ICPSR Historical Demography Summer Course 2006 Project Report

MIGRATION and FERTILITY in SART

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Introduction
This project focuses on the marital fertility patterns of native and immigrant women in the Belgian village of Sart during (1850-1875) and after (1875-1900) the fertility decline.

Hypothesis
We believe that the fertility behaviour of rural and urban migrant women was not the same as that of native women due to regional variations in the timing of the fertility decline. In particular, we believe that this decline was first experienced by urban migrants because urban regions were pioneers in the fertility decline.

Sources and Methods
The SART-Database, constructed by George Alter et al., which is based on the communal population registers is the basis for this analysis. It contains both cross-sectional and continuous information about migration and vital events for individuals within households for the time period 1800-1900.

To test the hypothesis the methods used were: cross-tabulations, Kaplan-Meier survival curves, log rank test to analyse the equality of the survival function, Cox regressions, Schoenfeld residual analysis.

The following variables were used in the multivariate analysis:
- Place of birth: Sart, rural outside Sart, urban outside Sart
- Period: 1850-1875, 1875-1900
- Occupation of women: agricultural, non agricultural, not declared, housewife
- Occupation of husbands: agricultural, non agricultural, not declared
- Parity
- Age at each child birth

Results
- The Kaplan-Meier survival curves showed evidence that the fertility behaviour of rural and urban migrant women in both time periods was different from the fertility behaviour of women born in Sart.
- These findings were contradicted by the results of the Cox regression. In fact, what was driving these effects was not the place of birth, but that these three groups of women had different age structures.
- The Kaplan-Meier survival curves were reconstructed adjusting for age and the differences in the fertility behaviour were no longer obvious. The implications of these survival curves were supported by the multivariate analysis.

Conclusions
We conclude that the fertility behaviour of Sart’s native women is no different than that of women who migrated from rural and urban areas.

Part of the differences could be accounted for by the fact that for migrant women the correct parity may not have been assigned, because it is based on the number of living children at the time they enter observation.

Improved analysis would include observations of migrant women at earlier ages and lower parities.
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• **Occupation of women:** agricultural, non agricultural, not declared, housewife
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