

特集：東アジアの家族人口学的変動と家族政策に関する国際比較研究

## The Second Demographic Transition in Singapore: Policy Interventions and Ethnic Differentials\*

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This study examines fertility decline in Singapore for 1975-2010 to assess effects of pro-natal policy interventions. Pro-natal policy developments in Singapore are divided into several phases, and we investigate their impacts on period fertility rates during particular phases. To evaluate quantum improvements underlying increases in period fertility rates between before and after a policy implementation, we modify the Bongaarts-Feeney's tempo adjustment method (1998) to decompose the time series of fertility rates into quantum- and tempo- components. Results uncover ethnic differentials in fertility evolutions not only in the patterns but also in the determinants.

This study examines patterns and demographic factors underlying the fertility decline in Singapore during the 2<sup>nd</sup> demographic transition. Specifically, we observe the total fertility rates by major ethnic groups from 1975 to present, with references to the timing of pro-natal policy implementations. In order to evaluate the effects of policy interventions by detecting changes in total fertility rates, well-known tempo distortion in the period fertility measures should be disentangled. This paper focuses on a period quantum measure derived from a modification of the Bongaarts-Feeney's adjustment formula (1998).

Pro-natal policy developments in Singapore were divided into several phases. In the first phase, the Singapore government introduced a set of population control programs in the mid-1960s to achieve replacement reproduction by 1980, and this anti-natal policy remained effective throughout the early 1980s (Saw 2005: 35-39). These programs were so effective that Singapore's total fertility rate reached 2.08 in 1975 and continued to decline until the mid-1980s. To respond to the prolonged decline, the Singapore government introduced policies in 1984 that aimed to raise the fertility of educated females (Phase II). These policies selectively targeting to the highly educated females did not remain, but the government's population policies shifted from anti-natal to pro-natal. From 1987, the government started to support mothers who have 3<sup>rd</sup> and higher order children by adopting a set of pro-natal policy measures (Phase III). At the same time, eugenics policies and old anti-natalist policies were gradually abolished. While there were no major pro-natal policy developments from 1991 to 1999 (Phase IV), the government further emphasized

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