

# The Influence of Regional Context on Childbearing in Cohabitation in Europe

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## Objective

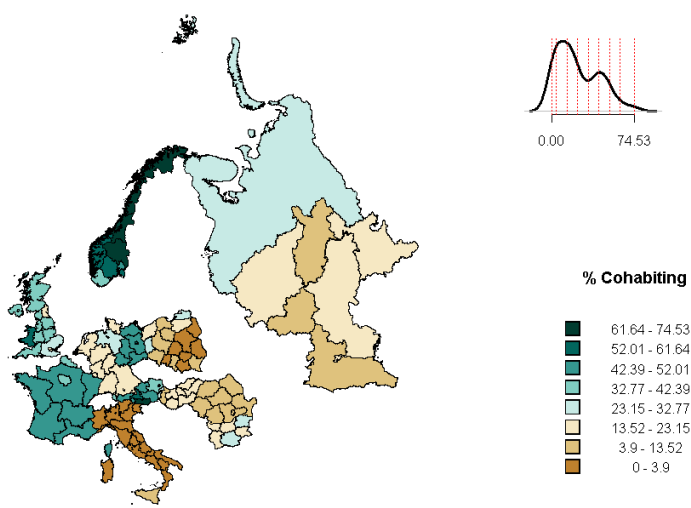
Premarital cohabitation and transition to parenthood within cohabiting unions have increasingly gained ground in Europe (Surkyn and Lesthaeghe 2004). However, patterns of union formation and childbearing have developed along different trajectories across countries where an array of social, economic, and ideational forces has produced variation over time and space (Perelli-Harris et al. forthcoming). This calls for research on the interrelationship between contextual factors on cultural norms and attitudes and family formation. Value orientations of the social context have been proved to play a crucial role in demographic decision making (Lesthaeghe, 1980). Research by Surkyn and Lesthaeghe (2004), for instance, provides support for a close link between value orientations and childbearing within cohabitation.

In this paper, we investigate the influence of regional context on childbearing in cohabitation in Europe. We emphasis' cultural values such as gender egalitarianism, family values, secularism, and also attitudes towards general trust in a society. While Surkyn and Lesthaeghe's (2004) study was restricted to data from the third wave of the European Value Survey (with small sample sizes and limitations of having only cross-sectional information), we have access to a much wider sample and possess detailed retrospective information on the birth histories. Making use of a multilevel approach, we focus on the transition to parenthood and explore whether the first birth within a relationship occurs within cohabitation or marriage. As far as we know this is the first time such study on the interrelationship between contextual conditions and fertility within cohabitation is carried out at the regional level covering a large number of European countries.

## Hypotheses and regional indicators

There is quite extensive regional variation in childbearing within cohabitation which is illustrated in figure 1. The data we are using covering the time period 2003-2008. There are not only variations between countries, but also between regions within a country. Countries with high regional variation include Russia, Poland and Norway.

*Figure 1: Regional variation in Childbearing in Cohabitation (First Births)<sup>1</sup>*

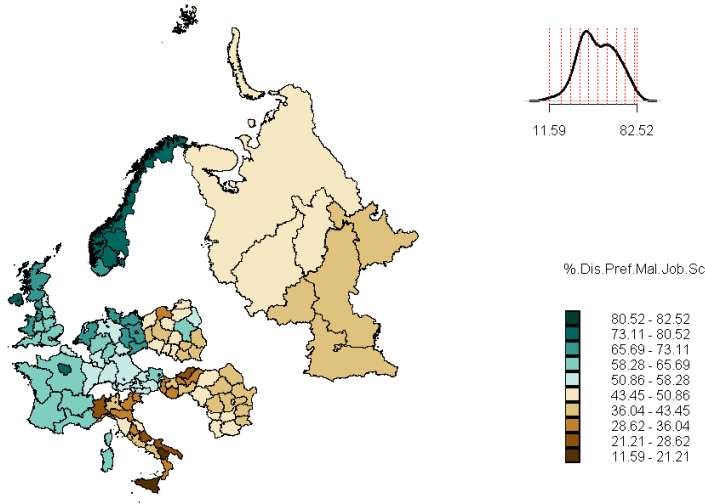


<sup>1</sup> All maps in this paper are based on a standard deviation categorization, with values above the mean in green shades and below the mean in brown shades.

In order to explain the regional variation in childbearing within cohabitation we have created several measurements based on cultural values and attitudes in a region. The value orientations considered in our study are the following: general trust in the society; prevalence of a male breadwinner model orientation; agreement with marriage being an outdated institution; approval of non-married partners cohabiting; and religiosity.

