

Assignment 4

Please discuss each question within half a page (with legible font size and line spacing).

1. Go to NSO website and find out the birth rate (per 1000), the death rate (per 1000), rate of natural population increase, and the population growth rate of Thailand. Was the birth rate or the death rate the primary cause of the current trend in the rate of natural increase? (**Note:** Give yourself a little self-respect and do this yourself. Don't just copy off your friends.)
2. Why does a young age distribution make it more difficult for a country to slow its rate of population growth?
3. Why is a well-implemented ban on child labor likely to reduce fertility rates?
4. What is the effect of maternal or paternal 3-year leave with full pay would have on the decision to have children?
5. Suppose that the probability of a certain child taking care of parents (ρ) is NOT identical among children, but rather a function of birth order, i.e. the first born has the higher probability than the later-borns. Let n be the birth order. The function takes the form of:

$$\begin{aligned}\rho &= 1 - 0.25n && \text{where } n < 4 \\ &= 0.2 && \text{where } n \geq 4\end{aligned}$$

Suppose, again, that the parents want to be *at least* 90% certain that they will have one of their children taking care of them. How many children will they choose to have?