### Course Outline

This course covers a range of challenges faced by governments in low- and middle-income countries. The course will cover both applied theory papers and empirical papers applying the latest empirical methods.

### **Evaluation**

Students will be evaluated on their performance on the class debate on "A Universal Basic Income is preferable to targeted transfers in middle income countries", a referee report, and class participation.

#### 1 Taxation

Tax systems in rich countries look very different from those in poor countries. How should tax systems be designed in the presence of high levels of tax evasion and informality? How much tax evasion is there? How can governments reduce tax evasion?

- 1. MG Allingham and A Sandmo. 1972. "Income Tax Evasion: A Theoretical Analysis". *Journal of Public Economics* 1:323–338.
- 2. A. Alstadsæter, N. Johannesen, and G. Zucman. 2017. "Tax Evasion and Inequality". Mimeo: UC Berkeley.
- 3. J. Andreoni, B. Erard, and J. Feinstein. 1998. "Tax Compliance". *Journal of Economic Literature* 36:818–860.
- 4. N. Artavanis, A. Morse, and M. Tsoutsoura. 2016. "Measuring Income Tax Evasion using Bank Credit: Evidence from Greece". Quarterly Journal of Economics 131 (2): 739–798.
- 5. N Benhassine, V Pouliquen, and M Santini. 2018. "Can Enhancing the Benefits of Fomrmalization Induce Informal Firms to Become Formal? Experimental Evidence from Benin". *Journal of Public Economics* 157:1–14.
- 6. T. Besley and T. Persson. 2009. "The origins of state capacity: Property rights, taxation and politics". American Economic Review 99:1218–1244.
- 7. T. Besley and T. Persson. 2011. *Pillars of prosperity: The political economics of development clusters*. Princeton: Princeton University Press.
- 8. T. Besley and T. Persson. 2013. "Taxation and Development". In *Handbook of Public Economics volume V*, ed. by A Auerbach, R Chetty, and M Feldstein.

- M.C. Best, A. Brockmeyer, H.J. Kleven, J. Spinnewijn, and M. Waseem. 2015. "Production versus Revenue Efficiency with Limited Tax Capacity: Theory and Evidence From Pakistan". *Journal of Political Economy* 123 (6): 1311–1355.
- 10. R. Boadway and M Sato. 2009. "Optimal Tax Design and Enforcement with an Informal Sector". American Economic Journal: Economic Policy 1 (1): 1–27.
- R. Burgess and N. Stern. 1993. "Taxation and Development". Journal of Economic Literature 31 (2): 762–830.
- 12. R. Chetty. 2009. "Is the Taxable Income Elasticity Sufficient to Calculate Deadweight Loss? The Implications of Evasion and Avoidance". American Economic Journal: Economic Policy 1 (2): 31–52.
- N. Dwenger, H.J. Kleven, I. Rasul, and J. Rincke. 2016. "Extrinsic and Intrinsic Motivations for Tax Compliance: Evidence From a Field Experiment in Germany". American Economic Journal: Economic Policy 8 (3): 203–32.
- 14. R Fisman and SJ Wei. 2004. "Tax Rates and Tax Evasion: Evidence from "Missing Imports" in China". *Journal of Political Economy* 112 (2): 471–496.
- 15. R Gordon and W Li. 2009. "Tax Structures in Developing Countries: Many Puzzles and a Possible Explanation". *Journal of Public Economics* 93:855–866.
- Y. Gorodnichenko, J. Martinez-Vazquez, and K.S. Peter. 2009. "Myth and Reality of Flat Tax Reform: Micro Estimates of Tax Evasion and Productivity Response in Russia". *Journal of Political Economy* 117:504–554.
- 17. H.J. Kleven, M. Knudsen, C. Kreiner, S. Pederson, and E. Saez. 2011. "Unwilling or Unable to Cheat? Evidence from a Tax Audit Experiment in Denmark". *Econometrica* 79 (3): 651–692.
- 18. R La Porta and A Shleifer. 2014. "Informality and Development". *Journal of Economic Perspectives* 28 (3): 109–126.
- 19. E. Luttmer and M. Singhal. 2014. "Tax Morale". *Journal of Economic Perspectives* 28 (4): 149–168.
- D. Pomeranz. 2015. "No Taxation without Information: Deterrence and Self-Enforcement in the Value Added Tax". American Economic Review 105 (8): 2539–2569.
- 21. S Sequeira. 2016. "Corruption, Trade Costs, and Gains from Tariff Liberalization: Evidence from Southern Africa". *American Economic Review* 106 (10): 3029–3963.

