PRELIMINARY DRAFT SUBJECT TO CHANGE

Economics 327 Economic Development in Africa Winter 2020

Instructor

Professor Christopher Udry KGH 3427 christopher.udry@northwestern.edu *Class:* MW 11:00am – 12:20pm, University Hall 121 *Office hours:* Tuesday 3:30pm – 5:00pm Friday 9:00am -10:00am

Teaching Assistant

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Course Description

This course will examine the central issues of development economics with a geographical focus on Sub-Saharan Africa. Our methodological approach will be to use primary data and rigorous empirical methods to examine patterns of economic activity and to evaluate the effectiveness of development policies and programs. The focus of the class will be on your own examination of primary data from multiple surveys from Nigeria, Ghana and Tanzania as you write a series of nine short papers about these topics.

Topics

Development economics is a large and rapidly growing field and Africa is a tremendously diverse continent. From the multitude of potential courses that one could design around issues of economic development in Africa, I have chosen to focus on daily life. How do people, families, firms and communities organize their economic lives when faced with the tight constraints imposed by their environment? We will read about this environment; about the definition and distribution of poverty; about the complex interactions between health, education and economic well-being; about agriculture and rural economic organization; about risk and financial markets; and about public goods and their allocation

Prerequisites

Economics 281, 310-1,310-2 or equivalent

Grading

Grading for this class will be based on 9 short papers and their presentation and on class participation. Each paper/presentation will count for 10% of the grade; class participation will count for the final 10%. Attendance is a requirement of the class; notify the TA in advance of any absences so that we can adjust the presentation schedule.

Hardware, Software, Readings

You will use the statistical program Stata in class and in the course assignments. Therefore, a laptop

with Stata installed will be needed during class sessions. Please contact me as soon as possible if a laptop with this capacity is not available to you.

Stata can be purchased or rented at a reduced student rate through the <u>Stata Grad Plan</u>. Stata/IC will be sufficient, although there may be some occasional need for extra programming steps to manage dataset size. Stata/SE, the next step up, will be more than sufficient.

The main course readings will be journal articles and policy publications available online. We will use selections from *Poor Economics* by Abhijit Banerjee and Esther Duflo, which can be ordered online

All the links in the syllabus work as of this writing (most can be found on JSTOR, Google scholar, or other online sources, such as the authors' websites.) Northwestern covers subscription fees to access these resources, however, you will need to be on campus or access the internet via Northwestern using a VPN.

Assignments

The course is organized around nine assignments. Each assignment concerns an important empirical question regarding patterns of economic development in Africa. For each assignment, you will receive access to a primary data set and documentation for that data. Your task will be to address that question by analyzing that primary data, and if necessary any additional secondary literature that you require. Each assignment will require an appropriate set of table(s) and/or figure(s) of quantitative results, a 1-2 page narrative interpreting these empirical results, and an appendix with the Stata *.do file that you used to construct the results. You will also submit a 3-10 slide presentation deck in case you are called upon to present your results. We will discuss this in detail in class during the first week.

You are encouraged to discuss the assignments with classmates, and to help each other with managing the data and with constructing your arguments. Each week, you will be randomly matched with a partner, and your project will be done jointly. Partners will be changed each week. Each pair will write their own narrative, provide their own *.do file, and construct their own tables and/or figures. The assignments are quite open; there are many potential approaches to answering each of them. 3 of the possible 10 points for each assignment are awarded for originality – the more different the analysis and programming is from that of others in the class, the more points you receive on this dimension.

*Document the *.do files that you submit.* The do file should include comments that explain the purpose of each section of the code, and that clearly designate which portions of the code you wrote yourselves, those portions that you copied from some other team, and those portions that were joint work with another team.

Econometrics is a prerequisite for this class. However, we will spend some time at the beginning of the quarter to review some basic econometrics. Ashley will offer a short tutorial on Stata commands. Two sessions are tentatively scheduled (will be confirmed in class and via Canvas) at the following times:

- Friday, Jan 10 11:00 am 12:00 pm
- Friday, Jan 17 11:00 am 12:00 pm

You can also get more help by clicking on the links at <u>https://github.com/PovertyAction/IPA-Stata-Trainings</u> and <u>https://stats.idre.ucla.edu/stata/modules/.</u>

Class Sessions

All written assignments are due – via canvas - at 9:00 AM on each Monday starting January 13. Each student should be prepared to discuss her or his findings in class on Monday. To facilitate that discussion, each student pair should upload the presentation file summarizing their results along with their assignment. I will randomly choose pairs to present each week, subject to the constraint that everyone will present at least twice during the term. The end of class on each Monday will be devoted to a short introduction of the week's assignment.

