Economics 327
Economic Development in Africa
Winter 2021

Instructor
Professor Christopher Udry
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Class: MW 11:00am – 12:20pm, at https://northwestern.zoom.us/j/91831664839
Office hours: **Tuesday 3:30pm – 5:00pm**
Friday 9:00am -10:00am
https://northwestern.zoom.us/my/cudry

Teaching Assistant

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Office Hours: Friday 2:00pm – 4:00pm

Course Description
This course will examine 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 Uganda as you write a series of eight 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 use primary data to learn 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; and about risk and financial markets.

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

Grading
Grading for this class will be based on 8 short papers and their presentation and on class participation. Each paper/presentation will count for 11% of the grade; class participation will count for the final 12%. Attendance is a requirement of the class; notify the TA in advance of any absences so that we can adjust the presentation schedule. Examples of papers and presentations that have been graded 100% are provided on Canvas at files/example assignments.

Hardware, Software, Readings

You will use the statistical program Stata during class and in the course assignments.

Stata can be purchased or rented at a reduced student rate through the Stata Grad Plan. Stata/SE will be 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 is available as an ebook from the NU library:
https://search.library.northwestern.edu/discovery/fulldisplay?vid=01NWU_INST:NULVNEW&mode=Basic&tab=Everything&docid=alma9962511604202441&query=any,contains,Poor%20Economics%20by%20Banerjee%20and%20Duflo&context=L&adaptor=Local%20Search%20Engine&lang=en&search_scope=MyInst_and_CI

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 eight 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.

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. However, some of the data preparation tasks can usefully be shared across everyone in the class; you are encouraged to do so and participation in this will be part of the class participation grade.

*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. Eduardo will offer a short tutorial on Stata commands, in two sessions:
- Monday, Jan 11 4:00 pm – 5:00 pm
- TBA

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

Class Sessions

All written assignments are due – via canvas - at 6:00 AM on each due date starting January 13. Papers are due most Mondays, with some adjustments for Martin Luther King Day and the end of term. Each student should be prepared to discuss her or his findings in class on the day the papers are due. 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.

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 11, 13: Running Start: Inequality and Poverty in Nigeria

Dataset: Nigeria LSMS-ISA 2015-16 (on Canvas)
Documentation: https://www.worldbank.org/en/programs/lsms/initiatives/lsms-ISA#acc34

Reading for 1/11:

>   Banerjee and Duflo, Chapter 1
https://search.library.northwestern.edu/discovery/fulldisplay?vid=01NWU_INST:NULVNEW&mode=Basic&tab=Everything&docid=alma9962511604202441&query=any,contains,Poor%20Economics%20by%20Banerjee%20and%20Duflo&context=L&adaptor=Local%20Search%20Engine&lang=en&search_scope=MyInst_and_CI

>   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)

Paper 1: What does it mean to be poor in Nigeria in 2015-16? You could discuss: Who is most likely to be poor? What work do they do? What do they own? What do they spend on/consume? Where do they live? What is their educational background, age distribution, gender? How do they use health care? What is their health status?
Due 6:00AM, Jan. 13

2. January 20, 25: Gender and Welfare in Nigeria

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

>   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 2: Describe economic outcomes for males and females to shed light on gender dimensions of resource allocation and living standards in Nigeria.
Due: 6:00 AM, Jan 25

3. January 29; February 1: Econometrics of Gender Discrimination

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

> 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 http://documents.worldbank.org/curated/en/593871468777303124/The-analysis-of-household-surveys-a-microeconometric-approach-to-development-policy)

> Kathleen Beegle, Rajeev H. Dehejia, Roberta Gatti, 2006. "Child labor and agricultural shocks" *Journal of Development Economics*, 81/1, Pages 80-96, https://doi.org/10.1016/j.jdeveco.2005.05.00

Paper 3: Is there evidence of discrimination against girls in Nigeria? This could be examined from expenditure on adult goods; from direct evidence on resource allocation; or from the impact of shocks on outcomes later.
Due 6:00AM, February 1

4. February 3, 8: An Example of Impact Evaluation

Dataset: Ghana COVID-19 Cash Transfer

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

> Dean Karlan, Matt Lowe, Robert Osei, Isaac Osei-Akoto, Christopher Udry. 2020. Cash and Compliance with Social Distancing: Experimental Evidence from Ghana.

Paper 4: What was the effect of the mobile money transfers on behavior, food security, income or welfare? Was there any differential effect of anticipating that these transfers would continue? Did it matter how wealthy or distressed the respondent was before the pandemic began? Did occupation or location influence these impacts?

Due 6:00AM, Feb 8

6. February 10, 15: Schooling, Returns to Education in Nigeria

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

> Duflo, E. (2001). "Schooling and Labor Market Consequences of School Construction in Indonesia: Evidence from an Unusual Policy Experiment," *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 15

7. February 17, 22: Microenterprises as an Engine of Development

Dataset: Nigeria LSMS-ISA waves 1-4

> 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

> Jayachandran, Seema. 2020. "Microentrepreneurship in Developing Countries". Link

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 Nigeria? Who runs microenterprises in Nigeria? Who works in them? Do they generate profits for the entrepreneur? How are they funded? Do they grow over time?
Due 6:00AM, Feb 22

8. February 24, March 1: Factor Markets and Agriculture

Dataset: Mali Soro Panel Data
Documentation:

> 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 Mali maximize profits?
Due 6:00AM, March 1

9. March 3, 8, 10: Gender and Farms

Dataset: Mali Soro Panel Data
Documentation:

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 Mali?
Due 6:00AM, March 10