

Development and determinants of higher-order fertility in Germany and France

Abstract

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Like in most other European countries, the number of women with three or more children has decreased considerably in Germany and France over the last decades (cf. Statistisches Bundesamt 2009; Breton/ Prioux 2005). In both countries, the two-child-family is the predominant family size. Consequently, the transition to the third child marks a crucial point in the fertility careers of women. In addition, family enlargement after the second child has further implications for the replacement level of populations. This is even more true in the light of increasing life-long childlessness. Only recently German family politics have started to acknowledge the (demographic) importance of families with many children (BMFSFJ 2008).

Still, having three or more children continues to be more widely spread in France while both West and East Germany have witnessed a steady decrease towards low numbers of families with many children (BMFSFJ 2003; Kreyenfeld 2003; Toulemon 2003). The aim of this study is to identify the fertility patterns related to higher-order births as a comprehensive Franco-German comparison has not been realized in this respect yet.

From the mere cross-sectional distribution of the number of children per woman in the three regions considered we wonder about the marked differences in the occurrence of higher-order births. Why did pro-natalist policies in France succeed whereas third-birth rates in the equally pro-natalist German Democratic Republic were much lower? On the other hand, why do France and (West) Germany, both representing the conservative welfare regime type, finally differ so much in terms of realized fertility?

In this paper, we tackle the question of the development and determining factors of the transition to higher-order births in Germany and France during the last decades.

The following research questions lead the analyses:

- From a descriptive point of view, what are the differences (or similarities) in the development of higher-order fertility in France, West and East Germany?
- Which determinants exercise a significant impact on the transition to a third birth?

Data and method

French as well as German vital statistics did not provide parity-specific fertility data for all population groups until very recently. Consequently, proper empirical analyses need to be undertaken in this field.

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At the same time, having to rely on survey data opens up the possibility to expand the scope of the study from the descriptive to an explanatory approach. Two main strands of analysis are pursued. First, we give a descriptive account of higher-order birth patterns by generating survival curves and hazard rates by the life table method. We provide survival curves of the first as well as of the second kind (cf. Calot 2001) and estimate third birth hazard rates standardized for bare demographic characteristics (age or age at first birth). For the second part of the analyses, we apply more elaborate event-history-analysis techniques to estimate the determinants of having a third birth.

The investigation is based on two datasets, the French *Etude de l'histoire familiale* 1999 and the German birth survey *Geburten in Deutschland* 2006. The French survey of family history was conducted during the population census 1999 and provides detailed information on the fertility histories of 235 000 women (and 145 000 men) and a large variety of further variables concerning educational attainment, characteristics of the partner, nationality, marital status or sex of previous children (Cassan et al. 2000; INSEE 2002). The German birth survey *Geburten in Deutschland* is limited to female respondents. 12500 women, 9500 women in West and 3000 in East Germany, were asked about their fertility histories and some further variables were collected, too. We provide separate analyses for West and East Germany as far as possible.

Hypotheses

Concerning the development of the proportions of women with three or more children, one would expect that the “secular fertility decline” affected all regions in a similar manner. However, there is reason to believe that family policies altered this trend in different ways in the three regions compared. On the one hand, French family policies have traditionally been directed towards the third child. Also East German policies were “pro-natalist policies” after the reforms of the 1970s and they particularly aimed at higher-order births. West Germany’s family policies, on the other hand, never had a clear pro-natalist orientation and, in contrast to both France and the former German Democratic Republic, never had a clear orientation towards stimulating third births. Against this background, one would expect that third birth rates declined most rapidly in Western Germany where no policies were designed to favour the third child.

The subsequent analyses will address the determinants of third birth rates in the three regions. The analysis is rooted in welfare state research (cf. Esping-Andersen 1990, 1999; Lessenich/ Ostner 1995; Ostner 1995) which tries to explain fertility behaviour through institutional regulations. Particular attention is given to the impact of educational attainment on the transition to the third child. This nexus might be shaped by welfare state regulations.

According to human capital theory (cf. Becker 1993), economic strength of the male partner (measured by his high educational attainment) is needed to support a family with many children in a country like Germany that offers poor childcare infrastructure and thus hinders that both parents work full-time. In the German case, we therefore assume that a positive effect of a high partner’s

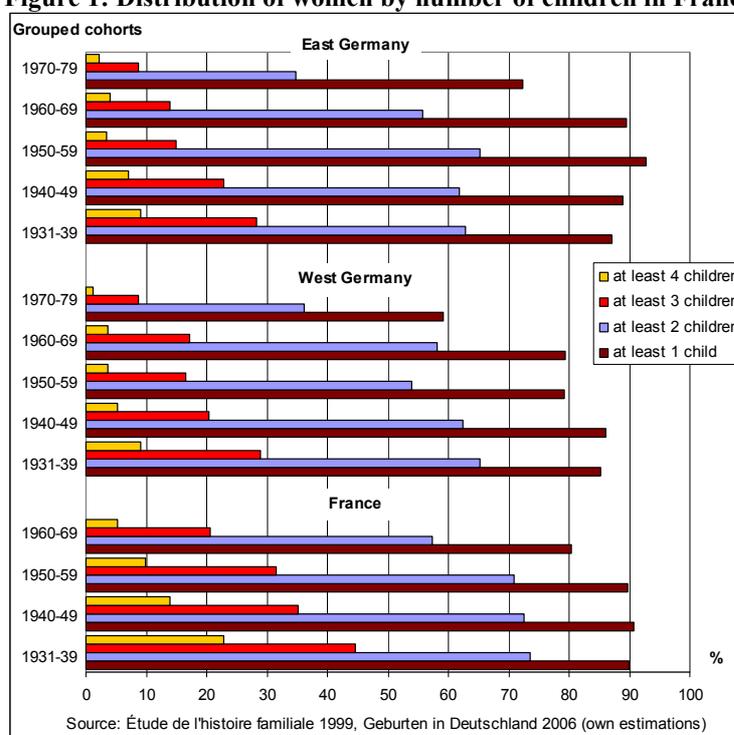
educational level on the risk of having a third birth will weaken the effect of the woman's educational attainment (cf. Kreyenfeld 2002 on the transition to second birth).

Due to the institutional framework of a conservative welfare regime, the general mechanisms of the male-breadwinner model are likely to operate in France, too. But strategies of combining work and a family life in a household with more than two children are also possible. In such a scenario, a high educational level of the partner is less important for supporting a family with many children. As it is generally easier to reconcile work and family life, it is assumed that the women's educational effects persist even after controlling for the partner's characteristics.

Results

The descriptive results support the expected downward trend in higher-order fertility, but show quite different developments in the three regions considered.

Figure 1: Distribution of women by number of children in France, West and East Germany



For France, the continuously high proportion of women with three children over the cohorts, known from previous studies (cf. Daguet 2000; Toulemon 2003), as well as the drastic decreases in the proportions of women with more than three children can be confirmed. The German development strongly differs from this pattern. First, we observe a much lower level of women with three or more children at the starting point of our analyses. While the oldest cohorts observed, born in the 1930s, had three children for an equally high proportion like the French women, they only rarely had more than three children. And this considerably lower proportion as compared to the French cohorts has become almost negligible over the cohorts born in the 1940s to the 1960s. The West German pattern is marked by a slow decrease in third births and an increase in lifelong childlessness, whereas the East German

sample shows a slightly more pronounced decrease in third births with, at the same time, much higher proportions of women with one or two children.

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