On most Wednesdays, we will begin with a discussion of important lessons from the readings for the week. Therefore, the week's reading should be completed before the Wednesday class. We will also devote a fraction of the class time on most Wednesdays to working with the data set that has been assigned for that week in class.

Other course policies

- **Requests for re-grading:** All re-grade requests should be submitted in writing to the professor within a week from when we return your work. Students must not approach either the professor or TA with an oral request before making their written request.
- Late assignments: A late assignment is an assignment that is turned in more than 20 minutes after the start of the class on which it is due. Assignments can be turned in up to 1 week late for 50% credit. Assignments will not be accepted more than 1 week after the due date/time, and will receive 0 credit.
- Students with documented disabilities: Any student with a verified disability requiring special accommodations should speak to the Office of Services for Students with Disabilities (847-467-5530) and the provide documentation to me as early as possible in the quarter, ideally in the first week, to arrange appropriate accommodation. All discussions with me, with the Office of Services for Students with Disabilities and with Academic Services will remain confidential.
- Academic integrity: Suspicion of academic integrity violations will be referred immediately to the Academic Dean's office; University rules prohibit subsequent discussion of the situation between the TA/professor and the student. Northwestern University's understanding and expectations in regard to issues of academic honesty are articulated in the Undergraduate Catalog. While you are a Northwestern student, you will be treated as an adult and will be held accountable for your actions; consequently you are expected to know and abide by the rules of the institution. It is important that you read and understand the ethical use of information (see Academic Integrity at Northwestern: A Basic Guide). Whether intentional or not, improper use of materials can be considered a violation of academic honesty. For example, you should not alter an assignment for re-grading, or fabricate excuses or lie in connection with your academic work. If you are unsure as to what is permissible, please consult us, because ignorance is not a valid excuse.
- Attendance: If you don't come to class (and don't have a legitimate excuse), you forfeit the class participation points for that day.

Course Schedule

1. January 6: Background. Theory and Measurement.

For 1/6:

Banerjee and Duflo, Chapter 1

Ray, Debraj. *Development Economics*. Princeton University Press, 1998, section 2.4 (pp. 25-33) and sect 8.22 (pp. 253-258) (on Canvas)

2. January 8, 13: Inequality and Poverty in Nigeria

Dataset: <u>Nigeria LSMS-ISA 2015-16</u> Documentation: <u>http://surveys.worldbank.org/lsms/programs/integrated-surveys-agriculture-ISA/nigeria#bootstrap-panel--4</u>

Toyin Falola and Matthew Heaton. 2008 *A History of Nigeria*. Cambridge University Press, Introduction, chpts 8-9 (https://ebookcentral.proquest.com/lib/northwestern/detail.action?docID=343509)

Akresh, R., Bhalotra, S., Leone, M., & Osili, U. O. (2012). War and stature: Growing up during the Nigerian civil war. American Economic Review, 102(3), 273-77. Link.

Paper 1: How does Nigeria define its poverty line? What does it mean to be poor in Nigeria in 2014-15? Due 6:00AM, Jan. 13

3. January 15, 22: Econometrics of Gender Preference

Dataset: Nigeria LSMS-ISA Waves 1-3

Documentation: <u>http://surveys.worldbank.org/lsms/programs/integrated-surveys-agriculture-ISA/nigeria#bootstrap-panel--4</u>

Deaton, A. 1997. *The Analysis of Household Surveys: A Microeconometric Approach to Development Policy*. Baltimore: World Bank, pp .133-134, 140-151, 156-161 (available at <u>http://documents.worldbank.org/curated/en/593871468777303124/The-analysis-of-household-surveys-a-microeconometric-approach-to-development-policy</u>)

Channing Arndt, Mikkel Barslund, Virgulino Nhate, Katleen Van den Broeck; Orphans and Discrimination in Mozambique, American Journal of Agricultural Economics, Volume 88, Issue 5, 1 December 2006, Pages 1279–1286 Link

Paper 2: Is there evidence from expenditure on adult goods of discrimination against girls in Nigeria? Due 6:00AM, Jan. 22

4. January 27: Health and Economic Well-Being

Dataset: Nigeria LSMS-ISA Waves 1-3

Documentation: <u>http://surveys.worldbank.org/lsms/programs/integrated-surveys-agriculture-ISA/nigeria#bootstrap-panel--4</u>

Paper 3: How correlated are health and poverty in Nigeria? Does this vary with age, gender, location, or position in the household? Due 6:00AM, Jan. 27

