

DEVELOPMENT FIELD EXAM

This exam has two parts: A section of three long questions and a section of six short questions. You should answer only two of the three longer questions. However, please answer all six short questions.

LONGER QUESTIONS

Complete two of these longer questions. Each is worth 30 points. These may require a more sustained argument than the short questions, but clarity and concision are still very desirable. Please *do not use a blue book*, but instead use letter-sized notepaper, written on one side. Please also begin each long question you complete on a new sheet of paper.

(1) **Distribution, Risk, and Welfare**

Consider a village of n people, each belonging to one of $m < n$ households; the number of people in the i th household is given by n_i . You have data on basic demographic characteristics of all of these n people, and a single cross-section of data on income and expenditures collected at the level of the m households.

A donor who is familiar with the United Nations' Millenium Project goals asks you to propose a transfer scheme to reduce the total number of households with income per household member below one dollar a day in the village. Transfers must be non-negative, and the total budget for the project is B dollars.

- a) Summarize your proposal very concisely. In particular, specify a rule that will indicate how many dollars should be given to each household in the village, based on data regarding household size and income.
- b) After reading your report, the donor plans to run their plan and your proposal by a board of expert reviewers. The board includes Martin Ravallion, Anthony Atkinson, Shelly Lundberg, Robert Townsend, and Amartya Sen. You anticipate that each of these people may have some objections to the donor's plan. For each expert reviewer, give a short paragraph summarizing what you think their principal objection is likely to be.
- c) For each of the five objections you've outlined above, suggest a modification to the plan and proposal which you think would satisfy the reviewers.

(2) **Violence and Economic Development**

- a) Describe the observed cross-country relationship between civil conflict and poverty. Which world regions have particularly high rates of civil conflict?
- b) Causality remains the key issue in interpreting these cross-country patterns. Briefly discuss at least one theoretical explanation for why poverty could lead to increased civil war risk, and one theoretical explanation for why civil war could increase poverty.
- c) Imagine that you have an infinite project budget from the Gates Foundation, which has become bored of health and has now turned its attention to understanding violence in Africa. Propose an empirical approach that will allow you to econometrically identify the impact of national per capita income on civil war risk. What source(s) of exogenous variation in income levels will you exploit? How will you go about measuring violence? Briefly lay out your research design and estimation methods; it will be useful to include some estimation equations to make your points clear.

- (3) We have good reason to believe that the measures of cross country differences in income provided by the Penn World Tables are potentially seriously flawed. Discuss why the data in the PWT might not completely capture differences in relative utility across countries, and discuss alternative methods that might be used to address these problems.

SHORT QUESTIONS

Please answer these questions in no more than one or two paragraphs, using only the space provided on the exam itself. Each of these questions is worth five points.

- (1) Describe the expected consequences of a weather shock on the rural labor market and the wage. How does the wage response affect landlords and smallholders, and mitigate or exacerbate the initial welfare effect of the production shock. Explain how the presence of a well developed credit market affect the relationship between fluctuations in production and wage volatility. Describe briefly the strategy used by Seema Jayachandran (*JPE* 2006) to test this model.

- (2) Consider the case of credit given to poor people without collateral. Explain how joint liability (group) credit contributes or not in mitigating the problems of adverse selection, moral hazard in project choice, enforcement of repayment, and insurance. You need not write any model, but your should be very precise when relating the mechanisms by which

the group credit feature contributes to mitigating a problem. Discuss the theories you are calling upon when appropriate.

- (3) Describe the theoretical conditions under which rural to urban migration will be “positively selected,” i.e., individuals with higher ability/human capital will move to urban areas. Briefly mention any empirical evidence on whether migrants are positively or negatively selected in less developed countries.

(4) How does income inequality affect economic growth? Briefly describe recent empirical findings, and mention the studies on which these claims are based.

(5) Suppose you are a policymaker interested in evaluating a government anti-poverty program. Which poverty figures are more reliable, those derived from national accounts or from household surveys, and why?

(6) In Hsieh and Klenow's paper measuring dispersion in marginal product of land and capital across firms in China and India, they use a framework where firms produce differentiated products with a constant return to scale production function. Why is the differentiated products assumption important? If we wanted to drop this assumption and assume that

firms produce identical products, why do we need to then drop the constant return to scale assumption?