Our motivation to include information on general trust is that in most of the observed countries the legal implications of childbearing within cohabitation are still very different to childbearing within marriage (Perelli-Harris and Sánchez Gassen, 2011). This includes rights of the non-married fathers and mothers as well as rights of the children. For example, after union dissolution former cohabiting partners have compared to divorced partners less legal possibilities to secure e.g. financial support from the former partner for rearing obligations of the common child. Children born outside of marriage usually also have a weaker status in terms of inheritance rights<sup>2</sup>. This implies that cohabiting partner have less legal means available to secure their rights, but have to trust each other that e.g. in the case of a union dissolution they are able to find an arrangement which is acceptable for both partners and not endangering the well-being of the child. We believe that in high-trust societies persons are more likely to trust their partner and get a child within cohabitation, compared to low-trust societies, where people might prefer to do this within marriage as a legally binding arrangement. In order to measure the “General trust in other members of the society”, we have created an index that is based on a question dealing with general trust, where people could indicate on a scale of ten answer categories, whether one can generally trust most other people or whether one cannot be to careful. We expect that children are more likely to be born within cohabitation in regions that score high on general trust in other members of the society.

Figure 2: Regional variation in Gender Egalitarianism - Share disagreeing that men should be given preference in the labour market if jobs are scarce



The gender dimension of economic independence should be crucial in directing fertility in cohabitation. In an environment, where the male-breadwinner ideal is very prevalent, women might be economically dependent on kin-relations. It is likely that this is very different in a job market, where women and men have practically equal employment chances. In such an environment women might be less reliant on kin-relations in supplying themselves and their offspring with necessary assets. As a

<sup>2</sup> However, there is quite some dynamic in this field as with increasing numbers of cohabiting couples and union dissolutions of cohabiters with children legislative bodies are under pressure to privatize the potential financial burden occurring from such behavior (Krause, 1976). Measures include legislation, which grants cohabiting partners certain rights depending of the length of time period they have been cohabiting and whether they have common children (Perelli-Harris and Sánchez Gassen, 2011).

result, marriage might be less important as a strategy to ensure access to financial assets. In short, one could argue that in societies with strong social norms that women should rather not be involved in public sphere issues such as gainful employment, but take over obligations in the private sphere, many women might be more economically dependent on men. This might have repercussions on marriage decisions and childbearing in cohabitation. We have therefore created a measurement about gender egalitarianism and the “Perceptions on the economic independence of men and women”. Figure 2 shows that there is extensive regional variation of gender egalitarianism. We can expect that children are more likely to be born in cohabitation in regions that score high on perception on economic independence of men and women.

We have also created a set of measurements to capture the “Acceptability of non-marital relationships”. First, we expect that children are more likely to be born in cohabitation in regions, where a high share of people thinks that marriage is an obsolete institution. We therefore include a variable that contains information on whether people think that marriage is an outdated institution. Second, we expect that children are less likely to be born in cohabitation in regions with lower acceptance of people living together without being married. In order to test this hypothesis we consider a variable that contains information on whether people think it is alright for people to live together without being married. Third, we anticipate that children are less likely to be born in cohabitation in regions that score high on attitudes that children should not be born outside marriage; we propose a variable that contains information about whether people accept of children being born outside marriage to verify this expectation.

Last, we have considered religiousness, as there has been historically a strong link between religion and marriage. In many areas of Europe marriage was a religious act, in which the state played little role. This only changed when a number of states introduced civil marriage. Particularly the Catholic Church still poses strong pressure on premarital sexual intercourse and non-marital cohabitation. Therefore, we believe, that in a region, where religious values are still wide-spread, people might be more likely to marry prior to conception or childbirth. We have thus created an index of “Religiosity” where we use information about the percentage that does not belong to any religious denomination. We expect that children are more likely to be born in cohabitation in regions where more people do not belong to any religious denomination.

## Data and Method

We use data from 12 countries across Europe which has been subdivided in 166 sub-national regions. This data is obtained from the Generations and Gender Survey (GGS) for Austria, Bulgaria, France, Hungary, Italy, Norway, Poland, Romania, and Russia which consists of national panel surveys. For the Netherlands we use the Family and Fertility Survey (FFS), for the UK we use data from the British Household Panel Survey (BHPS) and for Germany the first wave of the “Panel Analysis of Intimate Relationships and Family Dynamics” (pairfam). The contextual value data has been derived from the following surveys: European Social Survey (Wave 1-4, collected biannual between 2002 and 2008); European Value Survey (Wave 3 from 1999, Wave 4 from 2008); Generations and Gender Survey (Wave 1 collected between 2001 and 2010). We can benefit from the fact, that there is a large overlap in the value questions posed in these three surveys. This allows us to pool together the data from these different surveys in order to increase the number of responses available at the regional level. Extracting the value data data, we apply design weights, if they are available.

We employed a logistic multi-level regression model with random intercept, because both our hypotheses and our data are hierarchically structured (individuals live in different regions) and because we treat our dependent variable, the childbearing in cohabitation vs. marriage, as dichotomous (Agresti 2002). Multi-level models allow us to detect the effect of the context on individual behaviour as well as to identify the macro-characteristics which are mainly responsible for the contextual effect. In these models the clustering of observations is seen as an intrinsic characteristic of the population and is explicitly considered in the analysis.

