

May Examination Period 2024

ECN370 Development Economics Duration: 2 hours

## YOU ARE NOT PERMITTED TO READ THE CONTENTS OF THIS QUESTION PAPER UNTIL INSTRUCTED TO DO SO BY AN INVIGILATOR.

The exam consists of two sections, A and B. Section A is worth 25 marks and consists of 5 true or false statements. Section B is worth 75 marks and consists of 3 longer questions.

Answer ALL questions from both sections. Cross out any answers that you do not wish to be marked.

You are permitted to bring 20 x A4 pages of notes into your examination (i.e., 10 double sided pieces of paper). These can be typed or handwritten and can include graphs and images. They can include material from any source. Your notes must be stapled together and include your student ID number and the module code on the first page. You must submit your notes at the end of the examination with your answer booklet.

Non-programmable calculators are permitted in this examination. Please state on your answer book the name and type of machine used. Complete all rough workings in the answer book and cross through any work that is not to be assessed.

Possession of unauthorised material at any time when under examination conditions is an assessment offence and can lead to expulsion from QMUL. Check now to ensure you do not have more than 20 pages of notes. You should also not have mobile phones, smartwatches or unauthorised electronic devices on your person. If you do, raise your hand and give them to an invigilator immediately.

It is also an offence to have any writing of any kind on your person, including on your body. If you are found to have hidden unauthorised material elsewhere, including toilets and cloakrooms, it will be treated as being found in your possession. Unauthorised material found on your mobile phone or other electronic device will be considered an assessment offence. A mobile phone that causes a disruption in the exam is also an assessment offence.

## **Examiners:**

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## Section A (True or False)

Determine whether the following statements are "True" or "False" and provide a brief (maximum 3 sentences) motivation/intuition for your answer based on the theory and evidence discussed during the module. In other words, explain **why** the statement is "True" or "False". Each question is worth 5 marks.

**Q.A1** An agricultural productivity gap (APG) less than one suggests that workers are misallocated across the agricultural and the non-agricultural sectors of the economy.

[5 marks]

**Q.A2** The finding in Cohen and Dupas (2010), that effective coverage goes down if the price of insecticide-treated bed nets goes up, is evidence in favour of cost sharing.

[5 marks]

**Q.A3** Suppose the income distribution in country A and B is  $\{1, 2, 2, 3, 5\}$  and  $\{1, 1, 2, 3, 5\}$ , respectively; and that the poverty line is 2.5. Then, country B is poorer than country A according to the poverty gap indicator.

[5 marks]

Q.A4 The infant industry dilemma suggests that new industries in low-income countries operate on a higher average cost curve than existing industries in middle-income countries.

[5 marks]

**Q.A5** A decrease in the secondary gross enrolment rate from 95% to 90% must mean that fewer pupils of the correct age are attending secondary school.

[5 marks]

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## Section B (Longer Questions)

Q.B1 Social Assistance for Food Security RASKIN is a large social assistance programme that provides transfers of rice to the poor. With an annual budget of US\$1.5 billion, it is Indonesia's largest targeted transfer programme. It targets the poorest 30% of the population on the basis of a proxy-means test. In this question, you are asked to provide an assessment of this programme based on what you have learned about these type of programmes during the module.

a) The programme has been criticized for poor targeting. Partly due to local officials diverging from the official eligibility lists based on proxy-means tests. Research has shown that over 60 % of ineligible households receive rice from the programme. Discuss whether type I or type II error is the primary concern in this setting and whether alternative targeting strategies may be effective in this setting.

[10 marks]

b) Discuss the potential negative implications of providing transfers of rice to the poor instead of providing cash. Illustrate your reasoning in a graph.

[9 marks]

c) Discuss why there may still be arguments for providing transfers of rice for local food security. In particular, explain what the impact may be on those not eligible for RASKIN transfers. Illustrate your reasoning in a graph.

[5 marks]

- **Q.B2** Gender and Development. In several developing countries, the proportion of women is lower than would be expected if women and men were born and died at the same rate. Nancy Qian studies this issue in the paper "Missing Women and the Price of Tea in China".
  - a) What explains, according to this paper, the differences in sex ratios across counties in China?

[5 marks]

b) What is the main empirical challenge that the author needs to overcome? How does she solve this issue? Explain the empirical strategy in detail and the assumption needed in order for it to be valid.

[10 marks]

c) Figure 1 in the Appendix shows how the fraction of males in the population developed in tea and non-tea producing areas from 1962 to 1990. What do you learn from this graph with regards to the main results in the paper and the validity of the empirical design?

[8 marks]

- Q.B3 Credit Markets in Developing Countries This question discusses credit markets in developing countries.
  - a) What are the two key informational problems that impede the smooth functioning of credit markets? Define these two concepts. Why might these problems be particularly exacerbated in poor countries?

[10 marks]

b) Explain how micro finance institutions (MFIs) attempt to overcome these problems.

