

Syllabus

Seminar: Experimental Program Evaluation in Latin America

WS 2024/25

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1. General information

1.1 Course description and goals

Experimental or randomized evaluation has become one of the most relevant techniques used by economists to assess the causal effects or impacts of development programs. These evaluations are conducted in diverse fields such as health, education, labor economics, microfinance, among others.

This seminar has two main goals. On the one hand, it aims to introduce students to the concept of causal inference and literature on impact evaluation using randomization in development economics, particularly Latin American countries. On the other hand, it aims to teach students how to conduct a regression analysis using Stata with real data.

In this context, students are expected to replicate the econometric analysis of the randomized evaluation of a development program in Latin America (listed in the Syllabus). In addition, students are asked to write and present their own seminar paper using previous literature on the program, its evaluation design, and their own econometric analysis.

Since students are expected to do their own empirical analysis, they should have completed an econometrics course and should ideally be familiar with regression analysis using Stata or another statistical software (e.g., R). Nonetheless, a “crash-course” for Stata beginners will be offered. In addition, a [Stata Self-Study](#) course is available on Stud.IP.

1.2 Eligible Participants

The seminar is open to MA students in international economics, development economics, applied statistics, and business studies.

1.3 Prerequisites

Basic understanding of econometrics (Econometrics I)

1.4 Credit points

6 ECTS points

1.5 Registration

The sign-up for this seminar is centralized. The announcement of the seminar allocations will be shared with the students via the economics newsletter. Seminar slots will be allocated according to preferences and contested slots will be allocated in a lottery. In case of any questions about the process, please contact counseling-devecon@uni-goettingen.de. If you have obtained a slot, please register via FlexNow until Monday, November 4th, 2024. Attendance at the kickoff meeting is compulsory for registration. The number of participants is restricted to 15.

2. Course overview

2.1 Requirements

To acquire 6 ECTS points, students will have to write a replication paper (70%), prepare a presentation, participate in the discussions, and briefly discuss the paper of another student (which together accounts for the other 30%). Attendance at the final meeting is compulsory.

2.1.1 Research papers

The seminar papers must be written in English, comprising 10-12 pages (12 pt., 1.5 spaced, excluding reference list and appendix). In addition, a short abstract of about 150 words (key question, methodology, and main results) must be included.

Use a referencing style that is in line with basic conventions in economics literature. Always quote within a work using the same method. The in-text author-year citation style is recommended.

The specific structure for the seminar paper will be discussed at the kick-off meeting. Please, also take into account the Institute's general guidelines on writing and formatting a thesis on the [webpage](#). (The guide is on BA and MA theses, but many aspects apply to term papers as well.)

2.1.2 Presentations

The presentations should have a maximum length of 15 min. The speaker may use any visual device for his presentation (e.g., power point, pdf) and should be able to answer short questions during and after the presentation.

2.1.3 Discussions

Each student will be assigned another paper, which he/she should briefly (5 min) discuss after the presentation. The discussion should be a critical reflection of the paper and presentation (content, structure, unclear points) and come up with two or three questions to start a discussion in the plenum.

2.2 Preliminary schedule (timeline)

Monday, 28.10.2024 (16:00-18:00 c.t.) – **Kickoff meeting** (online*): Aim of the seminar and registration procedure; Guidelines to Write and Present an Empirical Paper; Introduction to Causal Inference and Impact Evaluation

[https://uni-goettingen.zoom-
x.de/j/67539976159?pwd=NDOESoHdOt7vWQfPeYGwOcrkSCbXl0.1](https://uni-goettingen.zoom.us/j/67539976159?pwd=NDOESoHdOt7vWQfPeYGwOcrkSCbXl0.1)

Meeting ID: 675 3997 6159

Passcode: 705513

Monday, 04.11.2024 (16:00-18:00 c.t.) – **Using Randomized Controlled Trials to Evaluate Program Impacts** (online):

Monday, 11.11.2024 (16:00-18:00 c.t.) – **Stata “crash-course”** (online)

Monday, 18.11.2024 (16:00-18:00 c.t.) – **Stata “crash-course”** (online)

Monday, 25.11.2023 (16:00-18:00 c.t.) – **Stata Regression Analysis** (online) / **Deadline** to choose a project

Mondays, from 02.12.2024 to 13.01.2025 (16:00- 18:00 c.t.) – **Bilateral meetings** (online): Students make individual appointments to discuss seminar paper questions

Monday, 10.02.2025 – **Seminar paper deadline:** Students should hand in an electronic copy of their seminar papers and do-files by email.

