

## Research Methods and Computer Applications

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AERC, Nairobi, July 8<sup>st</sup> to November 8<sup>th</sup>, 2024.

This intensive course is designed as an advanced introduction to asking questions and doing research in economics, with applications focused particularly on questions relating to African economic and political development. A major lacuna in the study of these topics is that the intellectual agendas tend to be set by western scholars who typically have little understanding of the distinctiveness of African societies, cultures and institutions. We hope that this course is part of a process of changing this situation. Our main aim is to help you to ask interesting and important questions, think about variation and measurement and expose you to the canonical empirical research designs that scholars use to answer the questions. You will get a chance to develop and present your own questions and on-going research. We also hope that you will help us brainstorm some questions that we are working on particularly with respect to new ideas about development in Africa.

### Course Assessment

The main deliverable will be a research question and research design which we hope can become part of your PhD dissertation. The deadline for a written outline of preliminary ideas (not more than 5 pages) will be the last week of the first semester, Monday August 12 (20% of grade). The idea is that you can discuss your initial ideas with Professor Robinson on Friday August 16. The final proposal will be due at the start of the examination period in the second semester (60% of grade) so we can organize presentations by all the students.

There will also be two computer replication exercises (20% of grade each).

## Course Outline

First Semester, Monday, Wednesday, Friday 18.00 Nairobi Time (10am in Chicago)

### Week 1: Asking Questions

1. July 8<sup>th</sup> James A. Robinson Overview of the philosophy of the class. Starting with a question or puzzle
2. July 10<sup>th</sup> James A. Robinson Studying some Classics: Moving to a Hypothesis, measurement and a Test
3. July 12<sup>th</sup> James A. Robinson More African Questions

I will be available at the end of every lecture to discuss with students. When I get the class list I will propose suggested times.

### Week 2: Research Methods and Computer Applications I

4. July 15<sup>th</sup> Jean Marcelin B. Brou Basic Statistics and Software (Introduction to STATA)
5. July 17<sup>th</sup> Jean Marcelin B. Brou Fundamentals of Probability Theory, Random Variables and Distributions
6. July 19<sup>th</sup> Jean Marcelin B. Brou Introduction to Hypothesis Testing Theory

### Week 3: Research Methods and Computer Applications II

7. July 22<sup>nd</sup> Jean Marcelin Brou Univariate and Multivariate Statistics
8. July 24<sup>th</sup> Jean Marcelin Brou Basic Simulations
9. July 26<sup>th</sup> Jean Marcelin Brou Introduction to Machine Learning

### Week 4: Research Methods and Computer Applications III

10. July 29 <sup>th</sup>	Soeren J. Henn	Introduction to R and RStudio
11. July 31 <sup>st</sup>	Soeren J. Henn	Data Visualization and Wrangling
12. August 2 <sup>nd</sup>	Soeren J. Henn	Causality, RCTs & Observational Studies

Week 5: Research Methods and Computer Applications IV

13. August 5 <sup>th</sup>	Soeren J. Henn	Summarizing Data & Survey Sampling
14. August 7 <sup>th</sup>	Soeren J. Henn	Bivariate Relationships and Functions
15. August 9 <sup>th</sup>	Soeren J. Henn	Joining and Tidying Data

Week 6: Thinking how to Structure a Research Paper.

16. August 12 <sup>th</sup>	James A. Robinson	How does Africa work? Variation, for example between Lagos and Kinshasa.
17. August 14 <sup>th</sup>	James A. Robinson	How to develop a research project
18. August 16 <sup>th</sup>	James A. Robinson	Deconstructing some examples.

Week 7: Student Presentation of Ideas.

