Department:	Economics
Course Code:	EC2303
Exam Type:	Main
Examiner:	Konrad B. Burchardi
Credits:	7.5 credits
Exam Length:	3 hours

Examination in

Intermediate Development Economics

27th of October 2016
9:00am-12:00am

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

Section A contains six questions, each worth 10 points. You have to answer ALL of those six 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 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. If this sum is greater than 100, your final points are 100. 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 sheets for all your answers. Do not answer more than one question on each 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. No aids are allowed.

Results will be made available on your "My Studies" account (www.mitt.su.se) on the 17th of November the latest.

Good luck!

Section A

Question A.1: *Explain what share-cropping contracts are, why they might lead to lower output than fixed rent contracts, and why they might be observed anyway.*

Question A.2: The hypothetical graph (see end of exam script) shows the distribution of the marginal products of capital (MPK) of firms in Sweden and Norway. The mean of the MPK in Norway is 2.86 and in Sweden it is 3.91. The dispersion around the mean is exactly the same in both countries.
(a) Imagine capital cannot flow between Sweden and Norway. `This data is evidence that the national capital stock is allocated more efficiently across firms in Norway than in Sweden.' Is this statement true or false? If false, can you correct the statement? No points will be awarded without explanation.
(b) Now imagine that capital can flow between both countries. Would you expect any capital flows, and if so in which direction? Explain your answer.

Question A.3: Imagine an NGO which operates in post-conflict regions around the world. The NGOs modus operandi is to conduct intensive training programs for local entrepreneurs just after a violent conflict ended. The NGO is now applying for further funding to SIDA, and presents evidence for the effectiveness of their program. In particular, they present data which demonstrates that – in regions where they operate – average household incomes increased by 13 percent over the 5 years after they started their operations. The manager in charge at SIDA concludes: 'That's convincing evidence that this NGO is highly effective.'
Do you agree with him? If yes, please explain why. If not, please explain why and what alternative evidence you would like the NGO to present.

Question A.4: Acemoglu, Johnson and Robinson present data that makes them believe that `institutions' are a driver of long-run economic growth. *Explain their argument.*

Question A.5: In the paper entitled "The Digital Provide: Information (Technology), Market Performance and Welfare in the South Indian Fisheries Sector", Robert Jensen presents the attached figure (see end of exam script). It depicts the daily average price for fish on local markets, and markets are grouped into three regions. Also each sub-figure shows the time at which cell phone towers started operating in each region.
Explain how we can understand the striking pattern in the figure.

Question A.6: *What is the Kuznets Hypothesis? Is there empirical evidence in favor/against it?*

Section B

Question B.1: 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 R^2.

(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]

Question B.2:   Dean Karlan and Jonathan Zinman present in their paper entitled "Observing Unobservables: Identifying Information Asymmetries With A Consumer Credit Field Experiment" an empirical strategy that allows to uncover whether adverse selection is present in credit markets.

(a) Explain how their experimental design allows to test for the presence of adverse selection in credit markets. [5 points]

(b) 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. [7 points]

Another economic situation in which adverse selection is believed to be important is the market for health insurance: individuals with high health risks might be particularly interested in taking up health insurance. Imagine you wanted to provide empirical evidence on the question 'Does adverse selection exist in health insurance markets?' and you could set up a randomised controlled trial to provide such evidence.

(c) Describe your experimental design and how you would analyse the data it generates. [8 points]

Question B.3:   In the paper "Economic Opportunities and Gender Differences in Human Capital: Evidence from India", Robert Jensen presents evidence for the idea that educational investments increase with the perceived returns to education.

(a)   Describe how he tests this hypothesis. [8 points]

He presents the attached table (see end of exam script).

(b)   Please describe why this table makes him believe that the treatment effected the targeted group, and only the targeted group. [8 points]

All "business process outsourcing" (BPO) jobs are `work away from home'.