Monday, 17.02.2025 – **Presentation deadline:** Students should submit presentations by email (before block seminar meeting)

Monday, 17.02.2025 and Tuesday 18.02.2025 (16:00-20:00 c.t.) – **Two-day block seminar** (in person)

* Use the same Zoom meeting ID and passcode for all online sessions.

2.3 Basic material and readings:

Kick-off meeting

Duflo, Esther, Rachel Glennerster, and Michael Kremer. 2006. "Using Randomization in Development Economics Research: A Toolkit." NBER Technical Working Paper, 333. Cambridge, MA. <https://doi.org/10.3386/t0333>

Glewwe, Paul, and Petra Todd. 2022. *Impact Evaluation in International Development: Theory, Methods, and Practice*. Washington, D.C.: World Bank Group. <http://documents.worldbank.org/curated/en/099056007072227384/IDU0944e7277054e1047800a2e10cc7e32c805e4>

Khandker, Shahidur, Gayatri B. Koolwal, and Hussain Samad. 2009. *Handbook on Impact Evaluation*. World Bank. Washington, D.C.: World Bank Group. <http://documents.worldbank.org/curated/en/650951468335456749/Handbook-on-impact-evaluation-quantitative-methods-and-practices>

Stata sessions

Kohler, U., Kreuter, F. 2016. "Datenanalyse mit Stata: allgemeine Konzepte der Datenanalyse und ihre praktische Anwendung." Berlin and Boston: Walter de Gruyter GmbH & Co KG.

Kohler, U., Kreuter, F. (2012). "Data Analysis Using Stata." College Station, TX: Stata Press

3. Replication Projects

I: Health, Education, Welfare

1. **Orazio Attanasio, Helen Baker-Henningham, Raquel Bernal, Costas Meghir, Diana Pineda, Marta Rubio-Codina, Early Stimulation and Nutrition: The Impacts of a Scalable Intervention, *Journal of the European Economic Association*, Volume 20, Issue 4, August 2022, Pages 1395–1432, <https://doi.org/10.1093/jeea/jvac005>**

Abstract

Early childhood development is becoming the focus of policy worldwide. However, the evidence on the effectiveness of scalable models is scant, particularly when it comes to infants in developing countries. In this paper, we describe and evaluate with a cluster-Randomized Controlled Trial an intervention designed to improve the quality of child stimulation within the context of an existing parenting program in Colombia, known as FAMI. The intervention improved children's development by 0.16 of a standard deviation (SD) and children's nutritional status, as reflected in a reduction of 5.8 percentage points of children whose height-for-age is below -1 SD.

2. **Barrera-Osorio, Felipe, Leigh L. Linden, and Juan E. Saavedra. 2019. "Medium- and Long-Term Educational Consequences of Alternative Conditional Cash Transfer Designs: Experimental Evidence from Colombia." *American Economic Journal: Applied Economics*, 11 (3): 54-91. DOI: 10.1257/app.20170008**

Abstract

In 2005 the city of Bogota, Colombia, introduced three conditional cash transfer programs for secondary schooling, randomly assigning socioeconomically disadvantaged students to different payment structures. We show, through administrative data, that forcing families to save one-third of the transfer increases long-term human capital accumulation by means of additional tertiary education—which is not incentivized—, casting doubt on conditionalities as a driving mechanism. Directly incentivizing on-time tertiary enrollment does no better than forcing families to save a portion of the transfer. Whereas forcing families to save increases enrollment in four-year universities, incentivizing tertiary enrollment only increases enrollment in low-quality colleges.

3. **Celhay, Pablo A., Paul J. Gertler, Paula Giovagnoli, and Christel Vermeersch. 2019. "Long-Run Effects of Temporary Incentives on Medical Care Productivity." *American Economic Journal: Applied Economics*, 11 (3): 92-127. DOI: 10.1257/app.20170128**

Abstract

We show that costs of adjustment as opposed to low perceived value may explain why improved quality care practices diffuse slowly in the medical industry. Using a randomized field experiment conducted in Argentina, we find that temporary financial incentives paid to health clinics for the early initiation of prenatal care motivated providers to test and develop new strategies to locate and encourage pregnant women to seek care in the first trimester of pregnancy. These innovations raised the rate of early initiation of prenatal care by 34 percent while the incentives were being paid in the treatment period. We also find that this increase persisted for at least 24 months after the incentives ended. We show that this is consistent with the presence of up-front costs from adjusting care processes that made it too expensive to develop and implement new strategies to increase early initiation of care in the absence of the incentives. Despite large increases in early initiation of prenatal care, we find no effects on health outcomes.

