

## **Lecture assignment 1 (Lecture 2,)**

Read the blogpost linked below, and answer the 3 questions. Your answer should be maximum half a page long.

<https://voxdev.org/topic/finance/closing-gender-profit-gap-through-savings-and-training-evidence-mozambique>

- a. Which are the two constraints to business growth that Batista et al. focus on in their study? Describe each of them briefly (about one sentence per constraint).
- b. Explain why, according to the authors, it is important to study these two constraints together.
- c. What are the main findings of the study for female entrepreneurs, and what is the main mechanism behind these results?

### **Model answer**

1. The two constraints, that Batista et al. focus on their study are (a) limited access to capital and (b) lack of exposure to the know-how of financial management. Access to capital would help microentrepreneurs to optimize cash flow management, and to make investments in the business. This can be achieved by a savings technology. Financial know-how refers to a set of skills and practices that are useful for running a business successfully, but also can enable the business owner to save. The authors motivate this intervention with the fact that female microentrepreneurs often have limited access to savings technology due to restricted mobility, a higher opportunity cost of time, and lower levels of financial literacy than males.
2. It may not be enough with access to a savings technology if the business owner doesn't know how to achieve savings, and training in financial know how is likely less useful without supplementary financial technologies. The authors also argue that female microentrepreneurs in poor settings face tighter constraints both in access to savings (e.g. due to taxation by relatives) and with respect to their financial literacy.
3. The authors implemented two interventions: access to mobile money accompanied by incentives, and business training. They designed the experiment so that it allows them to study the individual effect of each intervention, and the combined effect, and found, that the highest long-term effects (higher profits and savings) were reached by providing both liquid savings **and** financial management skills. Mobile money had a higher short-term impact for poor female microentrepreneurs, but no longer in the long run. The dual treatment had short run impact on both male and female microentrepreneurs, but significant long-term effects only for females. The main mechanism behind the results were that the interventions enabled a sustained improvement in financial management knowledge. (bookkeeping, lower remittances and higher savings) together with a safe place to store the savings.

### **Lecture assignment 2 (Lecture 4, Health)**

Read the blogpost linked below, and answer the 3 questions. Your answer should be maximum half a page long.

<https://voxeu.org/article/son-preference-and-indian-child-malnutrition>

The paper starts with the observation that Indian children on average have lower height-for age than African children on average (looking specifically at data from 25 African countries).

- a. The authors claim that this difference in height is NOT caused by genetic differences or differences in wealth or environment. What kind of comparison do they make in order to rule out those explanations? (describe the main method).
- b. The authors highlight a difference between girls and boys in the Indian data. Describe the nature of this difference.
- c. The authors discuss parental investments in children. Explain what they mean by these “investments” and how they measure them in the data.

See lecture for answers

### **Lecture assignment 3 (Lecture 5, agriculture)**

Read the blogpost linked below, and answer the 2 questions briefly. Your answer should be maximum half a page long.

<https://voxdev.org/topic/agriculture/when-agriculture-drives-development-lessons-green-revolution>

1. Why did high-yielding crop varieties (HYVs) initially benefit certain geographic regions but not others?
2. How do the returns to investments in agricultural productivity typically vary between rich and poor countries? What do you think explains these differences?

Partial answer:

Important to understand the direction: rich countries with a smaller share of agriculture would benefit relatively less from a technology that increases agricultural yields.

See lecture notes for more discussion

### **Lecture assignment 4 (Lecture 6, technology adoption)**

Read the short text linked below (also in reading list for this lecture), and answer the 3 questions. Your answer should be maximum half a page long.

[https://www.povertyactionlab.org/sites/default/files/research-paper/6.21.11-ChildPovertyImmunization\\_unicef.pdf](https://www.povertyactionlab.org/sites/default/files/research-paper/6.21.11-ChildPovertyImmunization_unicef.pdf)

- a. Describe briefly the three explanations for the low immunization rates that the authors point out.
- b. Does the intervention of Seva Mandir (in collaboration with the authors) address all these three problems? Why/Why not? Explain briefly.
- c. The results of the study point to a much larger take up rate of vaccination when small, non-monetary incentives were provided to the people getting vaccination. Discuss how this finding may be explained by opportunity costs and procrastination.
- d.

