MICHAEL CARLOS BEST

Department of Economics,
Columbia University | michael.best@columbia.edu | www.columbia.edu/~mcb2270

420 West 118th Street, Room 1112, New York, NY 10027, USA | +1 (415) 316 5006

November 2023

EMPLOYMENT

2022-2023	Department of Economics, Princeton University	Visiting Assistant Professor
2017-	Department of Economics, Columbia University	Assistant Professor
2014-2017	Stanford Institute for Economic Policy Research, Stanford University	Postdoctoral Fellow

OTHER PROFESSIONAL ACTIVITIES

2018-	National Bureau of Economic Research, Public Economics	Faculty Research Fellow
2018-	National Bureau of Economic Research, Development Economics	Faculty Research Fellow
2018-	Center for Development Economics and Policy	Affiliate
2017-	Bureau for Research and Economic Analysis of Development (BREAD)	Affiliate
2022-	Abdul Latif Jameel Poverty Action Lab (J-PAL)	Affiliate
2015-	Institute for Fiscal Studies (IFS)	International Research Fellow
2015-20	Centre for Economic Policy Research (CEPR), Development Economics	Research Affiliate
2020-	Centre for Economic Policy Research (CEPR), Development Economics	Research Fellow
2014-	Centre for Economic Policy Research (CEPR), Public Economics	Research Affiliate

EDUCATION

2009-2014	London School of Economics	PhD Economics
2011-2012	UC Berkeley Economics, Center for Equitable Growth	Visiting PhD Student
2008-2009	London School of Economics	MRes Economics (distinction)
2006-2008	University of Oxford	MPhil Economics (distinction)
2003-2006	London School of Economics	BSc Government & Economics

RESEARCH AND TEACHINGFIELDS

Public Economics and Development Economics

PEER-REVIEWED PUBLICATIONS

Individuals and Organizations as Sources of State Effectiveness (with Jonas Hjort, and David Szakonyi)
American Economic Review, 113(8), 2121–2167, 2023

> Bureaucrats implement policy. How important are they for a state's productivity? And do the tradeoffs between policies depend on their effectiveness? Using data on 16 million public purchases in Russia, we show that 39 percent of the variation in prices paid for narrowly defined items is due to the individual bureaucrats and organizations who manage procurement. Low-price buyers also display higher spending quality. Theory suggests that such differences in effectiveness can be pivotal for policy design. To illustrate, we show that a

common one—bid preferences for domestic suppliers—substantially improves procurement performance, but only when implemented by ineffective bureaucrats.

The Allocation of Authority in Organizations: A Field Experiment with Bureaucrats (with Oriana Bandiera, Adnan Khan, and Andrea Prat) *Quarterly Journal of Economics*, 136(4), 2195–2242, 2021

We design a field experiment to study how the allocation of authority between frontline procurement officers and their monitors affects performance both directly and through the response to incentives. In collaboration with the government of Punjab, Pakistan, we shift authority from monitors to procurement officers and introduce financial incentives in a sample of 600 procurement officers in 26 districts. We find that autonomy alone reduces prices by 9% without reducing quality and that the effect is stronger when the monitor tends to delay approvals for purchases until the end of the fiscal year. In contrast, the effect of performance pay is muted, except when agents face a monitor who does not delay approvals. Time use data reveal agents' responses vary along the same margin: autonomy increases the time devoted to procurement and this leads to lower prices only when monitors cause delays. By contrast, incentives work when monitors do not cause delays. The results illustrate that organizational design and anti-corruption policies must balance agency issues at different levels of the hierarchy.

Estimating the Elasticity of Intertemporal Substitution Using Mortgage Notches (with James Cloyne, Ethan Ilzetzki and Henrik Kleven) *Review of Economic Studies*, 87(2), 656–690, 2020

Using a novel source of quasi-experimental variation in interest rates, we develop a new approach to estimating the Elasticity of Intertemporal Substitution (EIS). In the U.K., the mortgage interest rate features discrete jumps—notches—at thresholds for the loan-to-value (LTV) ratio. These notches generate large bunching below the critical LTV thresholds and missing mass above them. We develop a dynamic model that links these empirical moments to the underlying structural EIS. The average EIS is small, around 0.1, and quite homogeneous in the population. This finding is robust to structural assumptions and can allow for uncertainty, a wide range of risk preferences, portfolio reallocation, liquidity constraints, present bias, and optimization frictions. Our findings have implications for the numerous calibration studies that rely on larger values of the EIS.

