

Fertility Change in Albania: Evidence from LSMS Survey

Transizione della fecondità in Albania. Un'analisi dai dati LSMS

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Riassunto:

L'indagine LSMS della World Bank del 2002 è la prima a fornire dati individuali per lo studio dell'andamento della fecondità in Albania e a raccogliere anche storie di fecondità retrospettive (per circa 6000 donne sopra i 15 anni di età). L'analisi descrittiva dei dati LSMS conferma ciò che in parte era già conosciuto da dati aggregati, cioè che c'è stato forte calo della fecondità, che è passata dai 5 figli per donna delle coorti degli anni '30 ai 3 di quelle degli anni '60. Le misure trasversali mostrano che questo calo è stato continuo nell'ultimo mezzo secolo, ma che è stato particolarmente forte nell'ultimo decennio (nel periodo successivo al crollo del regime comunista).

L'utilizzo di metodologie non parametriche (curve di Kaplan-Meier) e semi-parametriche (modelli di Cox) ha permesso di evidenziare un notevole calo dei secondi e terzi figli e forte è il ritardo alla nascita del primo figlio.

Keywords: Albania, fertility transition

1. Introduction: what happened to fertility prior the collapse of communism and the need of micro-data

The period of communist rule in Albania from 1950 and 1990 was characterised by a dramatic reduction of fertility (Falkingman & Gjonca, 2001). During those decades strong forces were in place that ideally should have kept fertility high: explicit pronatalistic policies, with high financial incentives for mothers, illegal abortion and non availability of contraception; cultural and traditional values of the patriarchal society, with extended family, universal marriage, childbearing only within the marriage and male dominated society. Nevertheless, the level of fertility decreased in that period from 7 to 3 children per woman, driven mainly by much stronger determinants such as social and economic policies, including universal education, also for women, full female employment and policy reducing infant mortality.

All analyses of the demographic situation before 1990 are based only on aggregate data, simply because individual data did not exist. In this paper we describe, in terms of

quantum and *tempo* of fertility, what happened in the period of social and economic transition of the post-communist era, from 1990 to present. LSMS – Living Standard and Measurement Survey – conducted from 2002 by World Bank is a multidimensional panel survey, collecting information not only on poverty (through income, consumption and job related questions) but also gathering information on detailed individual fertility histories. About 3,600 households were sampled, with about 6,000 female over the age of 15 answering the fertility histories questions.

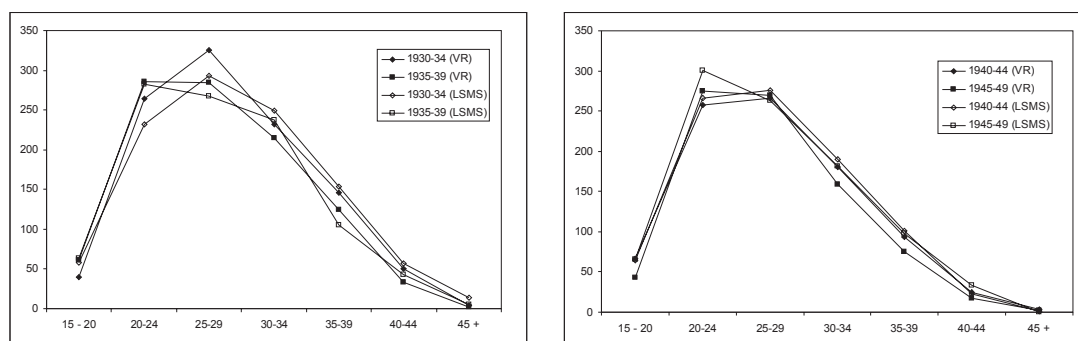
2. 1990 to date: reduction of fertility in the period of social and economic transition

In order to check the accuracy of LSMS survey on fertility data, we compared Cohort Total Fertility rates and Age specific cohort rates from Vital registration data and LSMS. Table 1 shows that from survey data we have higher estimations of total fertility from recent cohorts, but figure 1 shows very similar shapes for age specific cohorts rates (cohorts born during 1930s and 1940s) from the two data sets.

Table 1: Cohort fertility rates from both vital registration and LSMS

Cohorts	1930-34	1935-39	1940-44	1945-49	1950-54	1955-59	1960-64
CFR-VS	5.03	5.03	4.46	4.43	3.60	3.17	2.92
CFR-LSMS	5.28	5.01	4.61	4.71	4.09	3.64	3.27

Figure 1: Age specific cohort rates from Vital registration data and LSMS



From both data sources, a strong reduction of cohort fertility is evident, with a decrease from about 5 children for women born during 1930s to about 3 for those born in the early 1960s. Period fertility measures, estimated for 1980, 1990 and 2000 from LSMS data (table 2) show a continued reduction of fertility. The fertility decline is particularly strong in the most recent period of the 1990s.

Economic and social collapse in the society until 1998 was in fact expected to bring fertility further down. During the 1990s there was a sharp increase in unemployment, affecting more than 28% of women and about 20% of men, and an increased income inequality and poverty, with one out of four Albanians living below the poverty line. The only positive note was that education level has been maintained high, with an increasing proportion of women achieving university level education. In the period of economic

transition there was also a move from “traditional” to “modern” values with a slight increase in cohabitation, a move from extended to nuclear families and an openness of the society towards taboos such as use of contraception, divorce, cohabitation and childbearing outside marriage. The rapid economic change lead to a large emigration of population (about 25% of population, mainly men). All these characteristics form a setting for fertility reduction, completed once we take into consideration also the increased knowledge and availability of contraception and legal abortion.

