

High level of sex ratio at birth in the Caucasus. A persistent phenomenon?

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- Extended abstract -

From the mid-1990s, sex ratio at birth in the three countries of the Caucasus (Figure 1) abruptly increased to levels that had so far only been observed in certain regions of India and China where families have a very marked preference for male children. Whereas, up to 1995, sex ratio at birth seemed to be fixed at a level very close to the universal level of 105 males per 100 females, it reached 115 in Azerbaijan, 118 in Georgia, and as high as 120 in Armenia and the phenomenon was all the more striking as it occurred simultaneously in all three countries, in clear contrast to the neighbouring countries. In the 2000s, according to official statistics, levels have stabilised in Azerbaijan at 1.16-1.17, seem to decrease slowly in Armenia (1.14 in 2006) and are subjected to very surprising fluctuations in Georgia (1.11 in 2007 vs 1.28 in 2008). After the end of the Communist era in these three specific countries, all the political, social, and administrative changes of the transition phase produced many disorders and one could obviously start by questioning the reality of the phenomenon in a context where the bureaucratic and statistical instruments of the Soviet period were partially ruined and in the process of being reconstructed. However, a first study managed on fertility surveys has confirmed the reality of this phenomenon (Meslé et al., 2007).

First, results from Georgian and Armenian surveys – the 1999 Reproductive Health survey (RHS) in Georgia and the 2000 Demographic Health survey (DHS) in Armenia – confirmed those from civil registration. Second, the increase in sex ratio appeared to be closely associated to birth order and it seemed that the essence of the recently observed phenomenon relates to 3rd order births. The large difference between the birth orders suggested that if the excess masculinity of births results from the parents' behaviour, it was also significantly associated with the stages of family formation and the concern with having a certain balance of sexes. At the 3rd order, the parity progression ratio varied significantly according to the composition by sex of the siblings already born. More precisely, the probability was much higher when the first two births are female than in any of the three other cases. This disparity in the parity progression ratio in the context of controlled fertility clearly indicated that in some cases son preference is strong enough to result in higher fertility when the composition by sex of children already born is unsatisfactory and lower when the reverse is the case. In the absence of any other information on the sex of the foetus, such a result can't be achieved through contraception or induced abortion. However, higher fertility after the birth of two female children did not in itself have any consequences on the sex of the 3rd child. The most probable hypothesis to explain the excess masculinity of births resulting from son preference is obviously selective induced abortion as has already been shown in India and China, a hypothesis which has indeed been suggested for the Caucasus. The results of the fertility

surveys clearly showed that recourse to induced abortion remained much more frequent than the current figures indicated. In the most recent years, sex ratio at birth has stopped increasing but it remains abnormally high in the three countries. In the same time, data quality of vital statistics is still questionable (Duthé et al., forthcoming). Especially the recent fluctuations of the sex ratio in Georgia make the results very doubtful. Meanwhile, however, results of new surveys have been released: 2005 DHS in Armenia, 2006 DHS in Azerbaijan, 2005 RHS, as well as 2006 and 2009 Gender and Generation Survey (GGS) in Georgia. The aim of this paper is to analyse available data from these surveys and to see if recent trends confirm the first analyses. The study will be extended to Azerbaijan for which survey data are now available. Moreover, the two Georgian GGS will provide information on couples' preferences regarding their children's sex according to their fertility history.

Our analyses will contribute to a better understanding of the reasons for the persistence of a high sex ratio at birth in the three Caucasian countries. They should be used to make national authorities aware of the problem and to consider adequate health and gender policy.

References

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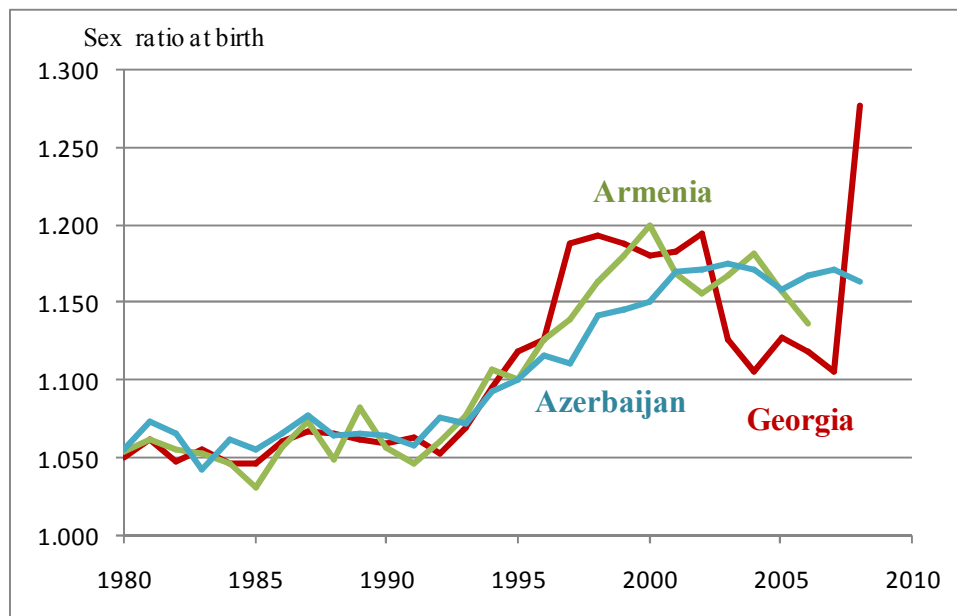


Figure 1. Trends in sex ratio at birth since 1980 in Armenia, Azerbaijan, and Georgia