

The Demographic Transition

Background

The demographic transition is a historical feature in which countries go from very high crude birth and death rates (and so low population growth) to very low crude birth and death rates (and low population growth again). One of the common features of the demographic transition in many countries is a significant rise in the accumulation of human capital at the same time that fertility rates are falling.

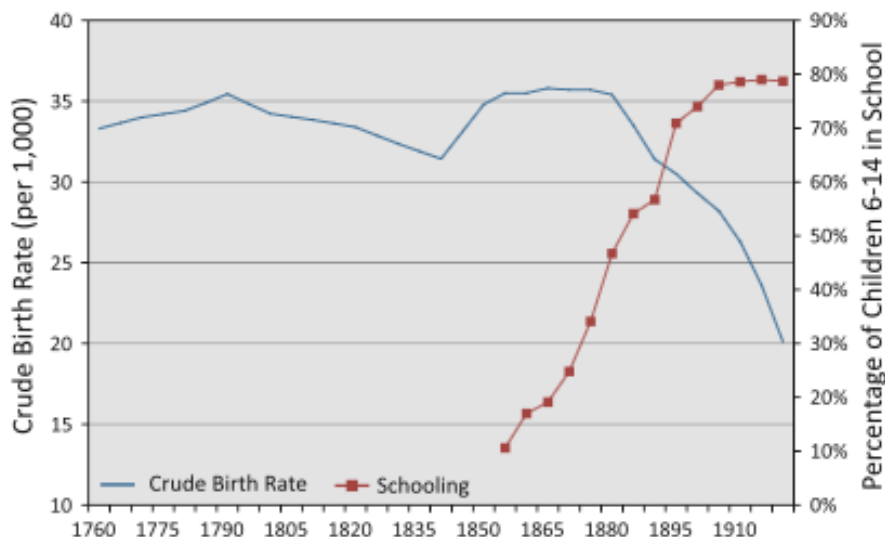


Fig. 3 Investment in human capital and the demographic transition, England, 1730–1935. Sources: Wrigley and Schofield (1981), Flora et al. (1983)

Figure 1: Demographic Transition

Galor (2012) provides the figure above, which shows in a rough way the decline in birth rates associated with the rise in school enrollment in England over the very long term. As he argues in this paper and others, this transition to accumulating human capital (quality) over accumulating children (quantity) helps drive the onset of sustained economic growth. In particular, increases in income per capita begin to be associated with *lower* fertility rates, but higher human capital, rather than *higher* fertility rates, as in a typical Malthusian setting. This allows for sustained growth.

Project

Write down a model of individual fertility that incorporates an explicit decision to provide human capital to children. The time cost of the number of kids needs to be separated from the time cost of the quality of kids, and human capital should matter for income in some way. Show in your model what would drive the decline in fertility (quantity) and increase in human capital (quality).

Rules

You can work on this project in groups of 2-3. I'll grade and assist each group as a whole.