

Jiayue Zhang

W: jzhangg.github.io

E: jiayue_zhang@brown.edu

Placement Director: Toru Kitagawa	toru_kitagawa@brown.edu	401-863-3688
Graduate Administrator: Angelica Spertini	angelica_spertini@brown.edu	401-863-2465

REFERENCES

Andrew Foster
Brown University
Andrew.Foster@brown.edu

Şebnem Kalemli-Özcan
Brown University
sebnem_kalemli-ozcan@brown.edu

Matthew Pecenco
Brown University
matthew_pecenco@brown.edu

Neil Thakral
Brown University
neil_thakral@brown.edu

EDUCATION

Ph.D. Candidate in Economics, Brown University	2020 - 2026
Visiting student, New York University Abu Dhabi	Spring 2024
Visiting student, Princeton University	Fall 2022 & Fall 2023
M.Sc. Finance, The Chinese University of Hong Kong Business School	2018 - 2020
B.A. Economics and Finance (Hon.), University of Hong Kong	2012 - 2015

JOB MARKET PAPER

“Credit and Demand for Green Energy: Evidence from Small Firms in Kenya”, with Yunyu Shu and Wycliffe Oluoch

Adoption of green technology has been low in low-income countries, despite its crucial role in sustainable development. While providing credit increases demand, it changes the payment structure and adds another dimension of price elasticity. This paper evaluates firm demand for small-scale solar sold on credit by experimentally eliciting discrete choices over different down payments and repayments. We show that price elasticity for credit purchases is mainly driven by upfront cost elasticity rather than repayment elasticity. When offered the flexibility to tailor a subsidy to be applied to the down payment or repayment, adopters almost unanimously choose to reduce the upfront cost. Despite the same de facto subsidy structure, this tailored subsidy scheme positively selects less liquidity-constrained adopters and results in more usage and more operational days by firms.

WORKING PAPERS

“Returns to Capital for Whom? Experimental Evidence from Small Firm Owners and Workers in Ghana”, with Morgan Hardy and Jamie McCasland, *revise and resubmit at American Economic Journal: Applied Economics*

We document capital contributions from workers to their employers in a representative sample of small firms. We separately conduct a two-sided experiment in a sample of small employers, randomizing cash transfers to firm owners or a randomly selected worker. Transfers to either party increase firm profits in equal magnitude. Treated owners purchase additional business assets; treated workers purchase business assets that are used in their employing firm and experience wage increases. Our findings challenge the assumption of a separation of labor and capital in firms, with widespread implications for measurement and for understanding the nature of firms in our context.

“Informed Climate Adaptation: Input and Output Subsidies for Shaded Cocoa”, with Yunyu Shu

With growing climate risks, agro-environmental policies seek to protect the environment while reducing poverty by incentivizing climate adaptation. We study how information shapes adaptation under different subsidy schemes for cocoa farmers in Ghana, where agroforestry is encouraged as an adaptation strategy. Conducting a lab-in-the-field experiment, we compare the impacts of an information intervention under an input subsidy for planting forest trees and an output subsidy for producing cocoa beans from shaded farms. While farmers receiving the information in both subsidy groups plant more forest trees than their subsidy-only counterparts, the increase is higher under the output subsidy than the input subsidy even though the information leads both groups to similarly update their beliefs about the benefits of shade. We rationalize the differential effects of information with a model in which beliefs about rainfall uncertainty and shade benefits affect ex ante input decisions. Counterfactuals show that output subsidy has greater potential to drive adaptation than input when beliefs are reasonably correct. We validate the lab results by distributing tree seedlings, finding consistent treatment effects on the number of seedlings requested and obtained.

WORK IN PROGRESS

“Beyond Informality: The Importance of Residential-Based Businesses”, with Morgan Hardy, Gisella Kaggy and Monica Lambon-Quayefio

Existing enterprise literature emphasizes the formal-informal enterprise dichotomy, with traditional informal enterprise listing protocols targeting businesses operating in non-residential business structures. In a suburb outside Accra, Ghana, we implement an inclusive enterprise listing strategy that targets not only formal and informal non-residential structure businesses but also residential (household-based) businesses. We find that residential businesses are economically significant and show meaningful persistence in structure types. Informal residential businesses are also meaningfully distinct from their non-residential counterparts across multiple firm, owner, and household characteristics, suggesting unique drivers and consequences of structure. Recent data from Ghana’s latest and newly inclusive national enterprise census, as well as enterprise data available through nationally representative household surveys across Sub-Saharan Africa, corroborate the significance of residential structure businesses on a national and continental scale. Our study draws attention to a data gap in most existing commonly available enterprise data sources and highlights the potential benefits of refined categorization in future research to deepen our understanding of both formal and informal enterprises in low-income countries.

