

# ECON GR6307: Public Economics and Development Reading List

Michael Carlos Best

January 25, 2022

Readings in bold and marked with \*\* are *absolutely* required readings. Readings marked with \*(M/DD) are the summary readings for that week's lecture. Each week you should pick one of these papers and prepare a 6-slide summary (excluding the title slide) of the paper and bring it with you on a USB drive. I will randomly call on someone to present their summary each week. NB the randomization will be with replacement, so don't think that you can't be called more than once! The summary should take the form of a general overview outlining why the paper is interesting/important, how the authors approached their question, the methods/data they used, and their main results (copy the tables into your slides).

## **1 Applied Welfare Analysis**

In public economics we often want to make normative statements about the social desirability of policies, and quantify tradeoffs between policies. This section presents the modern tools public economists use to do this.

For 1/25, please read Hendren & Sprung-Keyser (2020). Instead of preparing a summary of the paper (I'll go over it in the lecture), pick a policy that interests you and go through all the steps of how its MVPF is calculated. You can find all the ones in the paper plus a whole lot more that peo-

ple have worked out MVPFs for since then at <https://www.policyimpacts.org/policy-impacts-library>. Then prepare slides on that, with your own take on the ingredients of the MVPF.

1. R. Chetty. 2009a. “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.
2. **Raj Chetty. 2009b. “Sufficient Statistics for Welfare Analysis: A Bridge Between Structural and Reduced-Form Methods”. *Annual Review of Economics* 1:451–488.**\*\* (1/25)
3. Martin Feldstein. 1999. “Tax Avoidance and the Deadweight Loss of the Income Tax”. *Review of Economics and Statistics* 81 (4): 674–680.
4. **Amy Finkelstein and Nathaniel Hendren. 2020. “Welfare Analysis Meets Causal Inference”. NBER working paper 27640. Forthcoming, *Journal of Economic Perspectives*.**\*\* (1/18)
5. Henrik Kleven. 2018. “Sufficient Statistics Revisited”. Mimeo: Princeton University.
6. Nathaniel Hendren. 2016. “The Policy Elasticity”. In *Tax Policy and the Economy*, 30.
7. Nathaniel Hendren. 2020. “Measuring Economic Efficiency Using Inverse-Optimum Weights”. *Journal of Public Economics* 187.
8. Nathaniel Hendren and Ben Sprung-Keyser. 2020. “A Unified Welfare Analysis of Government Policies”. *Quarterly Journal of Economics* 135 (3): 1209–1318.\* (1/25)
9. Emmanuel Saez and Stefanie Stantcheva. 2016. “Generalized Social Marginal Welfare Weights for Optimal Tax Theory”. *American Economic Review* 106 (1): 24–45

10. Joel Slemrod and Shlomo Yitzhaki. 1996. "The Costs of Taxation and the Marginal Efficiency Cost of Funds". *IMF Staff Papers* 43 (1): 172–198
11. Joel Slemrod and Shlomo Yitzhaki. 2001. "Integrating Expenditure and Tax Decisions: The Marginal Cost of Funds and the Marginal Benefit of Projects". *National Tax Journal* 54 (2): 189–201

## 2 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?

### 2.1 Taxation in Developing Countries: Macro Perspective

1. T. Besley and T. Persson. 2009. "The origins of state capacity: Property rights, taxation and politics". *American Economic Review* 99:1218–1244.
2. T. Besley and T. Persson. 2011. *Pillars of prosperity: The political economics of development clusters*. Princeton: Princeton University Press.
3. **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.\*\* (2/1)**
4. R. Boadway and M Sato. 2009. "Optimal Tax Design and Enforcement with an Informal Sector". *American Economic Journal: Economic Policy* 1 (1): 1–27.
5. R. Burgess and N. Stern. 1993. "Taxation and Development". *Journal of Economic Literature* 31 (2): 762–830.
6. R Gordon and W Li. 2009. "Tax Structures in Developing Countries: Many Puzzles and a Possible Explanation". *Journal of Public Economics* 93:855–866.