19. August 19 <sup>th</sup>	James A. Robinson	Presentation of Initial Research Ideas (we will have to figure out how to organize this closer to the date!).
20. August 21 <sup>st</sup> .	James A. Robinson	Presentation of Initial Research Ideas
21. August 23 <sup>rd</sup> .	James A. Robinson	Presentation of Initial Research Ideas

Second Semester

Week 1: Research Methods and Computer Applications V

22. September 9 <sup>th</sup>	Pierre Nguimkeu	The OLS and IV regressions
23. September 11 <sup>th</sup>	Pierre Nguimkeu	Maximum Likelihood Methods
24. September 13 <sup>th</sup>	Pierre Nguimkeu	Inference for Linear Regressions

Week 2: Research Methods and Computer Applications VI

25. September 16 <sup>th</sup>	Pierre Nguimkeu	Diff-in-Diff and Synthetic Control Approaches
26. September 18 <sup>th</sup>	Pierre Nguimkeu	Regression Discontinuity Designs
27. September 20 <sup>th</sup>	Pierre Nguimkeu	Measurement Errors

Week 3: Instruments and Natural Experiments

28. September 23 <sup>rd</sup>	Nathan Nunn	Variation from Geography
29. September 25 <sup>th</sup>	Nathan Nunn	Variation from Climate
30. September 27 <sup>th</sup>	Nathan Nunn	Natural Variation

Week 4: Differences in Differences and Applications

31. September 30 <sup>th</sup>	Nathan Nunn	Natural Experiments
32. October 2 <sup>nd</sup>	Nathan Nunn	Variation from Instruments
33. October 4 <sup>th</sup>	Nathan Nunn	TWFE & Diff-in-Diff

Week 5: Sources of Variation: Examples from Culture and Religion

34. October 7 <sup>th</sup>	Sara Lowes	Measuring Culture
35. October 9 <sup>th</sup>	Sara Lowes	Culture and Religion
36. October 11 <sup>th</sup>	Sara Lowes	Culture, History and Policy

Week 6: Regression Discontinuity, Randomization and Applications

37. October 14 <sup>th</sup>	Sara Lowes	Randomization 1
38. October 16 <sup>th</sup>	Sara Lowes	Randomization 2
39. October 18 <sup>th</sup>	Sara Lowes	Regression Discontinuity Designs (Examples)

Week 7: Student Presentation of Ideas.

40. October 21st	The Team
41. October 23rd	The Team
42. October 25th	The Team

## First Semester

Week 1 (beginning July 8): James Robinson

Topic: Questions

Lecture 1: What questions are interesting? Beyond the Africa dummy and towards a study of African uniqueness and potentials. The need for an African perspective.

- Easterly, William and Ross Levine (1997) “Africa’s Growth Tragedy: Policies and Ethnic Divisions,” *Quarterly Journal of Economics*, 112, 4, 1203-1250.
- Henn, Soeren and James A. Robinson (2024) “Africa as a Success Story,” Unpublished.
- Ferguson, James (1994) *The Anti-Politics Machine: Development, Depoliticization, and Bureaucratic Power in Lesotho*, Minneapolis: University of Minnesota Press. Chapter 9, pp. 251-277.
- Zenawi, Meles (2012) “African Development: Dead Ends and New Beginnings,” <https://www.meleszenawi.com/african-development-dead-ends-and-new-biginnings-by-meles-zenawi/>

Lecture 2: Studying some Classics: Moving to a Hypothesis and a Test

The classics:

- Bates, Robert H. (1983) “Pressure Groups, public policy, and agricultural development: a study of divergent outcomes,” in his *Essays on the Political Economy of Rural Africa*, Cambridge University Press.
- Douglas, Mary (1962) “Lele Economy compared with the Bushong” in Paul Bohannan and George Dalton eds. *Markets in Africa*, Northwestern University Press.
- Ekeh, Peter P. (1975) “Colonialism and the Two Publics in Africa: A Theoretical Statement,” *Comparative Studies in Society and History*, 17, 1, 91-112.

Measuring and testing:

- Kisara, Kimuli (2007) “Tax Me If You Can: Ethnic Geography, Democracy, and the Taxation of Agriculture in Africa,” *American Political Science Review* 101(1), 159-172.
- Lowes, Sara, Nathan Nunn, James A. Robinson and Jonathan Weigel (2017) “The Interaction of Institutions and Culture: Evidence from the Kuba Kingdom,” *Econometrica*, 85(4), 1065-1091.
- Burgess, Robin, Remi Jedwab, Edward Miguel, Ameet Morjaria and Gerard Padró i Miquel (2015) “The Value of Democracy: Evidence from Road Building in Kenya,” *American Economic Review*, 105, 6, 1817-51.

