

# Desired and achieved fertility. Evidence from Uruguay

Verónica Amarante – Wanda Cabella

Name: Verónica Amarante

Affiliation: Instituto de Economía, Universidad de la República, Uruguay

Address: Joaquín Requena 1375, Montevideo, Uruguay

Tel.: (5982) 400 04 66/117

Fax: (5982) 408 95 86

E-mail: vero@iecon.ccee.edu.uy

Name: Wanda Cabella

Affiliation: Unidad Multidisciplinaria, Universidad de la República, Uruguay

Address: Constituyente 1502, Piso 4, Montevideo, Uruguay

Tel.: (5982) 413 64 00

Fax: (5982) 410 27 69

E-mail: wanda@fcs.edu.uy

## Abstract

Uruguay is a non developed country facing demographic problems that can be considered similar to those of developed ones. The recent decline of fertility is a subject of concern among researchers and politicians because of its social and demographic consequences. In this context, the gap between desired and achieved fertility appears as a relevant issue, that has begun to be considered in the design of public policies. This paper aims at contributing to that debate through the analysis of the divergence between desired and achieved fertility and its determinants. Using longitudinal data, we also intend to explore changes in desired fertility over time, and to analyse the potential role of ex post rationalization of births, that may be interpreted as adaptive preferences.

## 1. Fertility in Uruguay

Uruguay is not a typical country in the context of Latina America: it went through its first demographic transition during the end of the XIXth century and the beginning of the XXth. By the mid 50s, the country already exhibited low fertility levels (three children per woman). The declining trend in fertility continued from then on, but at a slower path (Pellegrino 2003). Since 2004 the fertility rate is below the replacement level (it was 2.02 in 2007).

Although average fertility has been low for many years, there are important social and geographical differences. These differences are not as big as in other countries of the region (Chackiel, 2004), but many authors have pointed out the process of widening of fertility gaps among different population groups (Varela et al., 2008, Videgain, 2006; Paredes & Varela 2005; Calvo 2002). Less educated women, women in poor households and women with weaker links to the labor market do exhibit higher fertility rates when compared to more advantaged women. Fertility behavior among less educated women does not show important changes during the past years, whereas more educated women experienced a significant decrease in their fertility rates.<sup>1</sup>

---

<sup>1</sup> The reasons behind the decline in fertility are a subject of debate among social scientists. Some theories assert that the expansion of contraception is the main factor explaining fertility reduction, whereas on economic grounds fertility is seen as mainly determined by parent's choices. Authors subscribing to this "family planning gap" view, argue that differences between desired and real fertility are mainly due to

Previous research has stressed the existence of a “double dissatisfaction” among uruguayan women, referring to empirical evidence from household surveys about desired fertility (Peri and Pardo, 2006). This evidence shows that desired fertility is higher than achieved one for higher education women, whereas less educated women tend to have more children than desired. The authors argue that the proportion of women whose desired fertility is higher than the achieved one has increased during the last years.

The recent decline of fertility is a subject of concern among researchers and politicians because of its social and demographic consequences. Public debate has included the discussion of the problems associated with a small and old population, and the future challenge for the social security. In this context, the gap between desired and achieved fertility appears as a relevant issue, that has begun to be considered in the design of public policies. Specifically, the mechanisms to stimulate fertility among those women whose desired number of children is higher than their children, are being discussed nowadays.

The above discussion shows that Uruguay is a non developed country that faces demographic problems that can be considered similar than those of developed countries. But research about desired and achieved fertility, and about the mechanisms that influence both variables, is scarce in the country. This paper aims at contributing to fill this gap through the analysis of the divergence between desired and achieved fertility and its determinants.

We want to assess the impact of key factors on the determination of deviations from desired fertility. Using longitudinal data, we also intend to explore changes in desired fertility over time, and analyse the potential role of ex post rationalization of births, that may be interpreted as adaptive preferences.

