

Written Exam for the M.Sc. in Economics summer 2011

Advanced Development Economics: Micro Aspects

Final Exam/Master's Course

1 June 2011

(3-hour closed book exam)

Please note that the language used in your exam paper must correspond to the language of the title for which you registered during exam registration. I.e. if you registered for the English title of the course, you must write your exam paper in English. Likewise, if you registered for the Danish title of the course or if you registered for the English title which was followed by "eksamen på dansk" in brackets, you must write your exam paper in Danish.

If you are in doubt about which title you registered for, please see the print of your exam registration from the students' self-service system.

Question 1: Poverty

- (a) Please explain how we can think of total expenditure per person as a measure of well-being.
- (b) Please explain how we can derive an absolute poverty line which is related to total expenditure. Relate the national absolute poverty line to the global poverty line used in Chen and Ravallion (2010).
- (c) Please define the three first FGT poverty-indexes (the headcount index, the poverty gap index and the poverty severity index) and explain the information we get from each of the three indexes. Use the table below (poverty in Vietnam 2004) to explain the poverty measures.

Region	Headcount (%)	Gap (%)	Severity (%)
Vietnam	19.5	4.7	1.7
<i>North West</i>	<i>58.6</i>	<i>19.1</i>	<i>8.0</i>
<i>Northern Mountains</i>	<i>35.4</i>	<i>9.5</i>	<i>3.5</i>
Central Highland	33.1	10.6	4.5
North Central Coast	31.9	8.1	2.9
<i>North East</i>	<i>29.4</i>	<i>7.0</i>	<i>2.4</i>
South Central Coast	19.0	5.1	2.1
Mekong River Delta	15.9	3.0	0.9
Red River Delta	12.1	2.1	0.6
South East	5.4	1.2	0.4

Question 2: Health and Nutrition

Field et al (2009) examine the effects on child schooling of an intensive and repeated distribution of iodine supplements. They look for evidence of improvements in cognitive ability attributable to the intervention by assessing whether children who benefited from supplements in utero exhibit higher rates of grade progression 10 to 14 years later.

- Describe the way iodine deficiencies (IDD) can affect human capital accumulation and labor productivity? Include in the description the link between IDD and gender inequality.
- Based on the table below describe the main results obtained? Remember to comment on the gender dimension.
- What are the two confounding issues of the approach chosen? And are they likely to be valid?

TABLE 3—GRADE ATTAINMENT AND IOC SUPPLEMENTATION IN UTERO (PART I)

	All (1)	Girls (2)	Boys (3)	Binary treatment indicator		
				All (4)	Girls (5)	Boys (6)
Pr(IOC in utero)	0.347 [0.148]**	0.594 [0.170]***	0.190 [0.160]	0.246 [0.114]**	0.429 [0.135]***	0.134 [0.136]
Pr(IOC in utero) × district coverage rate Pr(IOC in utero) _{35t<5}	0.033 [0.159]	0.208 [0.296]	-0.095 [0.210]	0.106 [0.122]	0.223 [0.199]	-0.017 [0.147]
Pr(IOC in utero) _{35t<5} × young mom	-0.055 [0.161]	-0.283 [0.354]	0.080 [0.200]	-0.056 [0.081]	-0.313 [0.180]*	0.121 [0.112]
Age 11	0.377 [0.115]***	0.310 [0.137]**	0.360 [0.132]***	0.437 [0.126]***	0.362 [0.154]**	0.412 [0.147]***
Age 12	1.129 [0.125]***	1.113 [0.162]***	1.115 [0.137]***	1.187 [0.130]***	1.146 [0.176]***	1.170 [0.154]***
Age 13	1.914 [0.143]***	2.062 [0.172]***	1.735 [0.160]***	1.958 [0.148]***	2.079 [0.193]***	1.778 [0.191]***
Fixed effects	District	District	District	District	District	District
Observations	1,395	678	717	1,395	678	717

Question 3: Land Markets and Property Rights

- (a) Describe whether there is a rationale for sharecropping in a full information setting under constant returns to scale?
- (b) Consider a risk-neutral landlord and risk-averse tenant (one-period principal-agent model), where the work effort of the tenant is not observable. Discuss how this may change the conclusion in (a).
- (c) Consider a multi-period principal-agent setting, where the landlord can use the threat of eviction when output is low. Discuss how eviction threats may affect tenant incentives to invest in land.