University of Cambridge

Part IIB, Paper 8: Development Economics I

Michaelmas 2016

Supervision 1

Exercise 1: The Microeconomics of Economic Development

1. Consider the following extract from Abhijit Banerjee, 2009, "Big Answers for Big Questions: The Presumption of Growth Policy":

   "This is the illusion of commensurability: Big questions must have big answers. Growth is surely the biggest question that we economists tackle. Hence, the evidence that can inform growth policy must be evidence about big things.

   There are at least two senses in which this is misleading: First, suppose the conclusion from the macro evidence is that reducing corruption is vital for promoting growth. But reducing corruption how? And what forms of corruption are the most worth fighting?

   [...] The same point can be made, mutatis mutandis, about many other dimensions of growth policy: Investment in education (where? at what level? through better teacher training or greater parental involvement?), investment in health-care, more effective capital markets, etc. In the end, details matter too much for it to be possible to do effective growth policy without experimental/quasi-experimental data."

   According to the above extract, why should we study the microeconomics of economic development? Explain briefly (250 words max).

Exercise 2: Theory, Evidence, Policy - The Case of Bednets 1

Questions refer to Cohen and Dupas, 2010, "Free Distribution vs. Cost-Sharing: Evidence from a Malaria-Prevention Field Experiment in Kenya".

1. What makes vaccines and bednets different form a public finance theory perspective? Why one may want to subsidize the former but not necessarily the latter?

2. Cohen and Dupas, 2010, use a randomized two-stage pricing design to disentangle selection and sunk cost effects. In clinics charging a positive price, they surprise a subsample

of women who decided to buy the bednet at the posted price with a lottery for an additional discount. They argue that, among these women, any variation in usage with the actual price paid is the result of psychological sunk cost effects.

Why is the additional discount given as a surprise? Explain how the two-stage randomization allows to disentangle the two effects and why the surprise element is important in doing so.

3. The results of the two-stage pricing design suggest that there is no psychological sunk cost effect of price on usage. That is, women that are surprised by a discount (and that, as a consequence, end up paying less for the ITN) are not less likely to use the bednet. As a caveat to the interpretation of this result, Cohen and Dupas specify that we do not have data on how women *perceived* the price they paid for the ITN. In particular, we cannot verify whether women who received a discount mentally "integrated" the two events (payment and discount) to "cancel" the loss, or whether they "segregated" the two events and perceived the payment as a cash loss and the discount as a cash gain.

   Why does it matter how the price paid was perceived? Is there a difference between getting a discount or paying a low price to begin with? Can this difference be responsible for the finding of no sunk cost effects?

4. A selection argument would predict that willingness to pay for an ITN is higher among those that need the ITN more. According to this argument, higher prices should induce a sicker group of women to purchase nets.

   An objective measure of health among women is hemoglobin levels. Women with low hemoglobin levels (anemic) are the ones with the most exposure and least resistance to malaria, and hence the ones that would benefit more from ITNs.

   Suppose you had access to the hemoglobin levels of all women in the RCT.

   (a) How would you test the selection argument? Which pattern would you expect?

   (b) Which pattern would you likely obtain if anemic women were also more likely to be poor and credit constrained?

5. The ITN in the Cohen Dupas, 2010, paper was a well-known product in the context studied. ITNs had been advertised heavily, both by the Ministry of Health and by local NGOs, and pregnant women and parents of young children had been particularly targeted by malaria prevention messages. Moreover, most people (even in rural areas) were aware that the unsubsidized price of ITNs was high.

   Do these considerations matter for external validity? Why?

6. Another important dimension of the debate on free distribution versus cost-sharing is the effect of full subsidies on the distribution system. This is because the behavior of agents on the distribution side (namely, health workers) could depend on the level of subsidy. In some contexts, free distribution schemes have been shown to be plagued by corruption (in the form of diversion) among providers.

   Is Cohen and Dupas, 2010, able to address this supply side question? If not, how would considerations on the supply side change the conclusions of the paper?

Exercise 3: Theory, Evidence, Policy - The Case of Bednets 2

Questions refer to Dupas, 2014, "Short-Run Subsidies and Long-Run Adoption of New Health Products: Evidence from a Field Experiment".

1. In Dupas, 2014, subsidies were randomized across households within a village. This means that households that received a high subsidy may have noticed that their neighbors received instead a low subsidy.

   (a) Do you think this feature of the RCT may have limited the salience of the specific subsidized price that the household paid?

   (b) Do you think it may have affected the estimation of the entitlement effect? How?

2. Another feature of the RCT in Dupas, 2014, may be worth paying attention to. Bednet vouchers that were distributed to households in Phase 1 indicated both the recommended retail price and the amount discounted from the recommended retail price.

   (a) Do you think this feature of the RCT may have limited the salience of the specific subsidized price that the household paid?

   (b) Do you think it may have affected the estimation of the entitlement effect? How?

3. Another potential concern with one-off subsidies is that subsidies for one product may lead to entitlement effects for other products. In particular, households might expect that the government or NGO that subsidized product A will also soon start to subsidize product B (if product B belongs to the same class of product, say health products), and thus adopt a "wait and see" stance.

   Suppose you wanted to test for these cross-product entitlement effects in the framework of Dupas, 2014. How could you extent the RCT to capture such effects?