### Lecture 3: More African Questions

Today I would like to have a more general discussion about African culture and society and how it relates to the economy. I want to discuss, amongst other things, “wealth in people”, Ubuntu, African traditional religion and metaphysical ideas.

- Selections from Gyekye, Kwame (1996) *African Cultural Values*, Philadelphia: Sankofa.
- Hill, Polly (1966) “A Plea for Indigenous Economics: The West African Example,” *Economic Development and Cultural Change*, Vol. 15, No. 1 (Oct., 1966), pp. 10-20 (11 pages)
- Heldring, Leander and James A. Robinson (2023) “Problematizing State Capacity: The Rwandan Case,” *Journal of Institutional Economics*, 19, 3, 401-425.

Week 2 (beginning July 14): Jean-Marcelin Brou

Topic: Research Methods and Computer Applications I

Week 2 (beginning July 14): Jean-Marcelin B. Brou

Topic: Research Methods and Computer Applications I

### Lecture 4: Basic Statistics and Software (Introduction to STATA)

- Thomas Cleff (2019). Ch. 1 and 2.
- Cameron and Trivedi (2022a). Ch 1.

### Lecture 5: Fundamentals of Probability Theory, Random Variables and Distributions

- Ramu Ramanathan (1993). Ch 2, 3 and 4.
- Thomas Cleff (2019). Ch. 7.
- William Greene (2018). Appendix B.

### Lecture 6: Introduction to Hypothesis Testing Theory

- Ramu Ramanathan (1993). Ch 7.
- Thomas Cleff (2019). Ch. 9.
- William Greene (2018). Appendix C.

Week 3 (beginning July 22): Jean-Marcelin B. Brou

Topic: Research Methods and Computer Applications II

Lecture 7: Univariate and Multivariate Statistics

- Thomas Cleff (2019). Ch. 3 and 4.

Lecture 8: Basic Simulations

- Cameron and Trivedi (2022a). Ch 5.

Lecture 9: Introduction to Machine Learning

- Cameron and Trivedi (2022b). Ch 28.

Textbooks:

- Colin A. Cameron and Pravin K. Trivedi (2022a), *Microeconometrics Using Stata, Volume I: Cross-Sectional and Panel Regression Methods*, Second Edition, Stata Press.
- Colin A. Cameron and Pravin K. Trivedi (2022b), *Microeconometrics Using Stata, Volume II: Nonlinear Models and Causal Inference Methods*, Second Edition, Stata Press.
- Thomas Cleff (2019), *Applied Statistics and Multivariate Data Analysis in Business and Economics: A Modern Approach Using SPSS, Stata, and Excel*, Springer.
- William Greene (2018), *Econometric Analysis*, 8th Edition, Pearson.
- Ramu Ramanathan (1993), *Statistical Methods in Econometrics*, Academic Press.

Week 4 (beginning July 29): Soeren Henn

Topic: Research Methods and Computer Applications III

Lecture H1. Introduction to R and RStudio

- Imai, Kosuke and Nora Webb Williams. 2022. *Quantitative Social Science: An Introduction in tidyverse*. Chapter 1

- Ismay, Chester and Albert Y. Kim. 2022. Statistical Inference via Data Science: A ModernDive into R and the Tidyverse. Chapter 1 ([Link here](#))
- Do Tutorial 1

