

Patterns of Low and Lowest-low Fertility in China: A Comparative Study on Hong Kong, Taiwan and Shanghai

Edward Jow-Ching TU¹ ZHANG Xia²

Abstract

Most studies of low and lowest-low fertility are based on developed countries', especially European experiences. Although several developing countries have experienced low and lowest-low fertility, few studies have been made about them. This paper studies the patterns and causes of low and lowest-low fertility in Hong Kong, Taiwan and Shanghai. These three places are forerunners of low and lowest-low fertility in Asia. Shanghai experienced under-replacement fertility in **1971(Are you sure?)**, and Hong Kong and Taiwan followed in 1979 and 1984 respectively. Shanghai and Hong Kong enter lowest-low fertility regime in 1974 and 1987 respectively. At lowest-low level, fertility declined further, Shanghai and Hong Kong's TFRs reached below one after 1998 and 1994 respectively. This research compares findings with the ones from European experiences.

The present study analyzes the patters of fertility declines from two aspects, the effects of postponement of childbearing on period fertility and to what extent 'catching up' effects at later ages would offset the decline at younger ages. These effects of delayed childbearing and recuperation at later ages could make significant contribution to the issue of the limit of low fertility. The present research is based on age- and parity-specific fertility rates for both cohorts (1946-1970) and periods (1970s-2002). To assess the impact of postponement of childbearing on the period fertility, we apply both Bongaarts-Feeney's (1998) and Kohler-Philipov's (2001)

¹ Edward Jow-Ching TU, Associate professor, Division of Social Science, The Hong Kong University of Science & Technology, Tel. No.: Fax No.: Email: soejctu@ust.hk

² ZHANG Xia, PhD student, Division of Social Science, The Hong Kong University of Science & Technology, Tel No.: 852-9874-5958, Email: sozhxia@ust.hk

methods to examine tempo-free total fertility rates. We also developed a model to estimate recuperation effects at later ages from both cohort and period perspective. Age 30 is widely taken as the starting point of recuperation. However, the starting point of recuperation varies over different countries or time. In our model, therefore, the starting age of recuperation is not fixed but subject to the actual situation. Compared with the reference fertility schedule, the exact age at which recuperation starts can be established. At the starting point of recuperation, fertility schedules are divided into two parts, postponement and recuperation. It then allows us to assess cumulated effects of postponement and recuperation respectively and estimate the degree to which postponement effects are compensated by recuperation ones. The comparison of the patterns of low and lowest-low fertility in Hong Kong, Taiwan and Shanghai, furthermore the comparison with European experiences might shed few lights on theoretical concerns of the emergence of low and lowest-low fertility and below-one fertility level.

Main findings in our analyses include: First, postponement of childbearing in Hong Kong, Taiwan, and Shanghai played an important role in fertility decline and has advanced Hong Kong and Shanghai into lowest-low fertility regime **several years earlier (based on what?)**. It is consistent with the argument that postponement of childbearing is a hallmark of the second demographic transition (Lesthaeghe and Moors 2000) and the lowest-low fertility is not as low as period total fertility rate. Second, tempo-free total fertility rates in Hong Kong and Shanghai are below 1.3 in 1990s and even lower than 1.0 in late 1990s in Shanghai. It conflicts with theoretical and empirical studies about low fertility in European countries that low and lowest-low fertility may not decline further below 1.3 (Bongaarts 1999, Foster 2000, Sobotka 2004), due to tempo effects, couples' reference for number of children and biological predisposition etc; Third, parity-specific fertility analysis shows that decline in parities one and two are mainly caused by postponement of childbearing, but not for the other parities. Hong Kong and Shanghai reveal that quantum decline contributes to the decline in parity one to some extent. However, European countries

demonstrate that the parity-specific tempo-free total fertility rates change very little over time (Sobotka 2004); 4) Overall, compensation effects are far from offsetting the decline at younger ages due to postponement of childbearing. Thus, if postponement of childbearing continues, fertility in the three areas may decline further with considerable proportion of childless in Hong Kong and Shanghai. If postponement of childbearing stops, a moderate rise in period fertility might occur but is hardly to achieve higher than 1.3 in Hong Kong and Shanghai. The different patterns of low and lowest-low fertility in the three areas and also in European countries could be related to each of their particular socioeconomic conditions and policies, including recent political and economic uncertainties and pronatalist policies.