

Economics 327
Economic Development in Africa
Winter 2022

Instructor

Professor Christopher Udry
christopher.udry@northwestern.edu

Class: MW 9:30am – 10:50pm

Tech L221

zoom: <https://northwestern.zoom.us/my/cudry>

Office hours: Thursdays 3:30pm – 5:00pm
Kellogg Global Hub 3427

Teaching Assistant

Devis Decet
ddecet@u.northwestern.edu

Office Hours: Fridays 10.30 am – 12 pm
Kellogg Global Hub 3411

Course Description

This course will examine central issues of development economics with a geographical focus on Nigeria. 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 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 Prof+ Plan](#). Stata/SE will be sufficient. It is also possible to use Stata on NUWorkspace, which can access your *.do and *.dta files via Box and Google drive.

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. Full credit (10 points) is awarded to assignments that are complete and correct. Up to 2 bonus points can be added for each assignment for originality or exceptionally challenging projects. 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. Devis will offer a short tutorial on Stata commands, in two sessions:

- Friday, Jan 13 9:30am – 10:50pm Tech L221
- Friday, Jan 20 9:30am – 10:50pm Tech L221

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 9. Papers are due on Mondays. 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 after 6:00 AM on its due date. 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 then 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 3, 4, 9: Economic Activity in Nigeria

Dataset: Nigeria LSMS-ISA 2018-19 [Nigeria LSMS](#)

Documentation: LSMS-ISA <https://www.worldbank.org/en/programs/lms/initiatives/lms-ISA#6>

Reading for 1/3:

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>)

Reading for 1/4:

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](#).

Due 6:00AM, Jan. 9:

Paper 1: Describe some dimension of employment and income in Nigeria. What fraction of adults work for wages? Run their own business? Farm their own farms? How much do they earn? Does this vary by region, gender, age, education? Choose a simple question related to livelihoods of people in Nigeria and tell us what the data say.

2. January 11, 18, 23: Poverty and its Dynamics in Nigeria

Dataset: Nigeria LSMS-ISA 2010-15 [Nigeria LSMS](#)

Documentation: LSMS-ISA <https://www.worldbank.org/en/programs/lms/initiatives/lms-ISA#6>

Reading for 1/11:

Banerjee and Duflo, Chapter 1 (on Canvas)

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

Due 6:00 AM, Jan 23:

Paper 2: What does it mean to be poor in Nigeria in 2010-2015? 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? How do they use health care? What is their health status? More ambitious students can link households across waves of the survey and discuss the transitions of households into and out of poverty across waves. Is poverty persistent?

3. January 25, 30: Schooling, Returns to Education in Nigeria

Dataset: Nigeria DHS 2003, 2008, 2013, 2018 processed [Nigeria Education](#) and Nigeria LSMS-ISA 2010-15 [Nigeria LSMS](#)

Documentation: Deschenes and Hottee

Reading for 1/25

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

Deschenes, Sarah and Rozenn Hottee. 2022. "Expanding Access to Schooling in Nigeria: Impact on Marital Outcomes" Manuscript: Northwestern. (On Canvas)

Due 6:00AM, Jan 30:

Paper 3: How did the Nigerian Universal Primary Education policy affect school attainment? How did these changes in education change life outcomes? You could focus on understanding the differential effects of UPE on primary or secondary enrolment, across regions, states, religion. Or you could examine the effects of higher levels of schooling for occupation, earnings, health, consumption or profits. You could look at the effect of education of women on the age of their husband, the prevalence of polygamy, or status within the marriage. You can also examine the effects of male education on these same outcomes.