#### Lecture H2. Data Visualization and Wrangling

- Ismay, Chester and Albert Y. Kim. 2022. Chapter 2 and 3.
- Do Tutorial 2

#### Lecture H3. Causality, Randomized Experiments and Observational Studies

- Imai, Kosuke and Nora Webb Williams. 2022. Chapter 2
- Do Tutorial 3

Professor's Office Hours: Immediately following each lecture

Week 5: (beginning August 5) Soeren Henn

Topic: Research Methods and Computer Applications IV

#### Lecture H4: Summarizing Data and Survey Sampling

- Imai, Kosuke and Nora Webb Williams. 2022. Chapter 3.1-3.4
- Do Tutorial 4

#### Lecture H5: Bivariate Relationships and Functions

- Imai, Kosuke and Nora Webb Williams. 2022. Chapter 3.6
- Do Tutorial 5

#### Lecture H6: Joining and Tidying Data

- Ismay, Chester and Albert Y. Kim. 2022. Chapter 4.
- Do Tutorial 6

Professor's Office Hours: Immediately following each lecture

Week 6: (beginning August 12) James Robinson

Topic: Developing a Research Question

## Lecture 16: How does Africa work?

- Comaroff, Jean and John Comaroff (2011) “Figuring Democracy: An Anthropological Take on African Political Modernities,” in their *Theory from the South*, Paradigm Publishers.
- Nyerere, Julius (1997) “One-Party Government,” *Transition*, No. 75/76, The Anniversary Issue: Selections from Transition, 1961-1976 (1997), pp. 156-161 (6 pages)
- Malukisa Nkuku, Albert and Kristof Titeca (2019) “How Kinshasa’s markets are captured by powerful private interests, <https://theconversation.com/how-kinshasas-markets-are-captured-by-powerful-private-interests-88602>
- Cheeseman, Nic and Diane de Gramont (2017) “Managing a mega-city: learning the lessons from Lagos,” *Oxford Review of Economic Policy*, Volume 33, Issue 3, Autumn 2017, Pages 457–477.
- Imran Rasul and Daniel Rogger (2018) “Management of Bureaucrats and Public Service Delivery: Evidence from the Nigerian Civil Service”, *Economic Journal*, 128: 608, 413-446.

## Lecture 17: How to develop a research project:

- Samuel, Isaac (2024) “The evolution of the Tutsi/Hima and Hutu/Iru dichotomy from the 17th century to 1962: state and ethnicity in Rwanda and Nkore.”

## Lecture 18: Deconstructing two examples.

- Moscona, Jacob and Seck, Awa Ambra "Age Set vs. Kin: Culture and Financial Ties in East Africa." [Coverage: Econimate (video)] Conditionally Accepted, *American Economic Review*.
- Goldstein, Markus and Christopher Udry (2008) “The Profits of Power: Land Rights and Agricultural Investment in Ghana,” *Journal of Political Economy*, Vol. 116, No. 6 (December 2008), pp. 981-1022 (42 pages).

## Second Semester

Week 1: (beginning September 9) Pierre Nguimkeu

Topic: Research Methods and Computer Applications IV

Lecture 1: The OLS and IV regressions

- Greene, Williams (2012), *Econometric Analysis*, 7th Edition, Chap 2-9
- Wooldridge, Jeffrey (2013), *Econometric Analysis of Cross section and Panel Data*, Chap 4-8
- Angrist, J. and J.S. Pischke (2008), *Mostly Harmless Econometrics*, Chapter 4.

Lecture 2: Maximum Likelihood Methods

- Greene, Williams (2012), *Econometric Analysis*, 7th Edition, Chap 14
- Wooldridge, Jeffrey (2013), *Econometric Analysis of Cross section and Panel Data*, Chap 13

Lecture 3: Inference for Linear Regressions

- Greene, Williams (2012), *Econometric Analysis*, 7th Edition, Chap 2-6,
- Wooldridge, Jeffrey (2013), *Econometric Analysis of Cross section and Panel Data*, Chap 14
- Ismay, Chester and Albert Y. Kim (2022), *Statistical Inference via Data Science*, Chap 10.