Housing Market Responses to Transaction Taxes: Evidence from Notches and Stimulus in the UK (with Henrik Kleven) *Review of Economic Studies*, 85(1), 157–193, 2018

We investigate housing market responses to transaction taxes using administrative data on all property transactions in the UK from 2004-2012 combined with quasi-experimental variation from tax notches and tax stimulus. We present two main findings. First, transaction taxes are highly distortionary across a range of margins, causing large distortions to the price, volume and timing of property transactions. Second, temporary transaction tax cuts are an enormously effective form of fiscal stimulus. A temporary elimination of a 1% transaction tax increased housing market activity by 20% in the short run (due to both timing and extensive responses) and less than half of the stimulus effect was reversed after the tax was reintroduced (due to re-timing). Because of the complementarities between moving house and consumer spending, these stimulus effects translate into extra spending per dollar of tax cut equal to about 1. We interpret our empirical findings in the context of a housing model with downpayment constraints in which leverage amplifies the effects of transaction taxes.

Production vs Revenue Efficiency With Limited Tax Capacity: Theory and Evidence From Pakistan (with Anne Brockmeyer, Henrik Kleven, Johannes Spinnewijn and Mazhar Waseem) *Journal of Political Economy,* 123(6), 1311–1355, 2015

> To fight evasion, many developing countries resort to production-inefficient tax policies. This includes minimum tax schemes whereby firms are taxed on either profits or turnover, depending on which tax liability is larger. Such schemes create non-standard kink points, which allow for eliciting evasion responses to switches between profit and turnover taxes using a bunching approach. Using administrative tax records on corporations in Pakistan, we estimate that turnover taxes reduce evasion by up to 60-70% of corporate income. Incorporating this in a calibrated optimal tax model, we find that switching from profit to turnover taxation increases revenue by 74% without reducing aggregate profits, despite the production inefficiency that it introduces.

WORKING PAPERS

Salary Misreporting and the Role of Firms in Workers' Responses to Taxes: Evidence from Pakistan May 2014

> This paper exploits employee-employer matched administrative tax data on firms and salaried workers in Pakistan to explore the underappreciated role of firms in determining how workers' taxable earnings respond to taxation. I present evidence on three ways in which firms affect workers' earnings responses. First, third-party reporting of salaries by employers makes underreporting taxable income more costly for workers and reduces evasion of the income tax. Second, firms' equilibrium salary-hours offers respond endogenously to the presence of adjustment costs in the labour market by tailoring offers to aggregate worker preferences. Third, workers learn about the tax schedule from firms' salary offers, making them more responsive to taxation both contemporaneously (by 130%) and in subsequent years (by 100%). However, while third-party reporting makes misreporting more costly, it does not eliminate it in a low tax-capacity setting: 19% of workers still underreport their salaries, leading to a loss of about 5% of tax revenue, and indicating high returns to investments in improving enforcement capacity. The large role played by firms in determining workers' earnings implies that firms need to play a central role in our analysis of income taxation in lower income countries.

Optimal Income Taxation with Career Effects of Work Effort (with Henrik Kleven) February 2013.

> The literature on optimal income taxation assumes that wage rates are generated exogenously by innate ability and therefore do not respond to behavior and taxation. This is in stark contrast to a large empirical literature documenting a strong effect of current work effort on future wage rates. We extend the canonical Mirrleesian optimal tax framework to incorporate such career effects and provide analytical characterizations that depend on estimable entities. Besides the standard static earnings elasticity with respect to the marginal tax rate, the optimal tax schedule also depends on the elasticity of future wages with respect to current work effort. We explore the empirical magnitude of this "career elasticity" in a meta-analysis of the literature on the returns to work experience and tenure, concluding that a reasonable

value for this elasticity lies between 0.2 and 0.4. Calibrating the model to US micro data (under reasonable values of the career elasticity), we present numerical simulations of optimal nonlinear tax schedules that depend on per-period earnings and potentially on age. In the case of age-independent taxation, the presence of career effects make the tax schedule substantially less progressive than in standard models with exogenous wage rates. In the case of age-dependent taxation, career effects create a strong argument for lower taxes on the old, opposite the recommendation in the recent literature on age-dependent taxation. This result reflects both a career incentive effect and an equity effect, where the latter effect arises because increasing earnings over the career path for each ability level imply that, *conditional on earnings*, age and ability are negatively correlated.

