



IMMC 2018 Greater China Winter Problem B

(简体 繁體 English)

Education and Growth

Following decades of annual per capita GDP growth of nearly 9%, China is now experiencing substantial changes in the determinants of its economic growth. Historically, the growth of China's economy has been driven by two main forces: a “demographic dividend” (where the working age population has increased as a proportion of the total population) and increases in labor productivity (due to increases in education and the reallocation of labor to more efficient sectors). In recent years, however, changes in the composition of the country's labor force and the deceleration of labor reallocation threaten to slow down economic growth. Therefore, if China hopes to continue to grow its economy at a relatively high rate, the country will need to focus on improving its education to counter the trends in labor size and productivity.

We would like your team to do two things. In the first step, please build an econometric model of economic growth. You may use the suggested dataset in the following link, or use any other data with clear description of data sources.

<https://www.gapminder.org/>

In your model, you may consider the following factors.

- 1) Initial income level, as poorer and richer countries may grow at a different speed.
- 2) Population size.
- 3) Capital endowment.
- 4) Education.
- 5) Other factors that you think are important.

In the second step, we would like you to use this model to predict China's future growth in the next 20 years, depending on the level of education. Particularly, what would be the growth rate or income level in the future? Is an annual economic growth rate (per capita) of about 7% over the next two decades feasible? If you are invited to advise the government, what is your policy suggestion?

Your submission should include a 1-page Summary Sheet and your solution cannot exceed 20 pages for a maximum of 21 pages. The appendices and references should appear at the end of the paper and do not count towards the 20 pages limit.