Week 2: (beginning September 16) Pierre Nguimkeu

Topic: Research Methods and Computer Applications V

Lecture 4: Differences-in-Difference and Synthetic Control Approaches

- Angrist, J. and J.S. Pischke (2008), *Mostly Harmless Econometrics*, Chapter 5.
- Wooldridge, Jeffrey (2013), *Econometric Analysis of Cross section and Panel Data*, Chap 18
- Abadie, Alberto, Alexis Diamond, and Jens Hainmueller. “Comparative Politics and the Synthetic Control Method.” *American Journal of Political Science* 59, no. 2 (2015): 495–510

- Abadie, Alberto, Alexis Diamond, and Jens Hainmueller. “Synthetic Control Methods for Comparative Case Studies: Estimating the Effect of California’s Tobacco Control Program.” *Journal of the American Statistical Association* 105, no. 490 (2010): 493–505.

#### Lecture 5: Regression Discontinuity Designs

- Angrist, J. and J.S. Pischke (2008), *Mostly Harmless Econometrics*, Chap 6.
- Imbens, Guido W., and Thomas Lemieux. “Regression Discontinuity Designs: A Guide to Practice.” *Journal of Econometrics*, 142, no. 2 (2008): 615–35

#### Lecture 6: Measurement Errors in Econometric Analysis

- Imai, Kosuke and Nora Webb Williams (2022), *Quantitative Social Science*, Chapter 3
- Nguimkeu, P., Denteh, A., & Tchernis, R. (2019). “On the Estimation of Treatment Effects with Endogenous Misreporting.” *Journal of Econometrics*, 208(2), 487-506.
- Bound, J., Brown, C., & Mathiowetz, N. (2001). Measurement error in survey data. In *Handbook of econometrics* (Vol. 5, pp. 3705-3843).
- Hausman, J. (2001). “Mismeasured variables in econometric analysis: problems from the right and problems from the left.” *Journal of Economic perspectives*, 15(4), 57-67.

#### Week 3 (beginning September 23): Nathan Nunn

##### Topic: Naturally Occurring Variation

#### Lecture N1: Variation from Geography

- (\* Potential Guest Lecture) Alsan, Marcela (2015). “The Effect of the Tse Tse Fly on African Development,” *American Economic Review*, 105, 1, 382-410.
- Nunn, Nathan and Diego Puga (2012). “Ruggedness: The Blessing of Bad Geography in Africa,” *Review of Economics and Statistics*, 94 (1): 20-36.
- Diamond, Jared. (1997). *Guns, Germs, and Steel*. New York: W.W. Norton.

#### Lecture N2: Variation from Climate

- (\* Potential Guest Lecture) McGuirk, Eoin and Nathan Nunn (2024). “Transhumant Pastoralism, Climate Change, and Conflict in Africa,” *Review of Economic Studies*, forthcoming.
- Miguel, Edward, Shanker Satyanath, and Ernest Sergenti (2004). “Economic Shocks and Civil Conflict: An Instrumental Variables Approach,” *Journal of Political Economy*, 112 (4): 725-753.
- Burke, Marshal, Solomon Hsiang, and Miguel, Edward (2004). “Quantifying the Influence of Climate on Human Conflict,” *Science*, 112 (4): 725-753.

### Lecture N3: Observational Studies and Natural Variation

- (\* Potential Guest Lecture) Wantchekon, Leonard, Marko Klasnja, and Natalija Novta (2015). “Education and Human Capital Externalities: Evidence from Colonial Benin,” *Quarterly Journal of Economics*, 130: 703-757.
- (\* Potential Guest Lecture) Archibong, Belinda and Nonso Obikili (2024). “Prison Labor: The Price of Prisons and the Lasting Effects of Incarceration,” *Quarterly Journal of Economics*, forthcoming.
- Okoye, Dozie. (2021). “Things Fall Apart? Missions, Institutions, and Interpersonal Trust,” *Journal of Development Economics*, 148: 102568.
- Acemoglu, Daron, Tristan Reed, and James A. Robinson (2014) “Chiefs: Economic Development and Elite Control of Civil Society in Sierra Leone,” *Journal of Political Economy*, 122, 2, 319-368.
- Alesina, Alberto, Stelios Michalopoulos, and Elias Papaioannou. 2016. “Ethnic Inequality,” *Journal of Political Economy*, 124(2): 428-488.
- Alesina, Alberto, Stelios Michalopoulos, and Elias Papaioannou. 2021. “Intergenerational Mobility in Africa,” *Econometrica*, 89 (1): 1-35.
- Alesina, Alberto, Stelios Michalopoulos, and Elias Papaioannou. 2023. “Religion and Social Mobility in Africa,” *Nature*, 618: 134-143.

