

# Professional Activity Statement

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## 1 Research

The overarching theme of my research agenda is to understand how technology reduces frictions in payments markets and consumer financial markets, and the effects of reducing these frictions on households and small firms in emerging economies. Within consumer financial markets, I have a set of papers on frictions that prevent households from saving, and a second set of papers and projects on credit market frictions. My papers employ natural experiments or randomized controlled trials (RCTs) for identification, and generally use a combination of confidential (often transaction-level) administrative data and survey data.

My focus on emerging economies is motivated by three main factors. First, the frictions in financial markets in developing countries are often more severe than frictions in more-developed markets, due to a combination of factors including poorly functioning legal institutions (Beck, Demirgüçkunt, and Maksimovic, 2008) and more-constrained financial intermediaries (Paravisini, 2008; Schnabl, 2012). Second, these frictions are an important impediment to economic growth (King and Levine, 1993; Rajan and Zingales, 1998). Third, much of the evidence in household and corporate finance is from rich countries, which are likely not representative of the vast majority of the global population (Badarınza, Balasubramaniam, and Ramadorai, 2019). My focus on households and small firms is similarly motivated, as households in developing countries face substantial credit, risk, and savings constraints (Banerjee and Duflo, 2007; Karlan, Osei, Osei-Akoto, and Udry, 2014), and small firms are typically more constrained than large ones (Beck, Demirgüçkunt, and Maksimovic, 2005). Furthermore, small and medium enterprises are an important driver of employment and income in emerging economies, representing about 90% of businesses, 50% of employment, and 40% of GDP (World Bank, 2023).

### 1.1 Payments Markets

In “Financial Technology Adoption: Network Externalities of Cashless Payments in Mexico” (conditionally accepted at *American Economic Review*, with the only condition being the Data Editor’s review of the replication package; solo-authored), I explore whether coordination failures constrain financial technology adoption by households and retail firms. Exploiting the Mexican government’s rollout of one million debit cards to poor households from 2009–2012, I examine responses on both the supply and demand sides of the market. Because payment technologies feature two-sided markets, coordination failures can constrain adoption. Two-sided markets generate indirect network externalities, where the benefits a debit card user derives from the technology depend on supply-side adoption of technology to accept card payments, which in turn depends on how many other consumers have adopted debit cards. These indirect network externalities can lead to multiple adoption equilibria, where moving to the Pareto-dominating equilibrium requires coordination (Katz and Shapiro, 1986; Gowrisankaran and Stavins, 2004).

I exploit large localized shocks to consumers' adoption of a particular payment technology—debit cards—to trace out the supply and demand-side spillovers of coordinated technology adoption in a two-sided market. Between 2009 and 2012, the Mexican government disbursed about one million debit cards as the new payment method for its large-scale conditional cash transfer program, Prospera. I find that small retailers responded to these large local shocks to consumer debit card adoption by adopting point-of-sale (POS) terminals to accept card payments, while large retailers such as supermarkets already had near-universal adoption of POS terminals. I then examine how this supply-side response fed back to the demand side, finding that it led to a 21% increase in other consumers' debit card adoption, and that richer consumers shifted 13% of their supermarket consumption to small retailers now that they could use debit cards at more small retailers. Consistent with this shift in consumption, I find that small retailers' sales and profits increased, while large retailers' sales decreased.

This paper is a good example of how my research typically combines natural or randomized experiments with a combination of administrative and survey data. I combine administrative data from Prospera on the debit card rollout with a rich collection of eight additional data sets on both consumers and retailers. The key data set on supply-side financial technology adoption is a confidential data set on the universe of POS terminal adoptions by retailers over a twelve-year period, accessed on-site at Mexico's Central Bank. For spillovers on other consumers, the two key data sets that I use are quarterly data on the number of debit cards at the bank by municipality level and a nationally representative consumption survey that can be used to identify unique trips to different types of stores. I complement these with four additional confidential data sets: transaction-level data on the universe of debit and credit card transactions at POS terminals over eight years; transaction-level data from the bank accounts of Prospera beneficiaries; a panel on store-level sales, costs, and profits for the universe of retailers; and high-frequency price data at the store by barcode level from a sample of stores. Finally, to explore whether coordination failures were indeed the mechanism constraining financial technology adoption, I conducted a survey of 1,760 corner store owners.