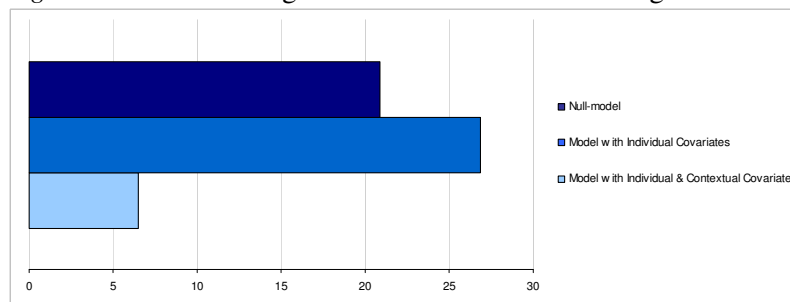
We follow an empirical strategy consisting of three steps. First, we estimate the so-called null model (which does not include any contextual or individual-level covariates) to test whether our data do or do not require a multilevel analysis. Second, we estimate a model with only first- (i.e. individual-) level variables, so as to better see in which direction, and, if significant, how strongly,

they act. Finally, we estimate a larger model, including both first- and second- (i.e. regional-) level variables so as to be able to interpret the variability associated with the context.

### Preliminary Results

Our results show that contextual cultural values and attitudes play a role in whether children are born within cohabitation. As figure 3 demonstrates, the contextual cultural values and attitudes explain a significant part of the variation in childbearing within cohabitation across Europe. When both the individual-level and regional-level covariates are introduced in the model there is only 6,5% of the total variation that remains. In the unconditional (null) model 20,9% of the total variation were due to regional variation, while standardizing for individual characteristics the regional variation increased to 26,9%.

Figure 3: Models of Regional Variation in Childbearing in Cohabitation



Note: The figure displays the intra-class correlation of the three models; namely how much of the total unexplained variation in fertility in cohabitation is due to the regional context.

Looking at the different contextual measurement in table 1 it is clear that both general trusts in other members of the society and gender egalitarianism is associated with childbearing in cohabitation. That is, children are more likely to be born in cohabitation when they are born in regions where there higher general trust and when they are born in regions where there is higher level of gender egalitarianism. Also, more acceptances of non-marital relationships are positively associated with childbearing in cohabitation as well as share of people without religious denomination, but there is not very much difference.

Table 1: Contextual factors affecting childbearing in cohabitation

	OR
General trust in other members of the society	1.24 <sup>#</sup>
Perceptions on the economic independence of men and women	2.22 <sup>***</sup>
Perception that marriage is an outdated institution	1.06 <sup>***</sup>
Disagree that it is alright for people to live together without being married	0.66
Disagree that it is alright that children are born outside marriage	0.68 <sup>#</sup>
Religious denomination	1.01 <sup>#</sup>

Note: <sup>#</sup>p<0.1 \*p<.05 \*\*p<.01 \*\*\*p<.001. Controlled for: respondent's gender, age at first birth, educational level, highest level of education achieved before 1<sup>st</sup> birth, and social background; see Appendix 1.

In the next steps we will expand the preliminary analysis in two ways. First, we will add more contextual factors such as employment level, especially female employment level. Second, we will further explore the interplay between regional context and childbearing within cohabitation for people with different socio-economic background. Childbearing within cohabitation has been found to have a negative educational gradient across Europe (Perelli-Harris et al. 2010), which means that women with lower educational attainment are more likely to have children within cohabitation than women with higher education. It has been argued that the reasons for choosing new family behaviors can be different for individuals with different educational attainment and the reasons can reflect their attitudes, opportunities, or constrains (Perelli-Harris et al. 2010). Thus, we will explore whether the extent to which cultural values and attitudes explain regional variation differs for those individuals with higher education compared to those individuals with lower education.

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## Appendix 1 – Individual factors affecting childbearing in cohabitation. OR

	Without contextual controls	With contextual controls
Female (ref: male)	0.95	0.92
<i>Age at first birth</i>		
15-19	2.63***	2.70***
20-24	1	1
25-29	0.55***	0.53***
30-34	0.48***	0.44***
35-39	0.65***	0.61***
40+	0.43***	0.40***
<i>Educational level</i>		
High	0.37***	0.36***
Medium	0.55***	0.55***
Low	1	1
<i>Highest level of education achieved prior to 1<sup>st</sup> birth</i>		
Before and same year as 1 <sup>st</sup> birth	1	1
After 1 <sup>st</sup> birth	1.09	1.10
<i>Social background (fathers highest education)</i>		
High	0.95	0.92
Medium	1.00	0.99
Low	1	1

Note: # p<0.1 \* p<.05 \*\* p<.01 \*\*\* p<.001.