Professor’s Office Hours: Immediately following each lecture

Week 4 (beginning September 30): Nathan Nunn

Topic: Identification Strategies

### Lecture N4: Natural Experiments

- (\*) Michalopoulos, Stelios and Elias Papaioannou (2016) “The Long-Run Effects of the Scramble for Africa,” *American Economic Review*, 106(7): 1802-1848.

- Lowes, Sara, Nathan Nunn, James A. Robinson and Jonathan Weigel (2017) “The Interaction of Institutions and Culture: Evidence from the Kuba Kingdom,” *Econometrica*, 85(4), 1065-1091.

#### Lecture N5: Variation from Instruments

- (\*) Nunn, Nathan and Leonard Wantchekon (2011) “The Slave Trade and the Origins of Mistrust in Africa,” *American Economic Review*, 101 (7): 3221-3252.
- Nunn, Nathan. (2008). “The Long-Term Effects of Africa’s Slave Trades,” *Quarterly Journal of Economics*, 123 (1), 139-176.
- Acemoglu, Daron, Simon Johnson and James A. Robinson (2001) “The Colonial Origins of Comparative Development: An Empirical Investigation,” *American Economic Review*, 91, 1369-1401.
- Lowes, Sara and Eduardo Montero (2021) “The Legacy of Colonial Medicine in Central Africa,” *American Economic Review*, 111, 4, 1284-1314.

#### Lecture N6: TWFE & Diff-in-Diff

- (\*) Nunn, Nathan and Nancy Qian. (2011). “The Potatoes Contribution to Population and Urbanization: Evidence from a Historical Experiment,” *Quarterly Journal of Economics*, 126 (2): 593-650.
- Hjort, Jonas and Jonas Poulsen. (2019). “The Arrival of Fast Internet and Employment in Africa,” *American Economic Review*, 109(3): 1032-1079.
- Franck, Raphael and Ilia Rainer. (2012). “Does the Leader’s Ethnicity Matter? Ethnic Favoritism, Education, and Health in Sub-Saharan Africa.” *American Political Science Review*, 106 (2): 294-325.
- Archibong, Belinda and Francis Annan. (2017). “Disease and Gender Gaps in Human Capital Investment: Evidence from Niger’s 1986 Meningitis Epidemic,” *American Economic Review Papers and Proceedings*, 107 (5): 530-535.

Professor’s Office Hours: Immediately following each lecture

Week 5 (beginning October 7): Sara Lowes

Topic: Further Empirical Tools and Strategies

Lecture L1: Measuring Culture; Lab in the Field Experiments

- (\*) Henrich, Joseph, Robert Boyd, Sam Bowles, Colin Camerer, Herbert Gintis, Richard McElreath and Ernst Fehr. (2001). "In search of Homo Economicus: Experiments in 15 Small-Scale Societies," *American Economic Review*, 91(2): 73-79.
- Lowes, Sara. "Ethnographic and Field Data in Historical Economics," *The Handbook of Historical Economics*, Chapter 6, edited by A. Bisin and G. Federico, Elsevier Academic Press, 2021, pp. 147-177.
- Habyarimana, James et al. 2007. "Why Does Ethnic Diversity Undermine Public Goods Provision?" *American Political Science Review*, 101 (4): 709-725.
- Lowes, Sara and Nathan Nunn. "Lab Experiments in Developing Country Contexts", in *Handbook of Experimental Economics Methods*, edited by Eric Snowberg and Leat Yariv, 2024.