**Model answer**

a. 1. Poor public healthcare system, that isn't actually doing what it is supposed to. 2. Traditional beliefs that discourage immunization and excessive reliance on injectables. 3. Attitudes toward preventive healthcare. There seems to be a lack of demand even for very affordable preventive care. Possible reasons are lack of faith in it and procrastination or inability to get it.

b. The poor public healthcare was addressed by providing a reliable service (staffed and regular immunization camps) and procrastination/ inability to stick to a plan was addressed with incentives (lentils and sets of plates). Traditional beliefs that discourage immunization were (at least partially) addressed by information campaign – a nurse was assigned to visit all households with children in the right age and inform both about the availability of the camp, but also about the effects of vaccines and how vaccine works.

c. The parents are busy trying to make a living, and getting their child immunized would require them to spend valuable time to find out information, travel to the right spot etc. All of this time could otherwise be spent on tasks that immediately produce something of value (the time has an opportunity cost). The incentives mean that the parents immediately receive something of tangible value when they go to get their child immunized. Because the lentils were worth half a day's work, the parents could skip half a day's work and be compensated for that opportunity cost of their time. The small non-monetary incentives also provide a reason for the people to act today, rather than to wait till next camp. Especially if the parents know that the immunization should be done but are procrastinating, this could be effective.

**Assignment 5, Lecture 9 (institutions 1)**

Listen to this 20 minute VoxDev podcast: <https://voxdev.org/topic/institutions-political-economy/gender-norms-rule-law-and-female-entrepreneurship-developing-countries>

or

read [the underlying paper](#) by Nava Ashraf, Alexa Delfino and Edward Glaeser.

AND: Read pages 4-24 in Chapter 7 by Gerard Roland, which is required reading for lecture 9. This text can be found in the dropbox folder with course literature:

<https://www.dropbox.com/sh/3lfu4hl4xajbo7j/AABS8meHAE1XclBjAa8geJzua?dl=0>

Answer the following in up to half a page:

- What types of problems are limiting female entrepreneurship in developing countries, according to the authors?
- What **transaction costs** – as defined in Roland, chapter 7, can these problems be related to? Explain briefly why.

Partial answer on transaction costs: There are several options here, but one discussed a lot in the podcast is holdup problems. Women business owners in male dominated sectors described in this study, cannot trust that if they make an agreement with a male business partner, he would stick to what he promised afterwards. As an example, there is a risk that once the woman has produced output and wants to sell it, the male counterpart would offer to pay less, and force her to accept a lower price than agreed.

For the exam, I recommend thinking about other possible transaction costs as well.

### **Assignment 6, Lecture 10 (institutions 2)**

Read the paper by D. Acemoglu, S. Johnson and J. Robinson (AJR, 2001): ‘The Colonial Origins of Comparative Development’. American Economic Review, 91 (5), pp. 1369–1401,

which is assigned reading for this lecture.

Answer briefly the following questions, in maximum half a page:

- what is the exclusion restriction in the IV strategy used in the paper?
- Do you feel convinced that this exclusion restriction holds? Why/why not? One reason is enough.

This was discussed extensively in the lecture.

### **Assignment 7, Lecture 11 (Growth)**

Read sections 4.4-4.7 in “the Facts of Economic Growth” by Chad Jones, and section IV (pp 14-16) in Development Accounting by Hsieh and Klenow.

Answer the following questions in up to half a page:

- Answer briefly: what do growth economists refer to by the term total factor productivity (TFP), and how is it related to the production function of an economy?
- What is broadly meant by the concept “misallocation” in research on economic growth? how does it enter the production function of an economy?
- Provide **one concrete example** of how the material and topics studied in lectures 2, 6, 7, 9 or 10 can be related to misallocation. Explain briefly.

\*If needed, more explanation on TFP can also be found in the beginning of “the Facts of Economic Growth” and in Aghion and Howitt.

Partial response:

The production function models how output (Y) is a function of different factors. These includes the factors of production: Labor, Physical and Human Capital (L, K, H), but also a parameter called TFP (total factor productivity), denoted as A or AM in the models we studied for today.

TFP refers to the part of total output not explained by capital (K or H) or labor (L). It refers to how productively the capital and labor units are used, but it is important to understand that TFP refers to **something beyond the quantities of labor and capital**. Two countries with the same levels of K and L can have different output due to different levels of TFP.

One important component of TFP is level of technology, and another is connected to allocation of resources - we will discuss both in class. TFP is usually seen as the major factor in economic growth.