Value Change and Low Fertility across Europe

Amy K. Johnson, Population Studies Center, University of Pennsylvania
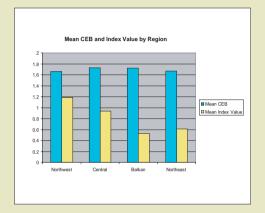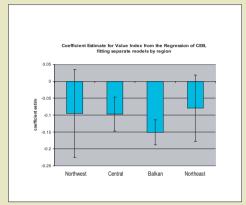
Background

Twenty years ago the Second Demographic Transition (SDT) theory was proposed as a process of value change regarding personal ideals, relationships, and family formation. It appeared that more individualistic, progressive and secular values were beginning to eclipse the older norms and that it was this value change that was at the heart of the declining fertility. The SDT was based mainly upon changes occurring in Northwestern Europe and was anticipated to spread across the continent with certain degrees of variation based on the pre-existing characteristics of the regions.

Research Question

To what extent can we expect this explanatory model to apply to other parts of Europe? In particular, Europe has been the stage for a variety of historical experiences, such that we might expect quite different value trends as we move eastward. This analysis examines an index of key values associated with the SDT in both its distribution across regions of Europe and its role in predicting individual level fertility.

Data and Measures

The European Values Survey provides an opportunity to analyze a wide range of values in relation to fertility from individual level data.

Value Index
This index is asked in reference to children, but I expect it to capture personal values more broadly.

"Here is a list of qualities that children can be encouraged to learn at home. Which, if any, do you consider to be especially important? Please choose up to five."

Value Range: -3 to 3

Value Index =
    independence + imagination + tolerance/respect for others
    - hard work – religious faith – obedience

Fertility is measured as number of children ever born (CEB). Since I am not measuring completed fertility, regressions will control for age of respondent, incorporating age as a quadratic term.

Regions were needed to gain the statistical power of a larger sample size. I created 4 groups of 4-5 countries each that were intended to represent similarities of experience.
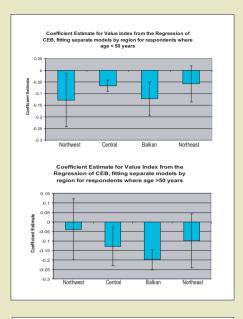   "Northwestern": Netherlands, Sweden, Norway, Denmark, Great Britain
    "Central": Hungary, Czech Republic, Austria, Slovakia
    "Balkan": Bulgaria, Romania, Serbia, Montenegro, Bosnia/Herzegovina
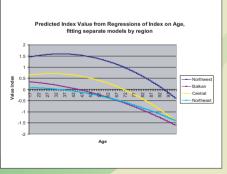   "Northeastern": Poland, Belarus, Lithuania, Latvia, Ukraine

Results

- Assuming values are generally constant across an individual's lifetime, these patterns represent intriguing changes in value orientation across cohorts and by region.

- Fertility patterns are very similar, but value patterns show much more variation, suggesting that these values play different roles in driving fertility across regions.

- Regressions also suggest different relationships between the value index and fertility by region:

- Since presumably it is the younger individuals who are implementing this newer value system, I ran regressions separately for those below and above age 50.
    o   Below age 50: Strong association for the Northwest and Balkan region, smaller association for the Central region.
    o   Above age 50: Very strong association in the Balkan population!

Discussion

- In the Northwest region, and to a lesser extent the Central region, dramatic value changes appear to have rapidly reshaped the broad context of personal ideals.

o   However, these values appear to be on their way down already in these regions.

- These values do not appear to be diffusing very strongly into Northeast Europe or to have the association with lower fertility as in the other regions.

- In the Balkan region where these values are consistently rising yet still rather low, they have had a strong direct association with individual fertility for quite long.

- Curiously, it is in the Balkan region that these values appear to be most directly linked with individual fertility outcomes, and for far more cohorts than our model suggested!

Mean CEB and Index Value by Region

Coefficient Estimate for Value Index from the Regression of CEB, fitting separate models by region

Coefficient Estimate for Value Index from the Regression of CEB, fitting separate models by region for respondents where age < 50 years

Coefficient Estimate for Value Index from the Regression of CEB, fitting separate models by region for respondents where age >50 years

Predicted Index Value from Regressions of Index on Age, fitting separate models by region

Penn Demography