#### Lecture L2: Culture and Religion

- (\*) Lowes, Sara, Nathan Nunn and Etienne Le Rossignol (2022) "The Social Consequences of Traditional Religion in Contemporary Africa," <https://www.saralowes.com/research.html>
- (\*Potential Guest Lecture) Auriol, Emmanuelle, Julie Lassébie, Amma Panin, Eva Raiber, Paul Seabright (2020) "God insures those who pay: formal insurance and religious offering in Ghana" *Quarterly Journal of Economics*, Volume 135, Issue 4, Pages 1799–1848/
- Lowes, Sara and Etienne Le Rossignol (2022) "Ancestral Livelihoods and Moral Universalism: Evidence from Transhumant Pastoralism," <https://www.saralowes.com/research.html>
- Bergeron, Augustin (2022) "Missions, Social Ties, and Moral Universalism: Evidence from the Belgian Congo".

#### Lecture L3: Culture, History, and Policy

- (\*) Ashraf, Nava, Natalie Bau, Nathan Nunn, Alessandra Voena (2020) "Bride Price and Female Education," *Journal of Political Economy*, 128, 2, 591-641.
- Bau, Natalie. "Can Policy Change Culture: Government Pension Plans and Traditional Kinship Practices," *American Economic Review*, 2021, vol. 111, no. 6.
- Le Rossignol, Etienne, Sara Lowes, and Eduardo Montero. (2022). "Fallow Lengths and the Structure of Property Rights."
- (\*Potential Guest Lecture) Annan, Francis and Belinda Archibong, (2020), "'We Are Not Guinea Pigs': The Effects of Disclosure of Medical Misconduct on Vaccine Compliance"

Week 6 (beginning October 14): Sara Lowes

Topic: Regression Discontinuity, Randomization, and Applications

#### Lecture L4: Randomization 1

- (\*) Donald, Aletheia, Sara Lowes, and Julia Vaillant, 2024. “Experimental Evidence on Rural Child Care Provision in the DRC,” 2024.
- (\* Potential Guest Lecture) Nunn, Nathan, Marina Ngoma, Clara Sievert, and Jonathan Weigel. 2025. “Urbanization and Religion in the DRC.” Working paper.
- Sánchez de la Sierra, Raúl, Kristof Titeca, Haoyang (Stan) Xie, Albert Malukisa Nkuku and Aimable Amani Lameke (2022) “The Real State: Inside the Congo’s Traffic Police Agency,” NBER Working Paper # 30258. <https://www.nber.org/papers/w30258>

#### Lecture L5: Randomization 2

- (\*) Hjort, Jonas, (2014). “Ethnic Divisions and Production in Firms,” *Quarterly Journal of Economics*, 129, 4, 1899-1946.
- (\* Potential Guest Lecture) Annan, Francis, (2023). “Misconduct and Reputation under Imperfect Information,” Forthcoming, *Journal of Political Economy*.
- Weigel, Jonathan L. (2020) “The Participation Dividend of Taxation: How Citizens in Congo Engage More with the State When it Tries to Tax Them,” *Quarterly Journal of Economics*, 135, 4, 1849–1903.

#### Lecture L6: Regression Discontinuity Designs (Examples)

- (\*) Lowes, Sara, and Eduardo Montero (2021) “Concessions, Violence, and Indirect Rule: Evidence from the Congo Free State”. *Quarterly Journal of Economics*, Volume 136, Issue 4, Pages 2047-2091.
- (\* Potential Guest Lecture) Dupas, Pascaline, Camille Falezan, Marie Christelle Mabeu and Pauline Rossi (2024) “Long-run Impacts of Forced Labor Migration on Fertility Behaviors: Evidence from Colonial West Africa”.
- Moscona, Jacob, Nathan Nunn and James A. Robinson (2020) “Segmentary Lineage Organization and Conflict in Sub-Saharan Africa,” *Econometrica*, 88, 5, 1999-2036.
- Lowes, Sara (2022) “Kinship Structure and the Family: Evidence from the Matrilineal Belt,” <https://www.saralowes.com/research.html>
- Dozie Okoye and Roland Pongou, 2024. “Missions, fertility transition, and the reversal of fortunes: evidence from border discontinuities in the emirates of Nigeria,” *Journal of Economic Growth*, Springer, vol. 29(2), pages 251-325, June.

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