High Sex Ratio at Birth and Its Implications in China

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Abstract

BACKGROUND

Since 1980s, sex ratio at birth (SRB) in China has been not only high but also increased continuously and dramatically. The reported SRB in China was 107.2 males per 100 females in 1982 (the third national census) and it rose to 116.9 in 2000 (the fifth national census).

Three factors are focused for the escalating in SRB: (1) underreporting of female births, (2) excess female infant mortality and female infanticide, and (3) incidence of prenatal sex determination and sex-selective abortion.

Both international and Chinese scholars and officials have agreed that SRB is higher than normal scale since 1980s, but no agreement has been reached on the relative contribution of these factors. Most international scholars thought mandatory birth control, excess female infant mortality, female infanticide and missing girls are main reasons of high SRB (e.g. Aird 1990; Banister 1992; Hull 1990; Johansson & Nygren 1991; Park & Cho 1995). But Chinese scholars argued that underreporting of female births is the most important factor to explain high SRB(e.g. Zeng et al 1993; Gu 1992; Hong 1993; Gao 1995). Recently, scholars thought prenatal sex determination and sex-selective abortion of female fetuses is the primary factor responsible for high SRB in China (Yuan 2000; SFPC 2000; Chu 2001). Government is more concerned with how to bring such high SRB back to normal level (e.g. SFPC 1993,2000; State Council 2000,2002).

DATA AND RESEARCH METHODS

Data sources: National population census data in 1982, 1990 and 2000; 1% national population survey data in 1987 and 1995; National fertility and contraceptive survey data in 1988; National population and reproductive health survey data in 1997 and 2001; Underreporting population survey between 1990 and 1998 in 1999; and vital statistic data of State Family Planning Committee (SFPC) in 1990s.

Methods: Integration of quantitative and qualitative analysis. (1) Analysis of reported SRBs from data of various surveys and censuses. (2) Annual SRBs estimation by using different

periods of ASMR and model life table base on census data. (3) To estimate sex ratios of age by using life table and comparing them with normal scales. (4) To compare age-sex pattern in 1990 and in 2000 and to estimate sex ratio of missing population by age. (5) Different scenario projections by using various SRB to examine its demographic implications.

THEORETICAL FOCUS AND EXPECTED FINDING

1. Judgment of high and rising SRB by using various methods. The main findings:
   (1) SRB in China is high and is rising since early of 1980s. China experiences high and rising SRB for two decades. The size of males is 21.79 millions more than females between ages 0 to 19 from the 2000 census.
   (2) If couples cannot have their desired number of children, their needs (individual, social, economy, emotion, etc.) from child won't be met, thus high SRB won't be back to normal level.
   (3) Many facts have demonstrated that prenatal sex determination and sex-selective abortion of female fetuses is the primary factor of high SRB in China, even "missing girls" (underreporting) is also one of important elements, because of widely available and accessible of modern technology and traditional experiences for prenatal sex determination and easy abortion (both technology and management system)
   (4) Regional different: SRB is normal in urban but high in rural; SRB is normal in metropolises, in less developed provinces and minority regions, but high in more developed provinces.
   (5) Parity differences: SRB for first child is normal, but high for second child and much higher for third child and above.
2. Demographic implications of high and rising SRB
   (1) Under the same fertility and mortality regimes, if high SRBs maintain for a long period (e.g. 2000-2050), the projections show that the higher the SRB, the smaller the size of total population.
   (2) The rising of SRB will postpone the timing that total population reaches the zero growth.
   (3) High SRB will increase the person-years of labor force because the mandatory retirement age for male is five years later than for that of female in China.
   (4) Marriage tradition will shift from "male market" to "female market". Competition of marriage is expected to be stiff.
   (5) A challenge of provisions for aged maybe bound to follow the high SRB and rapid aging because of large number of old males without descendants.