5. January 29, February 3: An Example of Impact Evaluation

Dataset: CBT Midline Evaluation

Duflo, E., R. Glennerster, M. Kremer (2007). "Using Randomization in Development Economics Research: A Toolkit," Handbook of Development Economics 4, 3895–3962

Blattman, Christopher and Jamison, Julian C. and Sheridan, Margaret, Reducing Crime and Violence: Experimental Evidence from Cognitive Behavioral Therapy in Liberia (2017) *American Economic Review*. Link

Paper 4: What was the short-term effect of group cognitive behavioral therapy on the physical and psychological wellbeing of participants, or on reports of intimate partner violence? Due 6:00AM, Feb 3

6. February 5, 10: Schooling, Returns to Education in Nigeria

Dataset: Nigeria LSMS-ISA waves 1-3 Documentation: <u>http://surveys.worldbank.org/lsms/programs/integrated-surveys-agriculture-ISA/nigeria#bootstrap-panel--4</u>

Duflo, E. (2001). "<u>Schooling and Labor Market Consequences of School Construction in</u> <u>Indonesia: Evidence from an Unusual Policy Experiment,</u>" *American Economic Review* 91 (4): 95-813.

Oyelere R. U. (2010). Africa's Education Enigma? The Nigerian Story, *Journal of Development Economics*, 91: 128-139. Link

Paper 5: What are the returns to an additional year of education in Nigeria? Due 6:00AM, Feb 10

7. February 12, 17: Microenterprises as an Engine of Development

Dataset: Northwestern-Yale-ISSER Ghana Panel, Waves 1-3

Grimm, M., Knorringa, P. and Lay, J., 2012. Constrained gazelles: High potentials in West Africa's informal economy. *World Development*, *40*(7), pp.1352-1368 Link

Diao, X., Kweka, J. and McMillan, M., 2016. *Economic transformation in Africa from the bottom up: Evidence from Tanzania* (No. w22889). National Bureau of Economic Research. <u>Link</u>

Paper 6: Microenterprises – small businesses with 1-5 employees – form an important component of the informal economy in many African settings. How common are they in Ghana? Who runs microenterprises in Ghana? Who works in them? Do they generate profits for the entrepreneur? How are they funded? Due 6:00AM, Feb 17

8. February 19, 24: Factor Markets and Agriculture

Dataset: Nigeria LSMS-ISA Waves 1-3

Documentation: <u>http://surveys.worldbank.org/lsms/programs/integrated-surveys-agriculture-ISA/nigeria#bootstrap-panel--4</u>

Dillon, Brian and Christopher B. Barrett (2017) "Agricultural factor markets in Sub-Saharan Africa: An updated view with formal tests for market failure" *Food Policy*, 67: 64-77. Link

Paper 7: Do farmers in Nigeria maximize profits? Due 6:00AM, Feb 24

9. February 26, March 2: Gender and Nigerian Farms

Dataset: Nigeria LSMS-ISA Waves 1-3 Documentation: <u>http://surveys.worldbank.org/lsms/programs/integrated-surveys-agriculture-ISA/nigeria#bootstrap-panel--4</u>

Doss, CR, Quisumbing, AR. Understanding rural household behavior: Beyond Boserup and Becker. *Agricultural Economics*. 2019; 1–12. Link

Udry, C. 1996. "Gender, Agricultural Productivity and the Theory of the Household." Journal of Political Economy 104: 1010–46. Link

Backiny-Yetna, Prospere; McGee, Kevin. 2015. Gender differentials and agricultural productivity in Niger. Policy Research working paper ; no. WPS 7199. Washington, DC: World Bank Group. Link

Paper 8: Are women farmers more productive than men farmers in Nigeria? Due 6:00AM, March 2

10. March 4, 9, 11: Risk, Information and Markets in African Agriculture

Dataset: Ghana DIRTS Project, 2014-2016 Farming Seasons

Karlan, Dean, Robert Osei, Isaac Osei-Akoto, and Christopher Udry. 2014. "Agricultural Decisions after Relaxing Credit and Risk Constraints." The Quarterly Journal of Economics 129 (2):597–652. Link

DIRTS project team. 2019. "Information, Market Access and Risk: Addressing Constraints to Agricultural Transformation in Northern Ghana"

Paper 9: Choose one of the interventions in the DIRTS project: agricultural education, improved input markets, rainfall index insurance, improved information on market prices, or improved forecasts and assess its affect on farming outcomes. Due 6:00AM, March 11