7. R La Porta and A Shleifer. 2014. "Informality and Development". *Journal of Economic Perspectives* 28 (3): 109–126.

## 2.2 Tax Evasion: Theory and Evidence from Rich Countries

1. A. Advani, W. Elming, and J. Shaw. 2020. "The Dynamic Effects of Tax Audits". Mimeo: Warwick University.
2. MG Allingham and A Sandmo. 1972. "Income Tax Evasion: A Theoretical Analysis". *Journal of Public Economics* 1:323–338.
3. A. Alstadsæter, N. Johannesen, and G. Zucman. 2019. "Tax Evasion and Inequality". *American Economic Review* 109 (6): 2073–2103.
4. A. Alstadsæter, N. Johannesen, and G. Zucman. 2018. "Tax Evasion and Tax Avoidance". Mimeo: UC Berkeley.
5. J. Andreoni, B. Erard, and J. Feinstein. 1998. "Tax Compliance". *Journal of Economic Literature* 36:818–860.
6. **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.**\*\* (2/8)
7. 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.
8. John Guyton, Patrick Langetieg, Max Risch, Daniel Reck, and Gabriel Zucman. 2021. "Tax Evasion at the Top of the Income Distribution: Theory and Evidence".\*(2/1)
9. 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.

10. J. Slemrod. 2007. "Cheating Ourselves: The Economics of Tax Evasion". *Journal of Economic Perspectives* 21:25–48.
11. J. Slemrod. 2017. "Tax Compliance and Enforcement". *Journal of Economic Literature* 57 (4): 904–954.
12. 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.

### 2.3 Taxing Individuals in Developing Countries

1. Javier Avila-Mahecha and Juliana Londoño-Velez. 2020. "Enforcing Wealth Taxes in the Developing World: Quasi-Experimental Evidence from Colombia". Forthcoming, American Economic Review: Insights.
2. Pablo Balan, Augustin Bergeron, Gabriel Tourek, and Jonathan Weigel. 2021. "Local Elites as State Capacity: How City Chiefs Use Local Information to Increase Tax Compliance in the D.R. Congo". Forthcoming, American Economic Review.
3. Pierre Bachas, Lucie Gadenne, and Anders Jensen. 2020. "Informality, Consumption Taxes, and Redistribution". NBER WP 27429.
4. Augustin Bergeron, Gabriel Tourek, and Jonathan Weigel. 2021. "The State Capacity Ceiling on Tax Rates: Evidence from Randomized Tax Abatements in the DRC". Mimeo: UC Berkeley.
5. Anne Brockmeyer, Alejandro Estefan, Karina Ramírez Arras, and Juan Carlos Suárez Serrato. 2021. "Taxing Property in Developing Countries: Theory and Evidence from Mexico". Mimeo: Duke University.\* (2/8)
6. 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.

7. A Jensen. 2019. "Employment Structure and the Rise of the Modern Tax System". Mimeo: Harvard Kennedy School.
8. Joel Slemrod, Obeid Ur Rehman, and Mazhar Waseem. 2020. "How do Taxpayers Respond to Public Disclosure and Social Recognition Programs? Evidence from Pakistan". Forthcoming, Review of Economics and Statistics.
9. Jonathan L Weigel. 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.