INVITED / LIGHTLY REFEREED PUBLICATIONS

Sanitation and Property Tax Compliance: Analyzing the Social Contract in Brazil (with Evan Kresch, Mark Walker, François Gerard, and Joana Naritomi) *Journal of Development Economics,* 160, January 2023

This paper investigates the role that sanitation plays in upholding the social contract, whereby citizens pay taxes in exchange for governments providing goods and services. We study the case of Manaus, Brazil, where sewer connections vary considerably across the city and property taxes are calculated in a presumptive manner that does not account for a household's access to sanitation. We find that households with access to the city sewer system are significantly more likely to pay their property tax, relative to households that only have access to latrines or lack access to improved sanitation entirely. Our evidence is consistent with a role for the social contract in this decision, as households with sewer systems are more likely to have positive attitudes towards the municipal government.

Government Analytics Using Administrative Case Data (with Alessandra Fenizia and Adnan Khan) Chapter 15 in *The Government Analytics Handbook: Leveraging Data to Strengthen Public Administration* edited by Daniel Rogger and Christian Schuster, Washington D.C. World Bank. 2023.

Measuring the performance of government agencies is notoriously hard due to the lack of comparable data. At the same time, governments around the world generate an immense amount of data that detail their day-to-day operations. In this chapter we focus on three functions of government that represent the bulk of their operations and that are fairly standardized: social security programs, public procurement, and tax collection. We discuss how public sector organizations can use existing administrative case data and re-purpose them to construct objective measures of performance. We argue that it is paramount to compare cases that are homogeneous or construct a metric that captures the complexity of the case. We also argue that the metrics of government performance should capture both the volumes of services provided as well as their quality. With these considerations in mind, case data can be at the core of a diagnostic system with the potential to transform the speed and quality of public service delivery.

SELECTED, SOMEWHAT ADVANCED WORK IN PROGRESS

Greener on the Other Side: Inequity and Tax Compliance (with Luigi Caloi, François Gerard, Evan Kresch, and Joana Naritomi)

Research Question: Do perceptions of inequity in property tax liabilities lead to delinquency?

Horizontal inequity in public policy generates resentment among citizens. We estimate the impact that inequity in the tax code has on voluntary tax compliance in the context of the property tax in Manaus, Brazil. Using administrative data on the universe of taxpayers and a novel quasi-experimental design leveraging geographic discontinuities in tax liabilities and a large reform, we find that the elasticity of compliance with respect to inequity is 0.14--0.18, slightly larger than the elasticity with respect to a taxpayer's own liability. A simple optimal taxation model draws out the implications of these responses for tax design, showing that compliance responses to horizontal inequity significantly dampen the optimal progressivity of property taxes.

A Bird in the Hand: Detection, Collection and Deterrence in Tax Enforcement (with Jawad Shah and Mazhar Waseem)

Research Question: How much tax evasion can be detected by audits and how does limited capacity to collect detected, unpaid taxes, affect how audits should be targeted?

The Political Economy of Progressive Property Tax Reform: Evidence from Pakistan (with Ali Abbas, Ali Cheema, Adnan Khan, and Shandana Khan Mohmand)

Research Question: What determines citizens' views on the desirability of progressive taxes? Which citizens' vies are reflected in candidates' political platforms?

Attacking Networks of Tax Evasion: Theory and Evidence from Paraguay (with Gastón Pierri and Evan Sadler)

Research Question: How are tax evasion decisions linked when firms operate in production networks? What does this imply for how tax enforcement should be targeted?

Measuring and Decomposing Bias: Evidence from Corruption Complaints in Peru (with Leonard Goff, Jonas Hjort, Dafne Murillo, and Gastón Pierri)

Research Question: How much implicit bias against indigenous defendents is there in corruption cases? How much is taste-based vs statistical discrimination?

Algorithms in Public Organizations: Experimental Evidence from Corruption Complaints in Peru (with Jonas Hjort and Gastón Pierri)

Research Question: What determines takeup of algorithmic tools in a complex organization like a civil service?

LESS DEVELOPED

When and Why do Governments Pay More? Evidence from Brazil (with Augustin Chaintreau, Xi Chen, Joana Naritomi, and Dimitri Szerman)

Research Question: Do government procurers pay more for identical purchases than similar private-sector buyers? What drives the difference?