- 22. J. Slemrod. 2007. "Cheating Ourselves: The Economics of Tax Evasion". Journal of Economic Perspectives 21:25–48.
- 23. J. Slemrod and S. Yitzhaki. 2002. "Tax Avoidance, Evasion and Administration". In *Handbook of Public Economics, volume III*, ed. by A.J. Auerbach and M. Feldstein.
- 24. G. Zucman. 2013. "The Missing Wealth of Nations: Are Europe and the U.S. net Debtors or net Creditors?" Quarterly Journal of Economics 128 (3): 1321–1364.
- 25. G. Zucman. 2014. "Taxing Across Borders: Tracking Personal Wealth and Corporate Profits". *Journal of Economic Perspectives* 28 (4): 121–148.

# 2 Anti-poverty Programs

Targeted transfers to poor household are a huge part of government spending in low- and middle-income countries. How should these programs be designed? Should they be monetary or in-kind transfers? Should they be means-tested? If so, how will eligibility be determined?

- G. Akerlof. 1978. "The Economics of Tagging as Applied to the Optimal Income Tax, Welfare Programs, and Manpower Planning". American Economic Review 68 (1): 8–19
- 2. V. Alatas, A. Banerjee, R. Hanna, B. Olken, and J. Tobias. 2012. "Targeting the Poor: Evidence from a Field Experiment in Indonesia". *American Economic Review* 104 (2): 1206–1240
- 3. V. Alatas, A. Banerjee, R. Hanna, B. Olken, M. Wai-Poi, and R. Purnamasari. 2016. "Self Targeting: Evidence From a Field Experiment in Indonesia". *Journal of Political Economy* 124 (2): 371–427
- 4. M Angelucci and G De Giorgi. 2009. "Indirect Effects of an Aid Program: How Do Cash Transfers Affect Ineligibles' Consumption". *American Economic Review* 99 (1): 486–508
- O Attanasio and V Lechene. 2014. "Efficient Responses to Targeted Cash Transfers". Journal of Political Economy 122 (1): 178–222
- S Baird, C McIntosh, and B Ozler. 2011. "Cash or Condition? Evidence from a Cash Transfer Experiment". Quarterly Journal of Economics 126 (4): 1709–1753
- 7. A Banerjee, R Hanna, G Kreindler, and B Olken. Forthcoming. "Debunking the Stereotype of the Lazy Welfare Recipient: Evidence from Cash Transfer Programs Worldwide". World Bank Research Observer