## 2.4 Taxing Firms in Developing Countries

1. F. Amodio, J. Choi, G. De Giorgi, and A. Rahman. 2018. "Bribes vs. Taxes: Market Structure and Incentives". Mimeo: McGill University.
2. Pierre Bachas and Mauricio Soto. 2018. "Not(ch) Your Average Tax System: Corporate Taxation under Weak Enforcement". World Bank Policy Research Working Paper 8524.
3. **M. Chatib Basri, Mayara Felix, Rema Hanna, and Benjamin Olken.** 2020. **"Tax Administration vs Tax Rates: Evidence from Corporate Taxation in Indonesia"**. Mimeo: MIT.\*\* (2/22)
4. N Benhassine, V Pouliquen, and M Santini. 2018. "Can Enhancing the Benefits of Formalization Induce Informal Firms to Become Formal? Experimental Evidence from Benin". *Journal of Public Economics* 157:1–14.
5. **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.\*\* (2/15)
6. A. Brockmeyer and M. Hernandez. 2018. "Taxation, Information and Withholding: Evidence from Costa Rica". Mimeo: World Bank.

7. Z. Chen, Z. Liu, J. C. Suarez-Serrato, and D. Xu. 2018. "Notching R&D Investment with Corporate Income Tax Cuts in China". Mimeo: Duke University.
8. Lucie Gadenne, Tushar K. Nandi, and Roland Rathelot. 2020. "Taxation and Supplier Networks: Evidence from India".
9. J Naritomi. 2018. "Consumers as Tax Auditors". Forthcoming, *American Economic Review*.\*(2/15)
10. D. Pomeranz. 2015. "No Taxation without Information: Deterrence and Self-Enforcement in the Value Added Tax". *American Economic Review* 105 (8): 2539–2569.

## 2.5 International Taxation and Developing Countries

1. Jøorgen Andersen, Niels Johannesen, and Bob Rijkers. 2020. "Elite Capture of Foreign Aid: Evidence from Offshore Bank Accounts". Forthcoming, *Journal of Political Economy*.
2. Cyril Chalendard, Ana M. Fernandes, Gael Raballand, and Bob Rijkers. 2020. "Technology (Ab)use and Corruption in Customs". Mimeo: World Bank.
3. 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.
4. S Sequeira. 2016. "Corruption, Trade Costs, and Gains from Tariff Liberalization: Evidence from Southern Africa". *American Economic Review* 106 (10): 3029–3063.\* (2/22)
5. J.C. Suarez-Serrato. 2018. "Unintended Consequences of Eliminating Tax Havens". Mimeo: Duke University.
6. T. R. Tørsløv, Ludvig S. Wier, and Gabriel Zucman. 2018. "The Missing Profits of Nations". NBER W.P 24701.

7. 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.
8. G. Zucman. 2014. "Taxing Across Borders: Tracking Personal Wealth and Corporate Profits". *Journal of Economic Perspectives* 28 (4): 121–148.

### 3 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?

#### 3.1 Theory

1. 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. 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.<sup>\*(10/13)</sup>
3. M Brewer, E Saez, and A Shephard. 2010. "Means Testing and Tax Rates on Earnings". In *The Mirrlees Review: Reforming the Tax System for the 21st Century*, ed. by J Mirrlees, S Adam, T Besley, R Blundell, S Bond, R Chote, M Gammie, P Johnson, G Myles, and JM Poterba.
4. 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.
5. **A.L. Nichols and R.J. Zeckhauser. 1982. "Targeting Transfers Through Restrictions on Recipients". *American Economic Review* 72 (2): 372–377.**<sup>\*\* (10/13)</sup>



6. E Saez. 2002. "Optimal Income Transfer Programs: Intensive Versus Extensive Labor Supply Responses". *Quarterly Journal of Economics* 117 (3): 1039–1073.