(c)   `The results in the table suggest that the treatment – for the targeted group – only generated additional jobs away from home, it did not displace existing employment in work away from home.' Is this statement true or false? If false, can you correct the statement? No points will be awarded without explanation. [4 points]
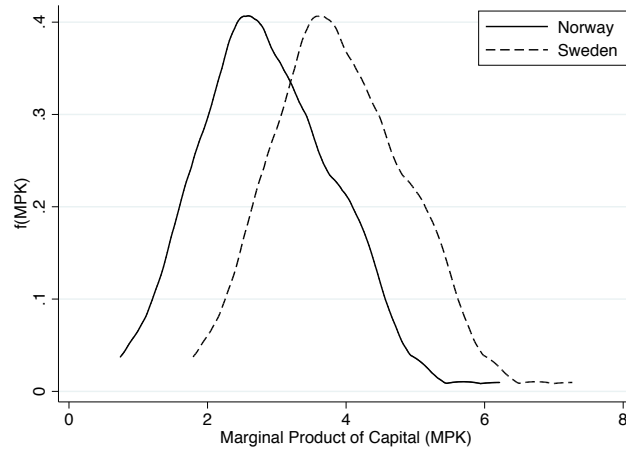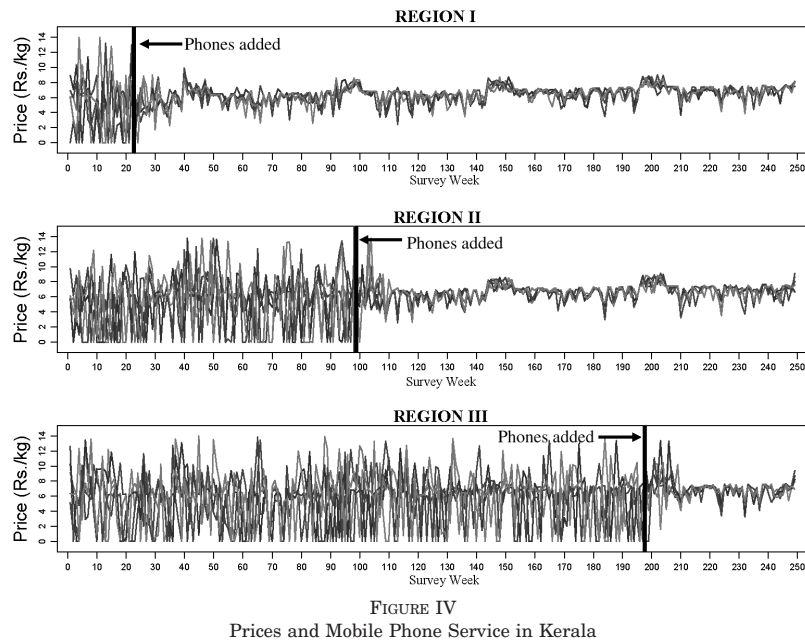
FIGURE IV
Prices and Mobile Phone Service in Kerala

TABLE II
EFFECT OF THE INTERVENTION ON EMPLOYMENT, BY AGE AT ROUND 2

	BPO employment			Works for pay away from home		
	(1) 18–24	(2) 25–44	(3) 45–60	(4) 18–24	(5) 25–44	(6) 45–60
Panel A: Women						
Treatment	0.046***	0.003	∼	0.024**	0.0029	−0.006
	(0.008)	(0.003)		(0.011)	(0.0089)	(0.014)
Observations	1,278	2,233	1,029	1,278	2,233	1,029
Control group mean	0.004	0.002	0.00	0.21	0.24	0.22
R^2	0.022	0.000	∼	0.054	0.001	0.000
Panel B: Men						
Treatment	−0.007	0.002	∼	0.003	0.007	−0.004
	(0.005)	(0.004)		(0.011)	(0.024)	(0.035)
Observations	1,442	2,469	1,104	1,442	2,469	1,104
Control group mean	0.008	0.003	0.00	0.47	0.56	0.52
R^2	0.001	0.000	∼	0.000	0.001	0.000

Notes: Heteroskedasticity-consistent standard errors accounting for clustering at the village level in parentheses. Age ranges are for age at round 2. The dependent variable is an indicator for whether an individual in round 2 had a job in the BPO sector in columns (1)–(3), and whether they worked for pay away from home in round 2 in columns (4)–(6). ∼ indicates that the coefficient could not be estimated because no one in the age*sex category had a BPO job. *Significant at 10% level; **significant at 5% level; *** significant at 1% level.