Tax Enforcement Traps: Experimental Evidence from Pakistan (with Sher Afghan Asad, Anders Jensen, and Adnan Khan)

> *Research Question: Can complementarities in tax compliance decisions create enforcement traps? And how can tax enforcement strategies escape them?*

State Capacity and Responses to Natural Disasters: Evidence from Brazilian Municipalities (with Marina Lemos, Renata Lemos, and Daniela Scur)

> *Research Question: What types of state capacity determine local governments' ability to respond effectively to natural disasters?*

Organizational Division of Labor: Evidence from Tax Collection in Pakistan (with Sher Afghan Asad, Anders Jensen, and Adnan Khan)

> *Research Question: Should tasks in a civil service be matched to workers based on geography or function?*

REFEREEING SERVICE

American Economic Review, American Economic Review: Insights, American Economic Journal: Applied, American Economic Journal: Economic Policy, Canadian Journal of Economics, Econometrica, Economica, Economic Development and Cultural Change, Economic Journal, Economica, Economie et Statistique, J-PAL, Journal of Development Economics, Journal of Economic Behavior and Organization, Journal of the European Economic Association, Journal of Political Economy, Journal of Public Economics, Journal of Public Economics Theory, International Tax and Public Finance, Journal of Urban Economics, Labour Economics, National Science Foundation, National Tax Journal, Quarterly Journal of Economics, Rand Journal of Economics, Review of Economic Studies, Review of Economics and Statistics, Review of International Organizations, World Bank Economic Review, World Bank DIME

OTHER SERVICE

2023-	Associate Editor: Journal of the European Economic Association
2022, 2023	Co-organizer, NBER Summer Institute, Public Economics
2022, 2023	Scientific Committee: International Institute for Public Finance
2022, 2023	Scientific Committee: National Tax Association
2021, 2022, 2023	Area Chair, Empirical: ACM conference on Equity and Access in Algorithms, Mechanisms, and Optimization (EAAMO)
2018, 2019	Co-organizer: New York Area Juniors' Nano-Conference in Development Economics
2017-2022	Co-organizer: Labor and Public Economics seminar, Columbia
2021-2022	Co-organizer: Development seminar, Columbia

TEACHING

Spring 2023	ECO 524: Graduate Public Finance II, instructor, Princeton University
Fall 2020, Spring 2022	UG 3412: Introduction to Econometrics (Undergraduate), instructor, Columbia University
Spring 2018, 2019, 2022 Fall 2019, 2020	GR6307: Public Economics & Development (PhD level), instructor, Columbia University
2017-2022	UG 4999: Undergraduate Honors Seminar, instructor, Columbia University
Winter 2016, Fall 2016	Economics 241: Public Finance and Taxation I (PhD level), lecturer, Stanford University
Spring 2015	Economics 102C: Advanced Topics in Econometrics (undergraduate level), lecturer, Stanford University
Summer 2009, 2010, 2011	EC270 Public Finance (undergraduate level), Class Teacher, Summer School, London School of Economics
Fall 2009 – Spring 2011	EC426 Public Economics (masters level), Graduate Teaching Assistant, London School of Economics
Fall 2009 – Spring 2011	EC307 Development Economics (undergraduate level), Graduate Teaching Assistant, London School of Economics
Fall 2010 – Spring 2011	EC307 Extension course on Empirical Methods, Instructor and co-designer of course, London School of Economics
Fall 2008 – Spring 2009	EC201 Microeconomic Principles (undergraduate level), Graduate Teaching Assistant, London School of Economics

AWARDS AND PRIZES

2022	*American Economic Review: Insights* Excellence in refereeing award
2011	Outstanding Teaching Commendation, Economics Network of the Higher Education Academy
2009 & 2011	Teaching Prize, LSE Economics & Teaching and Learning Centre
2008 – 2011	Economic & Social Research Council Quota Award, LSE, Economics
2008	George Webb Medley Prize Proxime Accessit for the best thesis, University of Oxford, Department of Economics
2007 – 2008	David Walton Distinguished Doctoral Scholarship, University of Oxford, Department of Economics

OTHER INFORMATION

Software:	Stata, R, LaTeX, LyX, Matlab, Maple, Mathematica, basic HTML
Languages:	English (native), Spanish (bilingual), Dutch (excellent), French (very good)
Professional:	Member of the European Economic Association, the American Economic Association, the National Tax Association and the International Institute of Public Finance
Citizenship:	El Salvador and United Kingdom. US permanent resident.
Sport:	LSE squash team 2003–2006 & 2008–2011