### 3.2 Evidence from Rich Countries

1. M Brewer, E Saez, and A Shephard. 2010. "Means Testing and Tax Rates on Earnings". In *The Mirrlees Review: Reforming the Tax System for the 21st Century*, ed. by J Mirrlees, S Adam, T Besley, R Blundell, S Bond, R Chote, M Gammie, P Johnson, G Myles, and JM Poterba.
2. R Chetty, J Friedman, and E Saez. 2013. "Using Differences in Knowledge Across Neighborhoods to Uncover the Impacts of the EITC on Earnings". *American Economic Review* 103 (7): 2683–2721.
3. M Deshpande and Y Li. 2017. "Who is Screened Out? Application Costs and the Targeting of Disability Programs". Mimeo: University of Chicago. <sup>\*(10/20)</sup>
4. A Finkelstein and M.J. Notowidigdo. 2019. "Take-up and Targeting: Experimental Evidence from SNAP". Mimeo: MIT.
5. 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.
6. 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.
7. E Saez. 2006. "Redistribution Toward Low Incomes in Richer Countries". Chap. 13 in *Understanding Poverty*, ed. by A Banerjee, R Banerjee, and D Mookherjee.

### 3.3 Targeting in Developing Countries

1. 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* 102 (4): 1206–1240.
2. **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.**<sup>\*(11/10)</sup>
3. 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.
4. O Attanasio and V Lechene. 2014. "Efficient Responses to Targeted Cash Transfers". *Journal of Political Economy* 122 (1): 178–222.
5. 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*.
6. A. Banerjee, R. Hanna, B.A. Olken, and S. Sumarto. 2018. "The (lack of) Distortionary Effects of Proxy-Means Tests: Results from a Nationwide Experiment in Indonesia". Mimeo: MIT.
7. Prabhat Barnwal. 2017. "Curbing Leakage in Public Programs: Evidence from India's Direct Benefit Transfer Policy". Mimeo: Michigan State University.<sup>\*(10/27)</sup>
8. 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.
9. P Niehaus, A Atanassova, M Bertrand, and S Mullainathan. 2013. "Targeting with Agents". *American Economic Journal: Economic Policy* 5 (1): 206–238.

10. F Brollo, K.M. Kaufmann, and E La Ferrara. 2016. "Learning About the Enforcement of Conditional Welfare Programs: Evidence From Brazil". Mimeo: Warwick University.
11. N. Cahyadi, R. Hanna, B.A. Olken, R.A. Prima, E. Satriawan, and E Syamsulhakim. 2018. "Cumulative Impacts of Conditional Cash Transfer Programs: Experimental Evidence from Indonesia". Mimeo: MIT.
12. R Chetty, J Friedman, and E Saez. 2013. "Using Differences in Knowledge Across Neighborhoods to Uncover the Impacts of the EITC on Earnings". *American Economic Review* 103 (7): 2683–2721.
13. 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.
14. R Hanna and B.A. Olken. 2018. "Universal Basic Incomes versus Targeted Transfers: Anti-Poverty Programs in Developing Countries". *Journal of Economic Perspectives* 32 (4): 201–226.
15. 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.
16. S.W. Parker and P.E. Todd. 2017. "Conditional Cash Transfers: The Case of Progresa/Oportunidades". *Journal of Economic Literature* 55 (3): 866–915.

### 3.4 Transfer Design

1. 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.<sup>\*(11/10)</sup>
2. **J. Cunha, G De Giorgi, and S Jayachandran. 2017. "The Price Effects of Cash Versus In-Kind Transfers". Mimeo: Northwestern University.<sup>\*\* (11/10)</sup>**

## 4 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?

### 4.1 Theory

1. P Aghion and J Tirole. 1997. "Formal and Real Authority in Organizations". *Journal of Political Economy* 105 (1): 1–29
2. **A Banerjee, R Hanna, and S Mullainathan. 2012. "Corruption". Chap. 27 in *Handbook of Organizational Economics*, 1109–1147.**<sup>\*(11/17)</sup>
3. R Benabou and J Tirole. 2006. "Incentives and Prosocial Behavior". *American Economic Review* 96 (5): 1652–1678.
4. T Besley and M Ghatak. 2005. "Competition and Incentives with Prosocial Agents". *American Economic Review* 95 (3): 616–636
5. E Lazear and P Oyer. 2012. "Personnel Economics". In *Handbook of Organizational Economics*, ed. by R Gibbons and J Roberts, 479–519
6. B Olken and R Pande. 2012. "Corruption in Developing Countries". *Annual Review of Economics* 4:479–509
7. C Prendergast. 2003. "The Limits of Bureaucratic Efficiency". *Journal of Political Economy* 111 (5): 929–958
8. C Prendergast. 2007. "The Motivation and Bias of Bureaucrats". *American Economic Review* 97 (1): 180–196
9. Andrei Shleifer and Robert W. Vishny. 1993. "Corruption". *Quarterly Journal of Economics* 108 (3): 599–617.<sup>\*(11/17)</sup>

