-1,26	0,18	0,28	***
youngest child prior union <=10 yrs					0,37	0,21	1,45	*	0,34	0,21	1,40	*
partner has children from prior union					-0,66	0,13	0,52	***	-0,52	0,12	0,60	***
divorced					0,06	0,16	1,07		0,03	0,16	1,03	
female					0,17	0,09	1,19	**	0,17	0,09	1,18	*
age (cont.)					0,50	0,05	1,64	***	0,46	0,05	1,59	***
age squared					-0,01	0,00	0,99	***	-0,01	0,00	0,99	***
relationship duration in years (cont.)					-0,06	0,01	0,94	***	-0,06	0,01	0,94	***
Bulgaria	0,45	0,20	1,57	*	0,73	0,22	2,08	**				
Russia	-0,33	0,17	0,72	*	0,33	0,20	1,39					

*Table continues on the next page*

Germany	-0,84	0,17	0,43	***	-0,98	0,18	0,38	***			
France											
Hungary	-0,17	0,15	0,84		-0,36	0,16	0,70	**			
Romania	-0,64	0,22	0,53	**	-0,27	0,25	0,76				
Norway	0,21	0,15	1,24		0,03	0,16	1,03				
Austria	-0,19	0,15	0,83		-0,32	0,16	0,73	*			
Lithuania	-0,44	0,18	0,64	*	-0,39	0,19	0,68	*			
East									0,05	0,16	1,06
East*prelude to marriage											
East*trial marriage									0,24	0,36	1,27
East*too poor to marry									-0,18	0,38	0,84
East*refusal of marriage									0,43	0,28	1,54 *
East*marriage is irrelevant									0,50	0,30	1,65 *
East*conformist									0,18	0,25	1,20

Note: eB = exponentiated B.

\*p < .1. \*\*p < .05. \*\*\*p < .001.

## REFERENCES

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179-211.
- Baizán, P., & Martín-García, T. (2006). Joint determinants of educational enrolment and first birth timing in France and West Germany. *Demosoc Working Paper*, 12.
- Bernhardt, E., & Hoem, B. (1985). Cohabitation and social background: Trends observed for Swedish women born between 1936 and 1960. *European Journal of Population*, 1, 375-395.
- Bianchi, S. M., & Casper, L. M. (2000). American families. *Population Bulletin*, 55, 3-42.
- Billari, F., & Kohler, H.-P. (2004). Patterns of low and lowest-low fertility in Europe. *Population Studies* 58, 161-176.
- Billari, F. C., & Liefbroer, A. C. (2010). Towards a new pattern of transition to adulthood? *Advances in Life Course Research*, 15, 59-75.
- Blossfeld, H.-P., & Huinink, J. (1991). Human capital investments or norms of role transition? How women's schooling and career affect the process of family-formation. *American Journal of Sociology*, 97, 143-168.
- Brown, S. L. (2003). Relationship quality dynamics of cohabiting unions. *Journal of Family Issues*, 24, 583-601.
- Brown, S. L., & Booth, A. (1996). Cohabitation versus marriage: A comparison of relationship quality. *Journal of Marriage and the Family*, 58, 668-678.
- Buber, I., & Prskawetz, A. (2000). Fertility in second unions in Austria: Findings from the Austrian FFS. *Demographic Research*, 3.
- Bumpass, L., & Lu, H. H. (2000). Trends in cohabitation and implications for children's family contexts in the United States. *Population Studies*, 54, 29-41.
- Bumpass, L. L., & Sweet, J. A. (1989). National Estimates of Cohabitation: Cohort levels and union stability. *Demography*, 26, 615-625.
- Carlson, M., McLanahan, S., & England, P. (2004). Union formation in fragile families. *Demography*, 41, 237-261.
- Casper, L. M., & Bianchi, S. M. (2002). *Continuity and change in the American family*. Thousand Oaks, CA: Sage Publications.
- Castro-Martín, T. (2010). Single motherhood and low birthweight in Spain: Narrowing social inequalities in health? *Demographic Research*, 22, 863-889.
- Clarkberg, M. (1999). The Price of Partnering: The Role of Economic Well-Being in Young Adult's First Union Experiences. *Social Forces*, 77, 945-968.
- Clarkberg, M., Stolzenberg, R. M., & Waite, L. J. (1995). Attitudes, values, and entrance into cohabitational versus marital unions. *Social Forces*, 74, 609-632.
- Coontz, S. (2004). The world historical transformation of marriage. *Journal of Marriage and Family*, 66, 974-979.
- Gibson-Davis, C. M. (2009). Money, Marriage, and Children: Testing the Financial Expectations and Family Formation Theory. *Journal of Marriage and Family*, 71, 146-161.
- Gibson-Davis, C. M., Edin, K., & McLanahan, S. (2005). High hopes but even higher expectations: The retreat from marriage among low-income couples. *Journal of Marriage and Family*, 67, 1301-1312.
- Griffith, J., Koo, H. P., & Suchindran, C. M. (1985). Childbearing and family in remarriage. *Demography*, 22, 73-88.