- 8. Prabhat Barnwal. 2017. "Curbing Leakage in Public Programs: Evidence from India's Direct Benefit Transfer Policy". Mimeo: Michigan State University
- M.P Basurto Preciado, P Dupas, and J Robinson. 2017. "Decentralization and Efficiency of Subsidy Targeting: Evidence from Chiefs in Rural Malawi". Mimeo: Stanford University
- 10. P Niehaus, A Atanassova, M Bertrand, and S Mullainathan. 2013. "Targeting with Agents". American Economic Journal: Economic Policy 5 (1): 206–238
- 11. T. Besley and S. Coate. 1992. "Workfare versus Welfare: Incentive Arguments for Work Requirements in Poverty-Alleviation Programs". *American Economic Review* 82 (1): 249–261
- 12. F Brollo, K.M. Kaufmann, and E La Ferrara. 2016. "Learning About the Enforcement of Conditional Welfare Programs: Evidence From Brazil". Mimeo: Warwick University
- 13. R Chetty, J Friedman, and E Saez. 2013. "Using Differenes in Knowledge Across Neighborhoods to Uncover the Impacts of the EITC on Earnings". American Economic Review 103 (7): 2683–2721
- 14. J Cohen, P Dupas, and S Schaner. 2015. "Price Subsidies, Diagnostic Tests, and Targeting of Malaria Treatment: Evidence from a Randomized Controlled Trial". American Economic Review 105 (2): 609–645
- 15. J. Cunha, G De Giorgi, and S Jayachandran. 2017. "The Price Effects of Cash Versus In-Kind Transfers". Mimeo: Northwestern University
- 16. M Deshpande and Y Li. 2017. "Who is Screened Out? Application Costs and the Targeting of Disability Programs". Mimeo: University of Chicago
- P Dupas, V Hoffman, M Kremer, and A Peterson Zwane. 2016. "Targeting Health Subsidies Through a Nonprice Mechanism: A Randomized Controlled Trial in Kenya". Science 353 (6302): 889–895
- 18. F Gahvari and E Mattos. 2007. "Conditional Cash Transfers, Public Provisions of Private Goods, and Income Redistribution". American Economic Review 97 (1): 491–502
- 19. C Imbert and J Papp. 2015. "Labor Market Effects of Social Programs: Evidence From India's Employment Guarantee". *American Economic Journal: Applied Economics* 7 (2): 233–263
- H.J. Kleven and W. Kopczuk. 2011. "Transfer Program Complexity and the Take up of Social Benefits". American Economic Journal: Economic Policy 3 (1): 54–90

- 21. A.L. Nichols and R.J. Zeckhauser. 1982. "Targeting Transfers Through Restrictions on Recipients". *American Economic Review* 61 (3): 312–323
- 22. S.W. Parker and P.E. Todd. 2017. "Conditional Cash Transfers: The Case of Progresa/Oportunidades". *Journal of Economic Literature* 55 (3): 866–915
- 23. J Rothstein. 2010. "Is the EITC as Good as an NIT? Conditional Cash Transfers and Tax Incidence". American Economic Journal: Economic Policy 2 (1): 177–208
- E Saez. 2002. "Optimal Income Transfer Programs: Intensive Versus Extensive Labor Supply Responses". Quarterly Journal of Economics 117 (3): 1039–1073

## 3 The Personnel Economics of the State

The government is the largest employer in most countries, but public service delivery is notoriously inefficient. How can governments attract honest, capable and motivated workers? How will the government monitor and incentivize their workers?

- 1. P Aghion and J Tirole. 1997. "Formal and Real Authority in Organizations". Journal of Political Economy 105 (1): 1–29
- 2. N Ashraf, O Bandiera, and K Jack. 2014. "No Margin, No Mission? A Field Experiment on Incentives for Public Services Delivery". *Journal of Public Economics* 120:1–17
- 3. N Ashraf, O Bandiera, and S.S. Lee. 2016. "Do-gooders and Go-getters: Selection and Performance in Public Service Delivery". Mimeo: London School of Economics
- 4. A Banerjee, R Hanna, and S Mullainathan. 2012. "Corruption". Chap. 27 in *Handbook of Organizational Economics*, 1109–1147
- 5. R Benabou and J Tirole. 2006. "Incentives and Prosocial Behavior". American Economic Review 96 (5): 1652–1678
- 6. T Besley and M Ghatak. 2005. "Competition and Incentives with Prosocial Agents". American Economic Review 95 (3): 616–636
- M Callen, S Gulzar, A Hasanain, Y Khan, and A Rezaee. 2015. "Personalities and Public Sector Performance: Evidence from a Health Experiment in Pakistan". NBER Working Paper 21180
- 8. N Chaudhury, J Hammer, M Kremer, K Muralidharan, and F. Halsey Rogers. 2006. "Missing in Action: Teacher and Health Worker Absence in Developing Countries". *Journal of Economic Perspectives* 20 (1): 91– 116