[6 marks]

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c) Banerjee et al (2015) implement a randomized control trial in India to study the impact of access to micro-finance on a range of development outcomes.

i) Table 1 in the Appendix reports a test from the paper. Explain the purpose of this test and what we learn from it.

[6 marks]

ii) Figure 2 in the Appendix reports some of the main findings in Banerjee et al (2015). Sub-figure (a) reports the effect on business profits for old business and sub-figure (b) reports the effect for new businesses. Discuss these results. Why do they differ? What do they tell you about the potential of micro-finance to unlock untapped entrepreneurial talent?

[6 marks]

End of Paper - An Appendix of 2 pages follows.

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Figure 1: Qian et al. (2008): Fraction of males in tea and non-tea producing areas

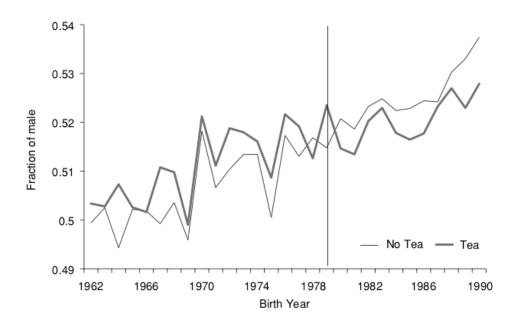
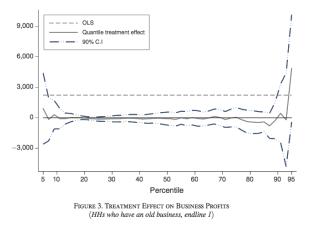
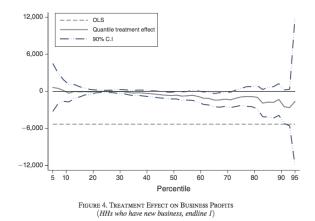


Figure 2: Banerjee et al (2015): Treatment Effect on Business Profits



(a) Treatment Effect on Profits for Old Business



(b) Treatment Effect on Profits for New Business

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Table 1: Banerjee et al (2015): Baseline Summary Statistics

TABLE 1A—BASELINE SUMMARY STATISTICS

	Control group			Treatment - control	
	Obs. (1)	Mean (2)	SD (3)	Coeff. (4)	p-value (5)
Household composition					
Number members	1,220	5.038	(1.666)	0.095	0.303
Number adults (>=16 years old)	1,220	3.439	(1.466)	-0.011	0.873
Number children (<16 years old)	1,220	1.599	(1.228)	0.104	0.098
Male head	1,216	0.907	(0.290)	-0.012	0.381
Head's age	1,216	41.150	(10.839)	-0.243	0.676
Head with no education	1,216	0.370	(0.483)	-0.008	0.787
Access to credit					
Loan from Spandana	1,213	0.000	(0.000)	0.007	0.195
Loan from other MFI	1,213	0.011	(0.103)	0.007	0.453
Loan from a bank	1,213	0.036	(0.187)	0.001	0.859
Informal loan	1,213	0.632	(0.482)	0.002	0.958
Any type of loan	1,213	0.680	(0.467)	0.002	0.942
Amount borrowed from (in Rs)					
Spandana	1,213	0	(0.000)	69	0.192
Other MFI	1,213	201	(2,742)	170	0.568
Bank	1,213	7,438	(173,268)	-5,420	0.279
Informal loan	1,213	28,460	(65,312)	-570	0.856
Total	1,213	37,892	(191,292)	-5,879	0.343
Self-employment activities					
Number of activities	1,220	0.320	(0.682)	-0.019	0.579
Number of activities managed by women	1,220	0.145	(0.400)	-0.007	0.750
Share of HH activities managed by women	295	0.488	(0.482)	-0.006	0.904
Businesses					
Revenue/month (Rs)	295	15,991	(53,489)	4,501	0.539
Expenses/month (Rs)	295	3,617	(26,144)	641	0.751
Investment/month (Rs)	295	385	(3,157)	14	0.959
Employment (employees)	295	0.169	(0.828)	0.255	0.148
Self-employment (hours per week)	295	76.315	(66.054)	-4.587	0.414
Businesses (all households)					
Revenue/month (Rs)	1,220	3,867	(27,147)	904	0.626
Expenses/month (Rs)	1,220	875	(12,933)	116	0.812
Investment/month (Rs)	1,220	93	(1,559)	-0.098	0.999
Employment (employees)	1,220	0.041	(0.413)	0.057	0.166
Self-employment (hours per week)	1,220	18.453	(46.054)	-1.801	0.400
Consumption (per household per month)					
Total consumption (Rs)	1,220	4,888	(4,074)	270	0.232
Nondurables consumption (Rs)	1,220	4,735	(3,840)	252	0.235
Durables consumption (Rs)	1,220	154	(585)	18	0.531
Asset index	1,220	1.941	(0.829)	0.027	0.669