- Heuveline, P., & Timberlake, J. M. (2004). The role of cohabitation in family formation: The United States in comparative perspective. *Journal of Marriage and the Family*, 67, 1214-1230.
- Hiekel, N., Liefbroer, A. C., & Poortman, A.-R. (2012, June 13-16). *The meaning of cohabitation across Europe*. Paper presented at the European Population Conference, Stockholm.
- Hobcraft, J. N., & Kiernan, K. E. (1995). *Becoming a Parent in Europe. Plenary paper for European Population Conference*. Paper presented at the European Population Conference Milan.
- Hoem, J. M. (1986). The impact of education on modern family-union initiation. *European Journal of Population*, 2, 113-133.
- Kalmijn, M. (2011). The influence of men's income and employment on marriage and cohabitation: Testing Oppenheimer's theory in Europe *European Journal of Population*, 27, 269-293.
- Kiernan, K. (2001). The rise of cohabitation and childbearing outside marriage in western Europe *International Journal of Law, Policy and the Family*, 15, 1-21
- Kiernan, K. (2002). Cohabitation in Western Europe. Trends, issues, and implications. In A. Booth & A. C. Crouter (Eds.), *Just living together. Implications of Cohabitation on Families, Children, and Social Policy* (pp. 3-31): Lawrence Erlbaum Associates, Inc.
- Kiernan, K. (2002). The state of European unions: An analysis of partnership formation and dissolution. In M. Macura & G. Beets (Eds.), *Dynamics of fertility and partnership in Europe: insights and lessons from comparative research* (Vol. 1, pp. 57-76). UN New York and Geneva.
- Klijzing, E. (1992). 'Weeding' in the Netherlands: First union disruption among men and women born between 1928 and 1965. *European Sociological Review*, 8, 53-70.
- Kravdal, O. (1997). Wanting a child without a firm commitment to the partner: Interpretations and implications of a common behaviour pattern among Norwegian cohabitants. *European Journal of Population*, 13, 269-298.
- Kravdal, O. (1999). Does marriage require a stronger economic underpinning than informal cohabitation? *Population Studies-a Journal of Demography*, 53, 63-80.
- Laslett, P., Oosterveen, K., & Smith, R. M. (1980). *Bastardy and its comparative history. Studies in the History of Illegitimacy and Marital Nonconformism* London: Edward Arnold.
- Liefbroer, A. C., & Billari, F. C. (2009). Bringing norms back in: A theoretical and empirical discussion of their importance for understanding demographic behaviour. *Population, Space and Place*, 16, 287-305.
- Manning, W. D., & Smock, P. J. (2002). First comes cohabitation and then comes marriage? A research note. *Journal of Family Issues*, 23, 1065-1087.
- Moors, G., & Bernhardt, E. (2009). Splitting Up or Getting Married? Competing Risk Analysis of Transitions Among Cohabiting Couples in Sweden. *Acta Sociologica*, 52, 227-247.
- Musick, K. (2002). Planned and Unplanned Childbearing Among Unmarried Women. *Journal of Marriage and Family*, 64, 915-929.
- Musick, K. (2007). Cohabitation, nonmarital childbearing, and the marriage process. *Demographic Research*, 16.
- Oppenheimer, V. K. (1988). A Theory of Marriage Timing. *American Journal of Sociology*, 94, 563-591.
- Oppenheimer, V. K. (2003). Cohabiting and marriage during young men's career-development process. *Demography*, 40, 127-149.
- Perelli-Harris, B., & Gerber, T. P. (2011). Nonmarital Childbearing in Russia: Second Demographic Transition or Pattern of Disadvantage? *Demography*, 48, 317-342.

