

“The onset of childbearing amongst Mexican women. The role of education  
in the regional contexts”

### **Extended abstract**

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### **Topic description and theoretical focus.**

Fertility transition in Mexico has been characterized by both a rapid decrease among older women and a slow decrease amongst women of younger ages. On women's life course, this feature is perceived through few changes at the beginning of the reproductive span, in spite of the simultaneous extensive expansion of the educational system. Governmental family planning programs have contributed to this condition by paying little attention to young population.

Several studies show that maternity and paternity at young ages can result in adverse consequences for the future development of young people. Amongst other effects, teenage fertility reduces educational opportunities and increases the chances of an unfavorable labor market insertion. Early maternity is usually associated to low schooling and poverty. Moreover, the lack of biological maturity can even endanger the young mother's life. In this sense, the age at the birth of the first child can represent a source of vulnerability in the short and medium term, favoring an accumulation process of disadvantages during the life course. The poorest groups start their reproductive life earlier and show higher fertility levels than other groups. These patterns impact households' poverty through several channels. Early pregnancy is probably both a consequence and an effect of poverty. It favors lower schooling, lower consumption patterns of the mother and the rest of the household's members in order to assign resources to the child's rearing, less participation of the mother in the labor market which decreases her opportunities of contributing to the household's income, and smaller acquisition of social capital due to scarce participation in the community and a greater probability of divorce or single motherhood.

Education is one of the most consistent variables related to fertility. In the case of young women, a higher educational level favors the delay of maternity through several

mechanisms. Amid them, personal development expectations fulfilled through the participation in the labor market causes the postponement of childbearing due to the incompatibility of the mother and the worker roles. However, lack of opportunities, both educationally appropriated and professionally attractive, limits seriously early maternity alternatives of broad sectors of the Mexican population.

However, different educational levels are not expected to reduce fertility in all settings. In highly gender stratified regions, primary schooling does not show an impact on results in fertility (Jejeebhoy, 1995).

Strong regional differences, associated with average income, education, infrastructure, migration patterns and culture have characterized Mexican development. It has been shown that a vicious circle of low human capital and slow growth prevails in some of the Mexican states while others with higher human capital show a dynamic economic performance (Esquivel, López Calva and Vélez, 2003). This pattern explains a growing polarization process between regions in Mexico. Additionally, an index for gender relations (PNUD, 2006) was calculated for all Mexican municipalities showing again strong regional differences in gender relations, not always linked to development. These regional differences lead us to think that the main factors determining the entrance into reproductive life, particularly education, will differ between regions.

The main objective of this paper is to analyze the regional differences in the timing of the onset of childbearing and the role of education in different regional contexts.

### **Data and research methods.**

Our analysis is based on the 2000 Mexican Population Census. The database is a sample of 10% of the population, and provides information about schooling, (enrollment and years of schooling), fertility (children ever born and date of birth of last child) and other social and demographic features about women and their context. The scope of the data offered by the census will allow us to provide a general vision of Mexican fertility and its relationship with education in different regional contexts.

The main hypothesis of this paper is that higher young women's schooling lowers the incentive of having a first birth at early ages, especially in contexts where education and labor opportunities for young women are higher.

In the paper, we develop a descriptive analysis to underline the disparities on economic development and also on education and labor opportunities for young women and men in each of the six regions studied. Also, we estimate multivariate models in order to

measure the effect of schooling on the probability of having experienced maternity in several stages of young women's life.

The analysis will be developed as follows:

1. Regions' characterization. Variables related to the development level and the opportunities for the young people are analyzed: GDP per capita, percentage of the population working in the agricultural sector, percentage of the population living in rural communities, migration (percentage of households with migrants), nuptiality (percentage of non single young population), female participation in the economic activity, female participation in the formal labor market.

2. Description of education levels of women and their relation to men's in the regions. School enrollment and number of years of schooling at ages 12 to 49, and the years of schooling sex ratio from ages 12 to 49 are the main variables.

3. Description of the relationship between schooling and the birth of the first child. Proportion of women who are already mothers, by education level (none, elementary school, high school, college), for the age groups 12 to 14, 15 to 17, 18 to 21, 22 to 24 and 25 to 29 years in each region; average number of children ever born among women who have at least one child, by level of education for the same age groups.

4. Model the probability of bearing a child among young women (15 to 17 years of age and 18 to 21 years). Explanatory variables: for young women (schooling, marital status and co-residence with the parents) and the region. We will pay special attention on avoiding possible inverse causality between education and fertility by limiting our analysis to the following educational categories: without schooling, incomplete elementary school, complete elementary school, and complete middle school and above. We expect that few early pregnancies have impeded the completion of middle school, which should happen before reaching 15 years of age.

### **Expected findings**

We expect to find broad differences in educational levels and in the frequency of early pregnancy between different regions. In contexts where education and labor opportunities for young women are higher, incentives to early pregnancies are expected to be lower. Concerning the relation between education and fertility, we expect a greater impact of young women's schooling on the timing of the onset of the childbearing period in regional contexts with higher educational levels and higher labor opportunities for young women.

