

Edward Wiles (né Davenport)

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Education

PhD Economics, Massachusetts Institute of Technology	2019-
MSc Economics, London School of Economics (with Distinction)	2017-2018
BSc Economics, London School of Economics (with First Class Honours)	2012-2015

Research Interests

Development Economics, International Trade, Organizational Economics

Publications

Losing Prosociality in the Quest for Talent? Sorting, Selection, and Productivity in the Delivery of Public Services (with Nava Ashraf, Oriana Bandiera, and Scott S. Lee). *American Economic Review*, 2020, 110(5): 1355-1394. **Awarded the Arrow Award** for the best paper published in health economics in English in 2020 by the International Health Economics Association.

We embed a field experiment in a nationwide recruitment drive for a new health care position in Zambia to test whether career benefits attract talent at the expense of prosocial motivation. In line with common wisdom, offering career opportunities attracts less prosocial applicants. However, the trade-off exists only at low levels of talent; the marginal applicants in treatment are more talented and equally prosocial. These are hired, and perform better at every step of the causal chain: they provide more inputs, increase facility utilization, and improve health outcomes including a 25 percent decrease in child malnutrition.

Work in Progress

Job Market Paper: Relational Frictions along the Supply Chain: Evidence from Senegalese Traders (with Deivy Houeix)

Search and trust frictions have historically hindered the ability of small firms to access foreign input markets. We run a field experiment with 1862 small garment firms in Senegal, in which we provide exogenous variation in search and trust frictions of interacting with suppliers in Turkey. Our search treatment connects firms to new suppliers using social media, and our two trust treatments vary the information about the types and incentives of these suppliers. To measure the impact on foreign market access, we mystery shop at all firms. Treated firms are 25% more likely to have the varieties the shopper requests and the goods supplied are 32% more likely to be high quality, driven by the search treatment. However, the trust treatments matter for longer-term outcomes: trust-treated firms are significantly more likely to develop these connections into relationships that persist beyond the study. These new relationships lead to increases in profit and sales, particularly among wholesalers.

Quantifying the Sensitivity of Quantitative Spatial Models (with Habib Ansari and Dave Donaldson)

A modern revolution in spatial economic modelling aims to answer quantitative counterfactual questions by using models that feature micro-level heterogeneity. This heterogeneity is then often assumed to come from particular parametric families — such as Frechet in Eaton and Kortum’s (2002) Ricardian model, or Pareto in applications of Melitz’s (2003) monopolistic competition model. While these parametric choices greatly enhance the tractability of model simulations, it is unknown how sensitive the answers to counterfactual questions are to these assumptions of convenience because there are infinitely many

alternative distributions of heterogeneity to be evaluated. We overcome this challenge by building a general trade model that leverages recent advances in the robustness literature. Our method calculates sharp bounds on the values of model counterfactuals that could obtain — while still exactly matching all aggregate trade data points and satisfying equilibrium constraints — under all possible distributions of underlying heterogeneity that lie within a given divergence from a chosen reference distribution. Applying this method to the Eaton and Kortum (2002) and Melitz (2003) models, we find that the gains from trade in these models could be several times larger or smaller than they appear to be under standard benchmark distributions, even if heterogeneity is drawn from a relatively similar distribution.

Selection into Public Service Delivery and Aspirations Spillovers: Evidence from Zambian Health Workers (with Nava Ashraf and Oriana Bandiera)

We study whether professionalising public service delivery agents has dynamic spillovers through improving aspirations of the next generation. To do this, we combine the experimental variation in Ashraf, Bandiera, Davenport, Lee (2020)—as well as the subsequent staggered rollout of the program—with data on the universe of exam scores in Zambia. We find that treated villages see large effects on education outcomes. Preliminary evidence suggests treatment effects in the order of 10% on the number of students taking the main Math, English, and Science exams, and similarly sized decreases in the average exam score, consistent with treatment inducing students on the margin to not drop out.

Quantifying the Benefits of Economic Integration: Evidence from a VAT Reform in India (with Tishara Garg)

We study the benefits of economic integration from reducing policy-induced barriers to trade. Using a landmark 2017 fiscal reform in India that substantially reduced barriers to crossing internal state borders as a natural experiment, we estimate gravity regressions using aggregate data and find that each additional border in a shipping route reduces trade by 15%. Calibrating a quantitative trade model to this elasticity, we find that reducing all such border frictions would increase GDP by 3%. To examine how supply chains may have re-organised, and the implications this has for gains from trade, we intend to exploit detailed micro-level data which we constructed from the universe of VAT records in India.

Teaching Experience

Development Economics (Micro), Profs Esther Duflo and Ben Olken (MIT 14.771) <i>PhD level.</i>	2021, 2024
Political Economy and Development, Profs Ben Olken and Abhijit Banerjee (MIT 14.75) <i>Intermediate undergraduate level.</i>	2022, 2024
The Challenge of World Poverty, Profs Esther Duflo and Frank Schilbach (MIT 14.73) <i>Introductory undergraduate level.</i>	2021, 2023
MSc Macroeconomics, Prof Alwyn Young (LSE EC413) <i>Masters level.</i>	2018

Awards and Honors

MIT Undergraduate Economics Association TA of the Year Award <i>Awarded to one TA in economics annually by the UEA.</i>	2023-2024
MIT Graduate Student Council Teaching Award <i>Given to one instructor in each of MIT's five schools for excellence in teaching a graduate level course. Awarded for PhD Development Economics (14.771) for the School of Humanities and Social Sciences.</i>	2021-2022
Arrow Award, with Nava Ashraf, Oriana Bandiera & Scott S. Lee <i>Awarded to the best paper published in health economics in English in 2020, by the International Health Economics Association.</i>	2020

Kennedy Scholarship	2019-2020
<i>National merit scholarship awarded to up to 10 British graduate students to study at MIT or Harvard.</i>	
John Hicks Prize	2018
<i>Awarded to the highest ranked student in LSE MSc Economics.</i>	

External Research Grants

International Science Partnerships Fund (£99,866), with N. Ashraf, O. Bandiera, V. Mukonka	2024
International Growth Centre (£19,981), with N. Ashraf and O. Bandiera	2024
International Growth Centre (£20,000), with N. Ashraf and O. Bandiera	2023
Private Enterprise Development in Low-Income Countries (£31,000), with D. Houeix	2023
Private Enterprise Development in Low-Income Countries (£20,720), with T. Garg	2023
Structural Transformation and Economic Growth (£11,960), with T. Garg	2021
International Growth Centre (£9,346), with N. Ashraf and O. Bandiera	2019