The phenomenon of recent reduction of fertility can be better understood using appropriate methodology such as non-parametric Kaplan-Meier estimates and semi-parametric Cox regression. From Kaplan-Meier curves (figure 2) of transitions to 1st, 2nd and 3rd birth, it is clear that younger cohorts behave differently from the older ones, showing a delay in entrance into first birth, most evident with the 1970s cohort as expected. The story is similar for the following parities, but the effect is even much stronger, showing sign of a control of fertility. It therefore looks that the reduction in the 2nd and 3rd birth has contributed to recent fertility decline. There are clear signs of postponement of 2nd child, whereas 3rd birth has gone down dramatically.

Some surprising results come out from Cox regression (not shown here). Hazard ratios of 1st birth show that effects of cohort, education, region and place of residence are less significant compared to 2nd and 3rd birth. As expected, younger cohorts have smaller effects. Education is the strongest explanatory variable (supporting previous results); rural/urban and regional residence show the expected results with the risk of earlier entrance in all parities being higher among rural and less developed regions.

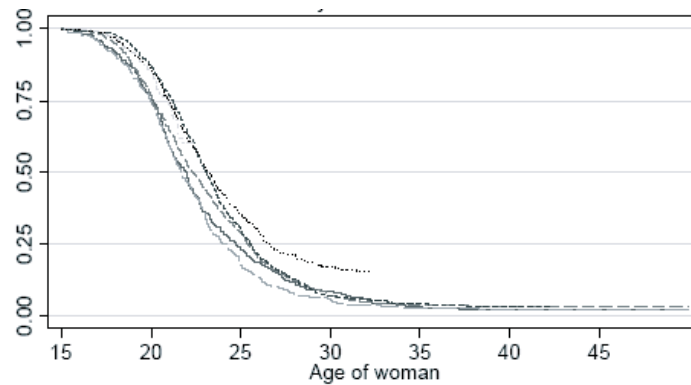
The difference comes to the period effect, because surprisingly the hazard ratios are much higher compared to “prior 1990” for the 1st birth. This counter-intuitive result might be due to the fact that first of all in a still traditional society having one child is still the “norm”. Then, it has to be noticed that not only in 1990 maternity leave increased from 6 months to 1 year, but also that during the 1990s women moved from full employment to increased proportion of housewives (45% of females aged 15 years and over), the large redundancy happened at the beginning of 1990s affecting mostly women. It seems that “traditionalism” or “norms” persist for the onset of family formation, whereas “modernity” and economic constraints impacts the number of children one has in Albania (i.e. effects for 2nd and 3rd births).

Table 2: *Period fertility rates (per thousand) and TFR in 1980-1990 and 2000*

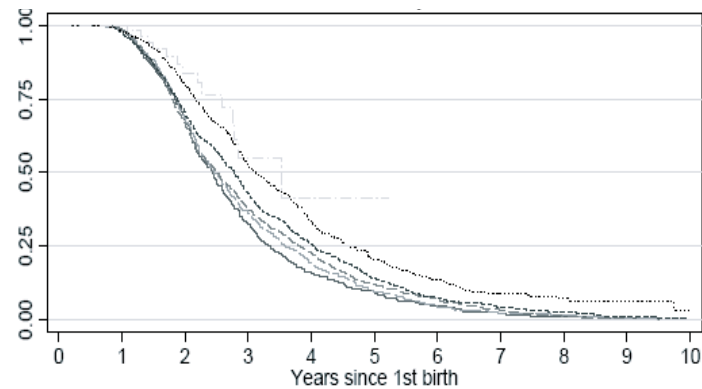
Age groups	1980	1990	2000
15-19	21.9	15.4	16.5
20-24	188.7	167.1	130.7
25-29	223.2	213.6	158.6
30-34	158.5	133.3	91.1
35-39	93.6	55.7	32.9
40-44	32.8	17.4	6.9
45-49	4.7	2.7	0.6
TFR	3.62	3.03	2.19

Figure 2: Kaplan-Meier estimates for 1st, 2nd and 3rd birth.

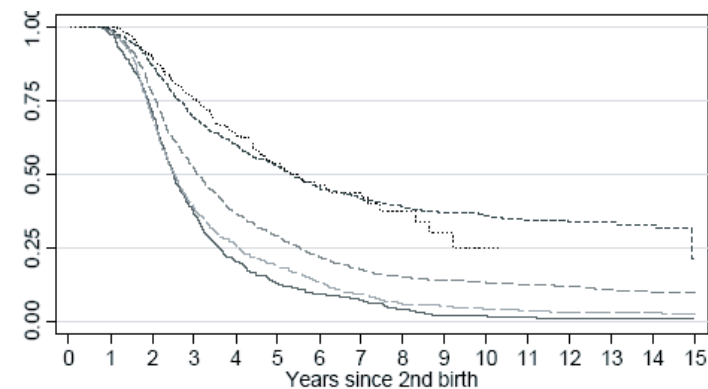
a) 1st birth



b) 2nd birth



c) 3rd birth



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