## 4.2 Financial Incentives

1. Marianne Bertrand, Simeon Djankov, Rema Hanna, and Sendhil Mullaianathan. 2007. "Obtaining a Driving License in India: An Experimental Approach to Studying Corruption". *Quarterly Journal of Economics* 122 (4): 1639–1676
2. 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
3. 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*.<sup>\*(11/24)</sup>
4. 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
5. E Duflo, R Hanna, and S.P. Ryan. 2012. "Incentives Work: Getting Teachers to Come to School". *American Economic Review* 102 (4): 1241–1278
6. 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
7. 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
8. **K Muralidharan and V Sundararaman. 2011. "Teacher Performance Pay: Experimental Evidence from India". *Journal of Political Economy* 119 (1): 39–77.**<sup>\*\* (11/24)</sup>

9. B Olken. 2007. "Monitoring Corruption: Evidence from a Field Experiment in Indonesia". *Journal of Political Economy* 115 (2): 200–249
10. B Olken and R Pande. 2012. "Corruption in Developing Countries". *Annual Review of Economics* 4:479–509

### 4.3 Non-financial Incentives

1. 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.<sup>\*(12/1)</sup>
2. O. Bandiera, M.C. Best, A.Q. Khan, and A. Prat. 2019. "Incentives and the Allocation of Authority in Organizations: A Field Experiment with Bureaucrats". Mimeo: Columbia University.
3. M.C. Best, J.K. Hjort, and D. Szakonyi. 2018. "Individuals and Organizations as Sources of State Effectiveness". Mimeo: Columbia University
4. 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
5. E Duflo, M Greenstone, R Pande, and N Ryan. 2018. "The Value of Discretion in the Enforcement of Regulation: Experimental Evidence and Structural Estimates from Environmental Inspections in India". *Econometrica* 86 (6): 2123–2160.<sup>\*\* (12/1)</sup>
6. A Khan, A Khwaja, and B Olken. 2017. "Making Moves Matter: Experimental Evidence on Incentivizing Bureaucrats through Performance-Based Postings". Mimeo: MIT

### 4.4 Recruitment & Selection

1. N Ashraf, O Bandiera, and S.S. Lee. 2016. "Do-gooders and Go-getters: Selection and Performance in Public Service Delivery". Mimeo: Lon-

don School of Economics.

2. E Dal Bó, 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.\*\*<sup>(12/8)</sup>
3. E Deserrano. 2017. “Financial Incentives as Signals: Experimental Evidence from the Recruitment of Village Promoters in Uganda”. Mimeo: Northwestern.\*<sup>(12/8)</sup>
4. Guo Xu. 2018. “The Costs of Patronage: Evidence from the British Empire”. *American Economic Review* 108 (11): 3170–3198.

## 5 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?

1. 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
2. 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. "E-governance, 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
6. 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
10. 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 Well-being 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
14. 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
18. J. Kleinberg, J. Ludwig, S. Mullainathan, and Z. Obermeyer. 2015. "Prediction Policy Problems". *American Economic Review, Papers and Proceedings* 105 (5): 491–495
19. J. Kleinberg, H. Lakkaraju, J. Leskovec, J. Ludwig, and S. Mullainathan. 2017. "Human Decisions and Machine Predictions". NBER WP 23180
20. 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