- 9. E Dal B'o, F Finan, and M.A. Rossi. 2013. "Strengthening State Capabilities: The Role of Financial Incentives in the Call to Public Service". *Quarterly Journal of Economics* 128 (3): 1169–1218
- 10. J De Ree, K Muralidharan, M Bardhan, and H Rogers. 2017. "Double for Nothing? Experimental Evidence on an Unconditional Teacher Salary Increase in Indonesia". Forthcoming, Quarterly Journal of Economics
- 11. E Deserrano. 2017. "Financial Incentives as Signals: Experimental Evidence from the Recruitment of Village Promoters in Uganda". Mimeo: Northwestern
- 12. E Duflo, M Greenstone, R Pande, and N Ryan. 2013. "Truth Telling by Third Party Audits and the Response of Polluting Firms: Experimental Evidence from India". Quarterly Journal of Economics 128 (4): 1499–1545
- 13. E Duflo, M Greenstone, R Pande, and N Ryan. 2016. "The Value of Discretion in the Enforcement of Regulation: Experimental Evidence and Structural Estimates from Environmental Inspections in India". Mimeo: MIT
- 14. E Duflo, R Hanna, and S.P. Ryan. 2012. "Incentives Work: Getting Teachers to Come to School". *American Economic Review* 102 (4): 1241–1278
- 15. F Finan, B Olken, and R Pande. 2017. "The Personnel Economics of the Developing State". Chap. 6 in *Handbook of Field Experiments, Volume II*, ed. by E Duflo and A Banerjee
- 16. A Khan, A Khwaja, and B Olken. 2016. "Tax Farming Redux: Experimental Evidence on Performance Pay for Tax Collectors". *Quarterly Journal of Economics* 131 (1): 219–271
- 17. A Khan, A Khwaja, and B Olken. 2017. "Making Moves Matter: Experimental Evidence on Incentivizing Bureaucrats through Performance-Based Postings". Mimeo: MIT
- 18. E Lazear and P Oyer. 2012. "Personnel Economics". In *Handbook of Organizational Economics*, ed. by R Gibbons and J Roberts, 479–519
- K Muralidharan and V Sundararaman. 2011. "Teacher Performance Pay: Eperimental Evidence from India". Journal of Political Economy 119 (1): 39–77
- 20. B Olken. 2007. "Monitoring Corruption: Evidence from a Field Experiment in Indonesia". *Journal of Political Economy* 115 (2): 200–249
- 21. B Olken and R Pande. 2012. "Corruption in Developing Countries". Annual Review of Economics 4:479–509

- 22. C Prendergast. 2003. "The Limits of Bureaucratic Efficiency". Journal of Political Economy 111 (5): 929–958
- 23. C Prendergast. 2007. "The Motivation and Bias of Bureaucrats". American Economic Review 97 (1): 180–196

# 4 Data & Technology in Government

Most policy problems involve prediction of a counterfactual (what if we raise tax rates?) or a state of the world (how much poverty is there?). How can machine learning methods help governments make these predictions? Can new technologies be used to monitor government workers and increase their productivity and/or effort?