- 4. Cristia, By Julian, Pablo Ibarrarán, Santiago Cueto, Ana Santiago, and Eugenio Severín. 2017. "Technology and Child Development: Evidence from the One Laptop per Child Program." *American Economic Journal: Applied Economics*, 9 (3): 295-320. DOI: 10.1257/app.20150385**

Abstract

This paper presents results from a large-scale randomized evaluation of the One Laptop per Child program, using data collected after 15 months of implementation in 318 primary schools in rural Peru. The program increased the ratio of computers per student from 0.12 to 1.18 in treatment schools. This expansion in access translated into substantial increases in use of computers both at school and at home. No evidence is found of effects on test scores in math and language. There is some evidence, though inconclusive, about positive effects on general cognitive skills.

- 5. Bruhn, Miriam, Luciana de Souza Leão, Arianna Legovini, Rogelio Marchetti, and Bilal Zia. 2016. "The Impact of High School Financial Education: Evidence from a Large-Scale Evaluation in Brazil." *American Economic Journal: Applied Economics*, 8 (4): 256-95.**

Abstract

We study the impact of a comprehensive high school financial education program spanning 6 states, 892 schools, and approximately 25,000 students in Brazil through a randomized control trial. The program increased student financial proficiency by a quarter of a standard deviation and raised grade-level passing rates. Short-term financial behaviors, however, show mixed results with significant improvements in students' savings and budgeting as well as positive spillovers to parents, but also an increase in students' use of expensive credit to make consumer purchases.

- 6. Beuermann, Diether W., Julian Cristia, Santiago Cueto, Ofer Malamud, and Yyannu Cruz-Aguayo. 2015. "One Laptop per Child at Home: Short-Term Impacts from a Randomized Experiment in Peru." *American Economic Journal: Applied Economics*, 7 (2): 53-80. DOI: 10.1257/app.20130267**

Abstract

This paper presents results from a randomized controlled trial whereby approximately 1,000 OLPC XO laptops were provided for home use to children attending primary schools in Lima, Peru. The intervention increased access and use of home computers, with some substitution away from computer use outside the home. Children randomized to receive laptops scored about 0.8 standard deviations higher in a test of XO proficiency but showed lower academic effort as reported by teachers. There were no impacts on academic achievement or cognitive skills as measured by the Raven's Progressive Matrices test. Finally, there was little evidence for spillovers within schools. (JEL I21, I28, J13, O15)

- 7. Angrist, Joshua, Eric Bettinger, Erik Bloom, Elizabeth King, and Michael Kremer. 2002. "Vouchers for Private Schooling in Colombia: Evidence from a Randomized Natural Experiment" *American Economic Review*, 92 (5): 1535-1558. DOI: 10.1257/000282802762024629**

Abstract

Colombia used lotteries to distribute vouchers which partially covered the cost of private secondary school for students who maintained satisfactory academic progress. Three years after the lotteries, winners were about 10 percentage points more likely to have finished 8th grade, primarily because they were less likely to repeat grades, and scored 0.2 standard deviations higher on achievement tests. There is some evidence that winners worked less than losers and were less likely to marry or cohabit as teenagers. Benefits to participants likely exceeded the \$24 per winner additional cost to the government of supplying vouchers instead of public-school places.

J: Labor and Demographic Economics

- 8. Le Barbanchon, Thomas, Diego Ubfal, and Federico Araya. 2023. "The Effects of Working While in School: Evidence from Employment Lotteries." *American Economic Journal: Applied Economics*, 15 (1): 383-410. DOI: 10.1257/app.20210041**

Abstract

Does working while in school smooth students' transition into the labor market? We provide evidence on this question by leveraging a one-year work-study program that randomized job offers among over 90,000 student applicants in Uruguay. Program rules forbade employers from employing participants in the same job after program completion, and less than 5 percent of participants ever worked in the same firm again. Two years after the program, participants had 8 percent higher earnings. Our results suggest that the program's focus on work-related skills was a key mechanism for earnings impacts.

- 9. Martínez A., Claudia, Esteban Puentes, and Jaime Ruiz-Tagle. 2018. "The Effects of Micro-entrepreneurship Programs on Labor Market Performance: Experimental Evidence from Chile." *American Economic Journal: Applied Economics*, 10 (2): 101-24.**

Abstract

We investigate the impact of a program providing asset transfers and business training to low income individuals in Chile, and asked whether a larger asset transfer would magnify the program's impact. We randomly assigned participation in a large scale, publicly run micro-entrepreneurship program and evaluated its effects over 45 months. The program improved business practices, employment, and labor income. In the short run, self-employment increased by 14.8/25.2 percentage points for a small/large asset transfer. In the long run, individuals assigned to a smaller

transfer were 9 percentage points more likely to become wage workers, whereas those assigned to larger transfers tended to remain self-employed.

