

[The Large Fall in Global Fertility: A Quantitative Model](#)

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Over the past four decades, fertility rates have fallen dramatically in most middle- and low-income countries around the world. To analyse these developments, we study a quantitative model of endogenous human capital and fertility choice, augmented to allow for endogenously evolving social norms over the number of children. In the model, individuals derive utility from both the quantity and “quality” of children and dislike deviating from the social norm on the number of children, where the norm is a weighted average of the fertility of the previous generation and the replacement level of fertility, which is close to two. Calibrating the model's structural parameters and initial conditions to match key moments in the data for developing countries in 1960, we use the model to simulate the transition to the steady-state levels of fertility and human capital.

In particular, we use information on funding for family-planning programs to simulate the effect of population-control policies, allowing the weight placed on the fertility of the previous generation to decline with the intensity of these programmes, given that the majority of these programmes advocated having two children. We also consider several alternative mechanisms that might explain the fertility decline, including the fall in infant and child mortality and improvements in contraceptive technologies (the second component of the population-control policies). The model allows us to gauge quantitatively the role played by these different channels - human capital accumulation, declining infant mortality, improved control over fertility, and reductions in the social norm on family size - in generating the fertility decline.

We find that the baseline model without norms generates a small decline in fertility. The inclusion of endogenously evolving social norms on fertility can generate a decline in fertility which is twice as large as the decline generated by the baseline mode, but still not enough to replicate the large declines in the data. We find that policies aimed at altering family-size norms significantly accelerate and strengthen the decline in fertility that would have otherwise gradually taken place as economies move to higher levels of human capital, lower levels of infant mortality, and higher supplies of contraceptive technologies.