- B Abelson, K.R. Varshney, and J Sun. 2014. "Targeting Direct Cash Transfers to the Extremely Poor". In Proceedings of the 20th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining, 1563– 1572
- K. Ackermann, E. Blancas Reyes, S. He, T. Anderson Keller, P van der Boor, R. Khan, R. Ghani, and J.C. Gonzalez. 2016. "Designing policy recommendations to reduce home abandonment in Mexico". In Proceedings of the 22nd ACM SIGKDD International Conference on Knowledge Discovery and Data Mining, 13–20
- 3. A Banerjee, R. Hanna, B. Olken, J. Kyle, and S. Sumarto. 2016. "Tangible Information and Citizen Empowerment: Identification Cards and Food Subsidy Programs in Indonesia". Journal of Political Economy, forthcoming
- 4. A Banerjee, E Duflo, C Imbert, S Mathew, and R Pande. 2017. "Egovernance, Accountability and Leakage in Public Programs: Experimental Evidence from a Financial Management Reform in India". Mimeo: MIT
- 5. J. Blumenstock, G. Cadamuro, and R. On. 2015. "Predicting Poverty and Wealth from Mobile Phone Metadata". Science 350 (6264): 1073–1076
- J Blumenstock. "Fighting Poverty with Data". Science 353 (6301): 753–754
- 7. M Callen and J.D. Long. 2015. "Institutional Corruption and Election Fraud: Evidence From a Field Experiment in Afghanistan". *American Economic Review* 105 (1): 354–381
- 8. M Callen, S Gulzar, A Hasanain, and Y Khan. 2016. "The Political Economy of Employee Absence: Experimental Evidence from Pakistan". Mimeo: UC San Diego

- 9. L Casaburi and U Troiano. 2016. "Ghost-House Busters: The Electoral Response to a Large Anti Tax Evasion Program". Quarterly Journal of Economics 131 (1): 273–314
- A. Chalfin, O. Danieli, A. Hillis an Z. Jelveh, M. Luca, J. Ludwig, and S. Mullainathan. 2016. "Productivity and selection of human capital with machine learning". American Economic Review, Papers and Proceedings 106 (5): 124–127
- 11. R Engstrom, J Hersh, and D Newhouse. 2016. "Poverty from Space: Using High Resolution Satellite Imagery for Estimating Economic Wellbeing and Geographic Targeting". Mimeo
- 12. T Fujiwara. 2015. "Voting Technology, Political Responsiveness, and Infant Health: Evidence from Brazil". *Econometrica* 83 (2): 423–464
- 13. E.L. Glaeser, S.D. Kominers, M. Luca, and N. Naik. 2015. "Big data and big cities: The promises and limitations of improved measures of urban life". NBER Working Paper
- E.L Glaeser, A. Hillis, S.D. Kominers, and M. Luca. 2016. "Predictive cities crowdsourcing city government: Using tournaments to improve inspection accuracy". American Economic Review, Papers and Proceedings 106 (5): 114–118
- 15. S Goel, J.M. Rao, and R Shro. 2016. "Personalized risk assessments in the criminal justice system". American Economic Review, Papers and Proceedings 106 (5): 119–123
- 16. N Jean, M Burke, M Xie, M Davis, D Lobell, and S Ermon. 2016. "Combining machine learning and satellite imagery to predict poverty". *Science* 353 (6301): 790–794
- 17. J.S. Kang, P. Kuznetsova, M. Luca, and Y. Choi. 2013. "Where not to eat? improving public policy by predicting hygiene inspections using online reviews". In *EMNLP*, 1443–1448
- J. Kleinberg, J. Ludwig, S. Mullainathan, and Z Obermeyer. 2015. "Prediction Policy Problems". American Economic Review, Papers and Proceedings 105 (5): 491–495
- J Kleinberg, H Lakkarju, J Leskovec, J Ludwig, and S Mullainathan. 2017.
  "Human Decisions and Machine Predictions". NBER WP 23180
- K Muralidharan, P Niehaus, and S Sukhtankar. 2016. "Building State Capacity: Evidence from Biometric Smartcards in India". American Economic Review 106 (10): 2895–2929
- 21. K Muralidharan, P Niehaus, and S Sukhtankar. 2017. "General Equilibrium Effects of (Improving) Public Employment Programs: Experimental Evidence from India". Mimeo: UC San Diego

- 22. K Muralidharan, Abhijeet Singh, and Alejandro Ganimian. 2017. "Disrupting Education? Experimental Evidence on Technology-Aided Instruction in India". Mimeo: UC San Diego
- 23. J Naritomi. 2016. "Consumers as Tax Auditors". Mimeo: London School of Economics