

Course name: Intermediate Development Economics
Course code: EC2303
Examiner: Ingvild Almås and Mich Downey
Number of credits: 7.5 credits
Date of exam: October 31, 2018
Examination time: 3 hours (09:00-12:00)

Examination in Intermediate Development Economics

This exam contains SIX sections: Sections **A**, **B**, **C**, **D1**, **D2** and **E**.

Section A contains three questions, of which you have to answer ONLY TWO. You can choose which TWO of the three questions in Section A you answer. Each of those questions is worth 13 points. (Do not answer three questions in Section A. If you do so, only the first two questions answered will be marked.)

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 13 points. (Do not answer three questions in Section B. If you do so, only the first two questions answered will be marked.)

Section C contains four questions, each worth 6 points. You have to answer ALL of those four questions.

Section D1 contains five questions, of which you have to answer ONLY FOUR. You can choose which FOUR of the five questions in Section D1 you answer. Each of those questions is worth 2 points. (Do not answer five questions in Section D1. If you do so, only the first four questions answered will be marked.)

Section D2 contains five questions, of which you have to answer ONLY FOUR. You can choose which FOUR of the five questions in Section D2 you answer. Each of those questions is worth 2 points. (Do not answer five questions in Section D2. If you do so, only the first four questions answered will be marked.)

Section E contains four questions, each worth 2 points. You should answer ALL of those four questions.

You can earn a maximum of 100 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.

Write your exam identification number on each answer sheet. Use the printed answer sheet for all your answers. Do not answer more than one question on each answer sheet.

If you think that a question is vaguely formulated, specify the conditions used for solving it. Only legible exams will be marked. No aids are allowed.

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 (26 points)

These questions ensure that you understand core concepts of the course. Answer two.

You may write as much as you think is necessary. We expect answer lengths to range from ¼ page to 1 page.

Question A.1: What is a poverty trap? Name one of the most discussed poverty traps. For the one you choose, describe the empirical evidence and whether it suggests that this is indeed a poverty trap.

Question A.2: What is the Gini index? Explain and discuss its theoretical properties.

Question A.3: In the Solow growth model, this expression captures steady state output per worker:

$$y = A^{\frac{2-\alpha}{1-\alpha}} \left(\frac{s}{\delta + n} \right)^{\frac{1}{1-\alpha}}$$

In this model, what are the four ways that steady state output per worker would increase or decrease (answer in words, not mathematical symbols or notation)? For each, give one realistic example of a change that would either increase or decrease output per worker.

Section B (26 points)

These questions ensure that you understand how to approach development policy in a thoughtful and balanced way. Answer two.

You may write as much as you think is necessary. We expect answer lengths to range from ¼ page to 1 page.

Question B.1: What are likely effects (both intended and unintended) of informing parents of young children in India about the returns to education?

Question B.2: What is a community driven development program? What are the potential advantages and disadvantages of this type of program, compared to traditional development programs?

Question B.3: What are likely effects (both intended and unintended) of using electronic procurement processes for government infrastructure contracts?

Section C (24 points)

These questions ensure that you understand the key ideas of causal inference and its role in development and policy. Answer all four.

You may write as much as you think is necessary. We expect answer lengths to range from 1-2 sentences to ½ page.

Question C.1: Explain what a causal effect or causality is.

Question C.2: Why are we interested in causal effects when designing policies?

Question C.3: Suppose an organization creates a program to improve employment outcomes. It keeps track of detailed information about the labor market outcomes of program participants only. 30% of participants have a job, and those with a job earn twice the poverty line (on average). Do we conclude that the program was effective? Do we conclude that the program was ineffective? Why or why not?

Question C.4: Suppose a government implements a nationwide nutrition policy. Three years later, children are healthier. Is this a causal effect/conclusion? Why or why not?

Section D (16 points)

These questions ensure that you know what work has been done in development economics. Answer four questions from Section D1 and four questions from Section D2.

You may write as much as you think is necessary. We expect answer lengths to be 1-3 sentences.

Section D1: Choose four papers. For each, explain the core idea and/or result of the paper in a couple sentences.

Question D.1: Khandelwal, Amit K., Peter K. Schott, and Shang-Jin Wei. "Trade liberalization and embedded institutional reform: Evidence from Chinese exporters." *American Economic Review* 103.6 (2013): 2169-95.

Question D.2: Donaldson, Dave. "Railroads of the Raj: Estimating the impact of transportation infrastructure." *American Economic Review* 108.4-5 (2018): 899-934.

Question D.3: Baird, Sarah, Craig McIntosh, and Berk Özler. "Cash or condition? Evidence from a cash transfer experiment." *The Quarterly Journal of Economics* 126.4 (2011): 1709-1753.

Question D.4: Olken, Benjamin A. "Monitoring corruption: Evidence from a field experiment in Indonesia." *Journal of Political Economy* 115.2 (2007): 200-249.

Question D.5: Duflo, Esther, Pascaline Dupas, and Michael Kremer. "Peer effects, teacher incentives, and the impact of tracking: Evidence from a randomized evaluation in Kenya." *American Economic Review* 101.5 (2011): 1739-74.

Section D2: Choose four papers. For each, provide 1-2 sentences summarizing the methodology or context to answer part (a) and 1-2 sentences summarizing the motivation, relevance, or interpretation to answer part (b).

Question D.6: Jensen (2007) finds that cell phone availability reduces gaps in prices across different markets.

- a) *How did Jensen show this?*
- b) *Why does this matter?*

Question D.7: Callen, Gulzar, Rezaee, and Shapiro (2018) show that agricultural productivity increases the Pakistani government's investments in legal capacity.

- a) *How did Callen, Gulzar, Rezaee, and Shapiro show this?*
- b) *Why does this matter?*

Question D.8: Jensen (2010) shows that people invest in more education when there are jobs that require education.

- a) *How did Jensen show this?*
- b) *Why does this matter?*

Question D.9: Dube and Vargas (2013) show that oil price increases raise conflict; coffee price increases reduce conflict.

- a) *How did Dube and Vargas show this?*
- b) *Why does this matter?*

Question D.10: Almås, Haushofer, and Shapiro (2018) show that income transfers increase spending on foods.

- a) *How did Almås, Haushofer, and Shapiro show this?*
- b) *Why does this matter?*

Section E (8 points)

These are difficult questions. Each is worth two points.

Question E.1: Consider production of a single good in a competitive market economy. Suppose that firms know their own productivity, but that it is not widely known or observable to others. In this context, is it possible that the most productive firms end up with the bulk of production, even though their productivity is not observable to the rest of the economy? Why or why not?

Question E.2: Explain the Kuznets curve. What is the theoretical argument(s) behind the curve? In some data sets the suggested relationship seem to hold up whereas in other data sets it does not. What could be the reasons why we do not see the suggested relationship in some datasets?

Question E.3: What does the Heckscher-Ohlin theory suggest is the root source or cause of comparative advantage? What is the insight of the Stolper-Samuelson theorem?

Question E.4: Consider the following table:

Firm	Year	Process or method of production	Workers	Machines	Output
A	2014	Traditional	4	2	9
B	2014	Traditional	4	2	9
Unused/ unemployed	2014		8	5	
A	2016	Traditional	4	2	12
B	2016	Modern	4	2	15
Unused/ unemployed	2016		8	5	
A	2018	Traditional	2	1	6
B	2018	Modern	8	4	30
Unused/ unemployed	2018		6	4	

Name two ways that total factor productivity could be raised in 2020. Estimate how much you think these changes would raise total output in the economy.