## **2. Data and methods**

The analysis is based on longitudinal micro level data, collected in two waves of a household survey. The first wave was conducted in 2001 (*Encuesta sobre Situaciones familiares y desempeños sociales de las mujeres*), and included 1806 women between 25 and 61 years old, living in Montevideo. These women were asked about their actual and desired fertility.

Seven years later, in 2008, a second wave of the survey was conducted. In the first wave, women were asked if they agreed to be interviewed again in the future, and 95% accepted. Nevertheless, some of these women did not provide contact information, so the sample for the second wave included 90% of those included in the first wave. Attrition in the second wave reached 35%, this means that around 1100 women were reinterviewed in 2008. So it is feasible to exploit this longitudinal data set in order to explore changes in desired fertility.

Based on the cross sections for 2001 and 2008, we analyse desired and achieved fertility, and we try to assess the importance of different factors to explain differences among them. The analysis is based both on descriptive statistics and on the econometric estimation of reduced form equations where the dependent variable is the difference between desired and achieved fertility, and the explanatory variables include a wide set of personal and household characteristics. We specifically explore the role of education, as a common finding from previous research is the

---

inadequate contraception, as a consequence of inaccessibility, high costs or lack of knowledge. They stress that fertility levels have dropped most sharply where family planning has increased most dramatically. On the other hand, some authors emphasize the importance of the demand for children and argue that the evolution of fertility is mainly the result of people's choices (Easterlin 1975, Prichett 1994). This view is held mainly by economists, who argue that improving objective conditions for women (raising their income, improving their education, strengthening their positions) is the way of achieving reductions in fertility, that are viewed as a necessary condition for higher economic growth in developing countries.

pattern of decreasing women's desired fertility with increasing education.<sup>2</sup> Unfortunately, the survey does not include men, so our research has to focus on women's desired fertility. We are, therefore, not directly taking into account the role of men in the process of deciding the number of children. Nevertheless, for women living with their couples, we may consider men's educational level.

Research about the change in fertility intentions is scarce, mainly because longitudinal data on desired fertility is not abundant. In this paper we exploit the longitudinal data set, in order to analyse changes in desired fertility among women. The panel data set will be used both to analyse the degree of coherence between fertility intentions and outcomes, and to consider if there exists a review of intentions after time goes by. The existence of an ex post rationalization of births may be interpreted as evidence of the prevalence of adaptive preferences.

## References

- Calvo, J. J. (2002). "Las necesidades básicas insatisfechas en Montevideo". Documento de Trabajo N° 59. Montevideo, Facultad de Ciencias Sociales, Universidad de la República.
- CELADE (2001). "América Latina: fecundidad 1950-2050". *Boletín Demográfico* 68.
- Chackiel, J. and S. Schkolnik .2003.. "Los sectores rezagados en la transición de la fecundidad". Serie *Población y Desarrollo* N° 42. CEPAL/CELADE. Santiago de Chile.
- Niedworok, N. (1994). *Mujer y fecundidad en Uruguay. Factores determinantes directos de la fecundidad y sus implicancias en salud*. Montevideo, Trilce.
- Peri, A. & Pardo, I. 2006. Nueva evidencia sobre la Hipótesis de la Doble Insatisfacción: ¿cuán lejos estamos de que toda la fecundidad sea deseada?, paper presented at II Congreso de la Asociación Latinoamericana de Población, Guadalajara, México, del 3 al 5 de septiembre de 2006 .
- Varela, C., Pollero, R. y Fostik, A. 2008 "La fecundidad: evolución y diferenciales en el comportamiento reproductivo", en C. Varela (coordinadora) *Demografía de una sociedad en transición. La población uruguaya a inicios del siglo XXI.*, pp. 35-68, Trilce, Montevideo.
- Videgain, A.K. 2006. *Análisis de los cambios en la transición a la adultez en mujeres de distintas cohortes en contexto de cambios sociales en el Uruguay contemporáneo*, tesis de maestría presentada al Centro de Estudios Demográficos, Urbanos y Ambientales del Colegio de México.

---

<sup>2</sup> Among other factors, it has been argued that education strengthens the position of women within the family, and this reinforces the effect of education on lower desired fertility.