10. Lafortune, Jeanne, Julio Riutort, and José Tessada. 2018. "Role Models or Individual Consulting: The Impact of Personalizing Micro-entrepreneurship Training." *American Economic Journal: Applied Economics*, 10 (4): 222-45. DOI: 10.1257/app.20170077

Abstract

Using a randomized experiment in Chile we study the impact role models have in the context of a training program for micro-entrepreneurs. We show that being in a group randomly chosen to be visited by a successful alumnus of the program increases household income one year after, mostly due to increased business participation and business income. We also randomized the provision of personalized "consulting sessions" vis-à-vis group sessions, and observe similar effects on income, with the role model intervention being significantly more cost effective and better suited for less experienced businesses.

11. Drexler, Alejandro, Greg Fischer, and Antoinette Schoar. 2014. "Keeping It Simple: Financial Literacy and Rules of Thumb." *American Economic Journal: Applied Economics*, 6 (2): 1-31. DOI: 10.1257/app.6.2.1

Abstract

Micro-entrepreneurs often lack the financial literacy required to make important financial decisions. We conducted a randomized evaluation with a bank in the Dominican Republic to compare the impact of two distinct programs: standard accounting training versus a simplified, rule-of-thumb training that taught basic financial heuristics. The rule-of-thumb training significantly improved firms' financial practices, objective reporting quality, and revenues. For micro-entrepreneurs with lower skills or poor initial financial practices, the impact of the rule-of-thumb training was significantly larger than that of the standard accounting training, suggesting that simplifying training programs might improve their effectiveness for less sophisticated individuals.

12. Attanasio, Orazio, Adriana Kugler, and Costas Meghir. 2011. "Subsidizing Vocational Training for Disadvantaged Youth in Colombia: Evidence from a Randomized Trial." *American Economic Journal: Applied Economics*, 3 (3): 188-220. DOI: 10.1257/app.3.3.188

Abstract

This paper evaluates the impact of a randomized training program for disadvantaged youth introduced in Colombia in 2005. This randomized trial offers a unique opportunity to examine the impact of training in a middle income country. We use originally collected data on individuals randomly offered and not offered training. The program raises earnings and employment for women. Women offered training earn 19.6 percent more and have a 0.068 higher probability of

paid employment than those not offered training, mainly in formal-sector jobs. Cost-benefit analysis of these results suggests that the program generates much larger net gains than those found in developed countries. (JEL I28, J13, J24, O15)

O: Economic Development, Innovation, Technological Change and Growth

13. Garbiras-Díaz, Natalia, and Mateo Montenegro. 2022. "All Eyes on Them: A Field Experiment on Citizen Oversight and Electoral Integrity." *American Economic Review*, 112 (8): 2631-68. DOI: 10.1257/aer.20210778

Abstract

Can information and communication technologies help citizens monitor their elections? We analyze a large-scale field experiment designed to answer this question in Colombia. We leveraged Facebook advertisements sent to over 4 million potential voters to encourage citizen reporting of electoral irregularities. We also cross-randomized whether candidates were informed about the campaign in a subset of municipalities. Total reports, and evidence-backed ones, experienced a large increase. Across a wide array of measures, electoral irregularities decreased. Finally, the reporting campaign reduced the vote share of candidates dependent on irregularities. This light-touch intervention is more cost-effective than monitoring efforts traditionally used by policymakers.

14. Galiani, Sebastian, Nadya Hajj, Patrick J. McEwan, Pablo Ibararán, and Nandita Krishnaswamy. 2019. "Voter Response to Peak and End Transfers: Evidence from a Conditional Cash Transfer Experiment." *American Economic Journal: Economic Policy*, 11 (3): 232-60. DOI: 10.1257/pol.20170448

Abstract

In a Honduran field experiment, sequences of cash transfers to poor households varied in amount of the largest (peak) and last (end) transfers. Larger peak-end transfers increased voter turnout and the incumbent party's vote share in the 2013 presidential election, independently of cumulative transfers. A plausible explanation is that voters succumbed to a common cognitive bias by applying peak-end heuristics. Another is that voters deliberately used peak-end transfers to update beliefs about the incumbent party. In either case, the results provide experimental evidence on the classic non-experimental finding that voters are especially sensitive to recent economic activity.