“Less is More; Worse is Better”, with Ming Li, Yunyu Shu, and Jia Xiang

Information campaigns are a major policy tool for promoting climate change adaptation. Such policies often face contestation because the benefits of adaptive actions are distributed unevenly across scales: local actors

prioritize private resilience while policymakers emphasize collective, long-term social gains. We examine whether information framed around private versus social benefits shifts adaptation behaviors, and whether credibility-enhancing caveats alter uptake, in the context of cocoa farming in Ghana where agroforestry is a viable but under-adopted adaptation strategy. We find that, while information on private and social benefits are separately effective in driving adaptation, combining them does not necessarily increase the information impact. We also show that providing information on the downside risks of the adaptation strategy on top of its benefits increases information credibility and subsequently boosts adoption of the adaptation strategy.

CONFERENCE PRESENTATIONS AND INVITED TALKS

2025:	MIT-Brown Development Workshop; Association of Environmental and Resource Economists 2025 Summer Conference; LSE Environment Camp; AEA CSQIEP Mentoring Conference; Political Economy of Climate & Environment Conference; Advances with Field Experiments Conference; Haverford College*; University of Rhode Island*; Beijing Normal University*
2024 :	NBER Development Economics; IGC/Yale EGC Firms, Trade, and Development Conference; IPA Northwestern Methods & Measurement Conference; Berkeley/Sloan Summer School in Environmental and Energy Economics; Firms, Labor Markets and Development Workshop; Webinar Series in Finance and Development; New York University Abu Dhabi
2023:	PEDL Young Scholars Matchmaking Workshop; Nature-based Climate Solutions and Biodiversity Conservation; Princeton Research Program in Development Economics
2021:	Oberlin College Danforth-Lewis Speakers Series
2018:	ECB-FRB-FRBNY Conference
2017:	FIW Research Conference; HKMA-BIS Conference; Central Bank of Brazil Annual Seminar

* Scheduled

GRANTS

2025 - 2026:	International Growth Centre (IGC) Small Projects Facility (<i>Cocoa production and trading dynamics</i>) (£19,880)
2024 - 2025:	IGC Small Research Grant (<i>Green Energy Adoption</i>) (£29,920) Orlando Bravo Center for Economic Research PDBF Research Fund (<i>Green Energy Adoption</i>) (\$10,000)
2023 - 2024:	IGC Small Research Grant (<i>Farmers' Climate Change Adaptation</i>) (£39,622.66) PEDL Exploratory Research Grant (<i>Green Energy Adoption</i>) (£39,989) Population Studies and Training Center Summer Research Grant (\$1,200)
2022 - 2023:	PEDL Exploratory Research Grant (<i>Farmers' Climate Change Adaptation</i>) (£39,777) Orlando Bravo Center for Economic Research PDBF Research Fund (<i>Farmers' Climate Change Adaptation</i>) (\$7,760) Orlando Bravo Center for Economic Research PDBF Research Fund (<i>Climate Change Pricing in Housing Markets</i>) (\$1,200)
2021 - 2022:	Brown University Travel Grants (\$1,700) Watson Institute Graduate Program in Development Summer Funding (\$1,500)

SCHOLARSHIPS, HONORS AND AWARDS

2025 - 2026:	Merit Dissertation Fellowship, Brown University
2023 - 2024:	Stephen R. Ehrlich Fellowship, Brown University
2022 - 2023:	Stephen Robert Graduate Fellowship, Brown University Global Mobility Fellowship, Brown University
2021 - 2022:	Manning Graduate Fellowship, Brown University
2020 - 2021:	Doris I. Eccleston 1925 Fellowship, Brown University
2018 - 2020:	CUHK Distinguished Academic Performance Scholarship for Graduates (1st Place)
2018 - 2019:	CUHK Distinguished Academic Performance Scholarship for New Students CUHK Business School Admission Scholarship

RESEARCH EXPERIENCE AND OTHER EMPLOYMENT

2025:	Research Assistant for Dr. Matthew Pecenco and Dr. Bobby Pakzad-Hurson, Brown University
2021 - 2024:	Research Assistant for Dr. Morgan Hardy, New York University Abu Dhabi
2018 - 2020:	Manager (Offshore Renminbi Policy), Hong Kong Monetary Authority
2015 - 2018:	Assistant Economist (Financial Markets), Hong Kong Monetary Authority

TEACHING

2024:	Lab Instructor at Brown University Honors Tutorial for Economics Majors
2023:	Guest Lecturer at New York University Abu Dhabi on Research Design, Fieldwork, and Data Analysis for Development Economics Guest Lecturer at University of Ghana on Empirical Methods in Applied Economics
2021:	Teaching Assistant at Brown University for Professor David Weil on Inequality of Income, Wealth, and Health in the United States

JOURNAL REFEREE

The European Journal of Finance

SKILLS

Computer: Python, Stata, R, Earth Engine, ArcGIS, QGIS, LaTeX, SurveyCTO

Language: English, Cantonese, Mandarin Chinese (native)