- Perelli-Harris, B., Kreyenfeld, M., Sigle-Rushton, W., Keizer, R., Lappegard, T., Jasilioniene, A., Berghammer, C., & Guilio, P. d. (2012). Changes in union status during the transition to parenthood in eleven European countries, 1970s to early 2000s. *Population Studies*, *66*, 167-182.
- Raley, K. R. (2001). Increasing Fertility in Cohabiting Unions: Evidence for the Second Demographic Transition in the United States? *Demography*, *38*, 59-66.
- Sassler, S., & Cunningham, A. (2008). How cohabitators view childbearing. *Sociological Perspectives*, *51*, 3-28.
- Seltzer, J. A. (2004). Cohabitation in the United States and Britain: Demography, kinship, and the future. *Journal of Marriage and the Family*, *66*, 921-928.
- Smock, P., Manning, W., & Porter, M. (2005). Everything's There Except Money: How Money Shapes Decisions to Marry Among Cohabitators. *Journal of Marriage and Family*, *67*, 680-696.
- Sobotka, T., & Toulemon, L. (2008). Changing family and partnership behaviour: Common trends and persistent diversity across Europe. *Demographic Research*, *19*, 85-138.
- Spanier, G. B. (1982). Living together in the eighties. *American Demographics*, *4*, 17-19.
- Thomson, E. (1997). Couple childbearing desires intentions, and births. *Demography*, *34*, 343-354.
- Thomson, E. (2005). Partnership and parenthood: A comparative view of cohabitation, marriage, and childbearing. In A. Booth & A. C. Crouter (Eds.), *The new population problem: Why families in developed countries are shrinking and what it means* (pp. 130-149). Mahwah, N.J.: Lawrence and Erlbaum Associates.
- Thornton, A., Axinn, W. G., & Xie, Y. (2007). *Marriage and cohabitation*. Chicago: Chicago University Press.
- Toulemon, L. (1997). *The fertility of step-families: The impact of childbearing before the current union*. Paper presented at the the annual meeting of the Population Association of America, Washington, DC.
- UNESCO. (2006). *International standard classification of education ISCED 1997*.
- Vikat, A., Beets, G., Billari, F., Bühler, C., Corijn, M., Désesquelles, A., Fokkema, T., MacDonald, A. L., Neyer, G., Pailhé, A., Pinnelli, A., Solaz, A., & Spéder, Z. (2007). Generation and Gender Survey : Towards a better understanding of relationships and processes in the life course. *Demographic Research*, *17*, 389-440
- Vikat, A., Thomson, E., & Hoem, J. M. (1999). Stepfamily fertility in contemporary Sweden: The impact of childbearing before the current union. *Population Studies*, *53*, 211-225.
- Wiik, K. A., Bernhardt, E., & Noack, T. (2009). A Study of Commitment and Relationship Quality in Sweden and Norway. *Journal of Marriage and the Family*, *71*, 465-477.
- Wu, L. L., Bumpass, L. L., & Musick, K. (2001). Historical and life course trajectories of nonmarital childbearing, *Out of Wedlock: Causes and Consequences of Nonmarital Fertility* (pp. 3-48). New York: Russell Sage Foundation.