15. Hjort, Jonas, Diana Moreira, Gautam Rao, and Juan Francisco Santini. 2021. "How Research Affects Policy: Experimental Evidence from 2,150 Brazilian Municipalities." *American Economic Review*, 111 (5): 1442-80. DOI: 10.1257/aer.20190830

Abstract

Can research findings change political leaders' beliefs and policies? We use experiments with 2,150 Brazilian municipalities to measure mayors' demand for and response to research information. In one experiment, we find that mayors are willing to pay to learn the results of evaluation studies, and update their beliefs when informed of the findings. They value larger-sample studies more, while not distinguishing between studies in rich and poor countries. In a second experiment, we find that informing mayors about research on a simple and effective policy, taxpayer reminder letters, increases the probability the policy is implemented by 10 percentage points.

16. Hidrobo, Melissa, Amber Peterman, and Lori Heise. 2016. "The Effect of Cash, Vouchers, and Food Transfers on Intimate Partner Violence: Evidence from a Randomized Experiment in Northern Ecuador." *American Economic Journal: Applied Economics*, 8 (3): 284-303. DOI: 10.1257/app.20150048

Abstract

Using a randomized experiment in Ecuador, this study provides evidence on whether cash, vouchers, and food transfers targeted to women and intended to reduce poverty and food insecurity also affected intimate partner violence. Results indicate that transfers reduce controlling behaviors and physical and/or sexual violence by 6 to 7 percentage points. Impacts do not vary by transfer modality, which provides evidence that transfers not only have the potential to decrease violence in the short-term, but also that cash is just as effective as in-kind transfers.

17. Angelucci, Manuela, Dean Karlan, and Jonathan Zinman. 2015. "Microcredit Impacts: Evidence from a Randomized Microcredit Program Placement Experiment by Compartamos Banco." *American Economic Journal: Applied Economics*, 7 (1): 151-82. DOI: 10.1257/app.20130537

Abstract

We use a clustered randomized trial, and over 16,000 household surveys, to estimate impacts at the community level from a group lending expansion at 110 percent APR by the largest microlender in Mexico. We find no evidence of transformative impacts on 37 outcomes (although some estimates have large confidence intervals), measured at a mean of 27 months post-expansion, across 6 domains: microentrepreneurship, income, labor supply, expenditures, social status, and subjective well-being. We also examine distributional impacts using quantile regressions, given theory and evidence regarding negative impacts from borrowing at high interest rates, but do not find strong evidence for heterogeneity.

18. Ambler, Kate, Diego Aycinena, and Dean Yang. 2015. "Channeling Remittances to Education: A Field Experiment among Migrants from El Salvador." *American Economic Journal: Applied Economics*, 7 (2): 207-32. DOI: 10.1257/app.20140010

Abstract

We implement a randomized experiment offering Salvadoran migrants matching funds for educational remittances, which are channeled directly to a beneficiary student in El Salvador chosen by the migrant. The matches lead to increased educational expenditures, higher private school attendance, and lower labor supply of youths in El Salvador households connected to migrant study participants. We find substantial "crowd-in" of educational investments: for each \$1 received by beneficiaries, educational expenditures increase by \$3.72. We find no shifting of expenditures away from other students, and no effect on remittances.

19. Cunha, Jesse M. 2014. "Testing Paternalism: Cash versus In-Kind Transfers." *American Economic Journal: Applied Economics*, 6 (2): 195-230. DOI: 10.1257/app.6.2.195

Abstract

Welfare programs are often implemented in-kind to promote outcomes that might not be realized under cash transfers. This paper tests whether such paternalistically motivated transfers are justified compared to cash, using a randomized controlled trial of Mexico's food assistance program. In relation to total food consumption, the in-kind transfer was infra-marginal and nondistorting. However, the transfer contained ten food items, and there was large variation in the extent to which individual foods were extra-marginal and distorting. Small differences in the nutritional intake of women and children under in-kind transfers did not lead to meaningful differential improvements in health outcomes compared to cash.

20. Edmonds, Eric V., and Norbert Schady. 2012. "Poverty Alleviation and Child Labor." *American Economic Journal: Economic Policy*, 4 (4): 100-124. DOI: 10.1257/pol.4.4.100

Abstract

Poor women with children in Ecuador were selected at random for a cash transfer that is less than 20 percent of median child labor earnings. Poor families with children in school at the time of the award use the transfer to postpone the child's entry into the labor force. Students in families induced to take up the transfer by the experiment reduce paid employment by 78 percent and unpaid economic activity inside their home by 32 percent. Time in unpaid household services increases, but overall time spent working declines.