4. February 1, 6: Risk, Farm Organization, and Food Insecurity in Rural Nigeria

Dataset: Nigeria LSMS-ISA Waves 1-4. [Nigeria LSMS](#)

Documentation: LSMS-ISA <https://www.worldbank.org/en/programs/lms/initiatives/lms-isa#6>

Reading for 2/1

Alexis H. Villacis, Joaquin Mayorga, Ashok K. Mishra. 2022 "Experience-based food insecurity and agricultural productivity in Nigeria," *Food Policy*, 102286

Due: 6:00 AM, Feb 6:

Paper 4: Describe the organization of farms in Nigeria. Choose your own direction: How many plots do households cultivate? Do farmers specialize in single crops or diversify? How common is irrigation? Mechanization? Use of agrochemicals? How does the yield of common crops compare with global averages? How sensitive to weather outcomes are these yields?

5. February 8, 13: Econometrics of Gender Discrimination

Dataset: Nigeria LSMS-ISA Waves 1-4. [Nigeria LSMS](#)

Reading for 2/8

Deaton, A. 1997. *The Analysis of Household Surveys: A Microeconomic 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-microeconomic-approach-to-development-policy>)

World Bank. 2022. “Closing Gaps, Increasing Opportunities : A Diagnostic on Women’s Economic Empowerment in Nigeria.” Washington, DC: World Bank. <https://openknowledge.worldbank.org/handle/10986/37225>

Due 6:00AM, February 13:

Paper 5: Is there evidence of discrimination against women or girls in Nigeria? This could be examined from expenditure on adult goods; from direct evidence on resource allocation; or from patterns of asset ownership or working.

6. February 15, 20: Microenterprises as an Engine of Development

Dataset: Nigeria LSMS-ISA waves 1-4. [Nigeria LSMS](#)

Reading for 2/15

Adebowale, Olabimtan and Lawson, David (2018) Does access to formal finance matter for stimulating entrepreneurship in developing countries? Evidence from non-farm entrepreneurial activities in Nigeria. GDI Working Paper 2018-026. Manchester: The University of Manchester (on canvas)

Jayachandran, Seema. 2020. “Microentrepreneurship in Developing Countries”. Link

Due 6:00AM, Feb 20

Paper 6: Microenterprises – small businesses with 1-5 employees – form an important component of the informal economy in many African settings. Choose a subtopic: (a) Describe their characteristics, such as How common are they in Nigeria? What do they produce/sell? Where are they located? (b) Who runs microenterprises in Nigeria? Who works in them? We’re interested in the age, gender, education of the manager and the workers. (c) Do they generate profits for the entrepreneur? How are they funded? (d) Do they grow, shrink or disappear over time? How often are they started?

7. February 22, 27: An Example of Impact Evaluation: Firm Growth in Nigeria

Dataset: McKenzie, David. Replication data for: Identifying and Spurring High-Growth Entrepreneurship: Experimental Evidence from a Business Plan Competition. Nashville, TN: American Economic Association [publisher], 2017. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2019-10-12.
<https://doi.org/10.3886/E113101V1> or via [sharepoint](#)

Reading for 2/22

Duflo, E., R. Glennerster, M. Kremer (2007). “[Using Randomization in Development Economics Research: A Toolkit](#),” *Handbook of Development Economics* 4, 3895–3962

McKenzie, David. 2017. "Identifying and Spurring High-Growth Entrepreneurship: Experimental Evidence from a Business Plan Competition." *American Economic Review*, 107 (8): 2278-2307..

Due 6:00AM, Feb 27:

Paper 7: Why did the YouWiN! business plan competition have such large effects on business outcomes? Examine additional outcome variables or heterogeneous treatment effects to generate ideas.

8. March 1, 6, 8: Factor Markets, Households and Agriculture

Dataset: Nigeria LSMS-ISA waves 1-4 [Nigeria LSMS](#)

Reading for 3/1

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](#)

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](#)

Due 6:00AM, March 6

Paper 8: Do farmers in Nigeria maximize profits?

Briefly explain: (1) why complete markets imply that farmers maximize profits, and (2) how this “neoclassical separation” provides the basis for the test you use.

or

Do women farm differently than men in their households?

Briefly explain: (1) why the answer should be no in a Pareto efficient household and (2) how this “neoclassical separation” provides the basis for the test you use.