

Course name:	Intermediate Development Economics
Course code:	EC2303
Type of exam:	Resit Exam
Examiner:	Ingvild Almås, Konrad Burchardi, Mitch Downey
Number of credits:	7.5
Date of exam:	7th of December 2019
Examination time:	9:00-12:00
Aids:	No aids are allowed.

Write your identification number on each answer sheet (the number stated in the upper right-hand corner on your exam cover).

Start each new question on a new answer sheet.

Explain notions/concepts and symbols. If you think that a question is vaguely formulated, specify the conditions used for solving it. Only legible exams will be marked.

This exam contains TWO sections: Section A and Section B.

Section A contains four questions, each worth 10 points. You have to answer ALL of those four questions.

Section B contains three questions, of which you have to answer ONLY TWO. You can choose which TWO of the three questions in Section B you answer. Each of those questions is worth 20 points. (Do not answer three questions in Section B. If you do so, only the first two questions answered will be marked.)

You can earn a maximum of 80 points on this exam. Your grade for this course is based on the sum of your points in this exam and the points you received for your presentation. For the grade E 45 points are required, for D 50 points, C 60 points, B 75 points and A 90 points.

Your results will be made available on your Ladok account (www.student.ladok.se) within 15 working days from the date of the examination.

Good luck!



Section A

- Question A.1: Explain in short what a causal relationship is. Discuss how this can be detected (by using well-established methods) and how the use of these methods has changed the way research in development economics is done. Link this discussion to the discussion on whether a nutrition-based poverty trap exists.
- Question A.2: What are the UN sustainable development goals? Please mention as many of these as you remember.
- Question A.3: Suppose three colleagues want to evaluate the effects of having health workers visit rural households at their homes. All three conduct experiments. Consider the attached map (see end of exam script). **Colleague 1** looked at 50 villages (triangles) and randomly assigned half of households to receive a visit. **Colleague 2** looked at 100 villages and randomly assigned half of the villages (circles) to receive visits and the other half (x's) to be control. **Colleague 3** looked at 100 villages and randomly assigned half of the villages (squares) to receive visits and the other half (crosses) to be control. Colleague 3 finds that the visits improved health, while Colleagues 1 and 2 find no effects. Assume that the randomization worked well. *In this case, what is the most likely explanation for why Colleague 3 concluded visits are effective while Colleagues 1 and 2 did not?*
- Question A.4: Explain why entrepreneurs might not take up investment opportunities with high average returns in the absence of functioning insurance markets. [5 points]
 Take up for weather insurance has been surprisingly low amongst farmers in developing countries. Explain what aspect of traditional weather insurance products might be responsible for the low take-up, according to Casaburi and Willis (AER, 2018). [5 points]



Section B

Question B.1: In "Democracy Does Cause Growth" (JPE, 2019) Daron Acemoglu, Suresh Naidu, Pascual Restrepo, and James Robinson show evidence that democracy increases economic growth. They provide several potential explanations for why this might be the case, but some remain sceptical.

<u>Use evidence from our lectures</u> to respond to four potential criticisms that argue why we should not expect democracy to increase growth.

- (a) The biggest problem facing developing countries is that the state doesn't provide services (hospitals, education, etc.) in the poorest communities. Switching from a dictatorship to democracy will not solve this problem. [5 points]
- (b) When poor countries democratize, they start trading more with rich countries. Since rich countries are capital abundant and poor countries are labour abundant, there are gains from trade as each country specializes in industries based on its comparative advantage. But a transformation towards trade creates more inequality and therefore more conflict. So switching to democracy can plunge countries into war. [5 points]
- (c) Dictators have stronger control and more power than elected politicians. Thus, to eliminate corruption, we need dictators to impose harsh punishments on corrupt officials. [5 points]
- (d) In developing countries, voters don't know what good policies are. They are distracted and easily swayed by whatever is popular at the moment (especially by influential groups). If we leave voters to decide what policies to implement, they will support bad policies. [5 points]
- Question B.2: (a) Describe how adverse selection might explain why we see high interest and low repayment rates in developing countries' credit markets. [8 points]

Dean Karlan and Jonathan Zinman present in their paper entitled "Observing Unobservables: Identifying Information Asymmetries With A Consumer Credit Field Experiment" (Econometrica, 2009) an empirical strategy that allows to uncover whether adverse selection is present in credit markets.

- (b) Explain how their experimental design allows to test for the presence of adverse selection in credit markets. [7 points]
- (c) State their findings on the presence of adverse selection in credit markets and discuss what you think we learn from these about the importance of adverse selection in credit markets in general.
 [5 points]



Question B.3: Mankiw, Romer and Weil derive in their paper "A Contribution to the Empirics of Economic Growth" the following regression equation explaining long run per capita output Y(t)/L(t) as a function of the initial technology stock A(0), the growth rate of technology g, the population growth rate n, the depreciation rate of physical capital δ , the saving rate in physical capital s_k and the saving rate in human capital s_h . Time is denoted as t.

$$\ln\left[\frac{Y(t)}{L(t)}\right] = \ln A(0) + gt - \frac{\alpha + \beta}{1 - \alpha - \beta}\ln(n + g + \delta) + \frac{\alpha}{1 - \alpha - \beta}\ln(s_k) + \frac{\beta}{1 - \alpha - \beta}\ln(s_h)$$

(a) Explain for each of those variables whether and why it has a positive or negative effect on long-run output per capita. [5 points]

They then obtain data on all variables in the above equation, including data on school enrolment, which they use as a proxy for s_h . They find that the results from running the regression corresponding to the above equation are consistent with what the Solow Model would predict. Adding s_h to an otherwise standard Solow Model results in a positive coefficient on s_h and a substantially higher R².

(b) 'This is strong evidence for the idea that the accumulation of human capital is a main driver of economic growth.' Do you agree with this statement? No points will be awarded without explanation. [8 points]

Hall and Jones present in their 1999 paper an alternative way to quantify the contribution of human capital to economic growth.

(c) Describe their approach, how it differs from the Mankiw, Romer, Weil approach, and their key finding. [7 points]



Figure: Question A.3

