

Written Exam at the Department of Economics summer 2018

Development Economics

Final Exam

30. May 2018

(3-hour closed book exam)

Answers only in English.

This exam question consists of 3 pages in total

NB: If you fall ill during an examination at Peter Bangsvej, you must contact an invigilator in order to be registered as having fallen ill. In this connection, you must complete a form. Then you submit a blank exam paper and leave the examination. When you arrive home, you must contact your GP and submit a medical report to the Faculty of Social Sciences no later than seven (7) days from the date of the exam.

Be careful not to cheat at exams!

- You cheat at an exam, if during the exam, you:
- Make use of exam aids that are not allowed
- Communicate with or otherwise receive help from other people
- Copy other people's texts without making use of quotation marks and source referencing, so that it may appear to be your own text
- Use the ideas or thoughts of others without making use of source referencing, so it may appear to be your own idea or your thoughts
- Or if you otherwise violate the rules that apply to the exam

Problem A

Please provide short answers to the following questions and statements:

1. In comparing levels of development across countries: What is the difference between using the HDI index (Human Development Index) and GDP per capita?
2. Please explain how it is possible to argue that
 - 2.1. Global inequality has increased from around 1980 to around 2000
 - 2.2. Global inequality has decreased from around 1980 to around 2000
 - 2.3. Global inequality has been roughly constant from around 1980 to around 2000
3. Please explain how Robert Allen estimates global least cost food poverty lines
4. Please define and explain development accounting
5. Consider a country where mortality is the key driver of desired family size. (i) Why would mortality affect optimal fertility? (b) What policy advise (provide two examples) would be relevant in the country if one would like to bring down fertility.
6. Please sketch or draw two simple growth models in which a temporary inflow of foreign aid may have permanent effects on the level of income per capita
7. Please, explain what debt overhang is.

Problem B

Human capital in the form of education is closely linked to economic development.

B1: Please illustrate and discuss the anticipated impact of human capital on GDP per capita both in the short run, using growth accounting, and in the long run, based on a Solow-model with exogenous human capital formation.

B2: Please explain how the return to schooling can be estimated using (a) micro data on individual earnings and (b) macro data on average schooling and GDP per capita. Describe the differences that are obtained using micro and macro data, respectively, to estimate the return to schooling and give possible explanations for the discrepancy.

B3: Please explain how Nicolai Kaarsen (Cross-country differences in the quality of schooling. *Journal of Development Economics*, 107, 215-224. 2014) incorporates the quality of schooling into a development accounting exercise and describe how this change in the accounting affects the results, relative to an accounting that does not include quality of schooling.

Problem C

Climate may influence long-run development outcomes in a variety of ways.

C1: Please, provide a hypothesis of why climate may affect long-run development via institutional developments and how tests have been constructed to test the hypothesis.

C2: Explain how the answer to Q1 relates to the so-called “income view” on health-income differences across countries. (*Hint*: you may wish to use a diagram drawn in (h,y) space, involving a schedule labeled $y(h)$ and one labelled $h(y)$, to structure your reply).

C3: What is the “health view” on health-income differences across countries?

C4: A reason why health may influence productivity is simply that healthier individuals can exert more on-the-job effort. (a) Explain how one may obtain a measure of health capital; (b) how to use it to assess the economic importance of health by way of development accounting and (c) how big a fraction of existing worldwide differences in labor productivity that can be accounted for differences in health.