A second paper in the context of payments markets is “Why Small Firms Fail to Adopt Profitable Opportunities” (with Paul Gertler, Ulrike Malmendier, and Waldo Ojeda). In partnership with a financial technology (FinTech) payments provider in Mexico, we conducted an RCT where the FinTech offered 33,978 firms that were already active users of the payments technology the opportunity to be charged a lower merchant fee for each payment they receive from customers. The median value of the fee reduction is 3% of total firm profits. Motivated by results from a pilot we conducted with the FinTech company in which take-up of the lower fee offer was low, we ask why small firms often fail to adopt profitable opportunities.

This question contributes to a literature that documents the substantial heterogeneity in managerial quality across firms (Bloom and Van Reenen, 2007) and identifies a lack of information and managerial capital as key constraints to firms' optimizing (Bloom, Eifert, Mahajan, McKenzie, and Roberts, 2013; Bruhn, Karlan, and Schoar, 2018). These papers find that firms were not implementing a number of business practices and that after receiving consulting services to identify which practices to implement, productivity increased substantially. Thus, the business practices that these firms were not implementing were a type of profitable opportunity. We designed our experiment to be a setting in which standard economic frictions that constrain firms' adoption of profitable opportunities are removed, and to test three other frictions: limited memory, present

bias, and a lack of trust in other firms.

We randomly varied the size of the fee reduction, a deadline, a reminder, and advance notice of the reminder. We find that firm owners are forgetful: unannounced reminders caused a large and significant increase in adoption of the lower merchant fee. By the eighth day of our study, reminders increased adoption of the lower merchant fee by 15%: firm owners who received an unannounced reminder were 4 percentage points (pp) more likely to take up the offer compared to firm owners who did not receive a reminder, on a base of 26% take-up. The higher overall take-up by firms that received a reminder was almost entirely driven by the increase in take-up on the day we sent the reminder. Deadlines, on the other hand, had no effect on take-up by the deadline, and eventual take-up was higher in the no deadline groups. Firm owners who received an announced reminder had the highest overall take-up. On the first day (when we sent the initial email), there was no difference in take-up between the announced and unannounced reminder groups. The day that we sent the reminder, announced reminders increased take-up of the profitable opportunity by an additional 2 pp compared to unannounced reminders, and the difference remained significant throughout the remainder of the experiment.

We conducted a survey of a subsample of firms in our RCT to better understand mechanisms behind the effect of the announced reminder relative to the unannounced reminder on take-up. The survey data help identify trust as the likely underlying mechanism behind the larger effect of the announced reminder: receiving an announced reminder increased firms' perceptions of the offer's value, and its treatment effect on take-up was stronger among firms that generally distrust advertised offers. We find similar evidence in the administrative data using the number of months the firm had used the FinTech payments technology as a proxy for their trust in the FinTech firm: while the overall level of take-up was higher among firms that had used the FinTech payments technology longer, the treatment effect of the announced reminder was concentrated among firms that had used it for less time (and thus likely had lower baseline trust in the FinTech company). The result on trust could have broad implications for firms' adoption of various profitable opportunities, as these opportunities often require firm-to-firm interactions where a lack of trust may be an important friction.

We also find that firms are highly elastic to the lower fee: a 20% average reduction in fees led to 42% more sales through the FinTech payments technology. This implies that some firms that had previously preferred cash payments likely preferred to receive card payments once the fee was lower (since cash also has various indirect costs such as crime risk and needing to make more frequent trips to the bank). Our survey data suggest that 24% of firms passed through fees to their customers when the FinTech charged them a higher merchant fee but switched to not passing through fees to their customers once the fee was lowered. We are working with the FinTech company to obtain itemized transactions data to write a second paper using our experimental variation to study how competition and consumers' demand elasticities affect the pass-through of card payment fees to consumers, which is a highly policy-relevant question as many countries have implemented "no surcharge" regulations, and the Mexican Senate is currently considering such a rule.

The shift towards cashless payments happening around the world presents an opportunity for governments to increase tax compliance and reduce criminal activity (Rogoff, 2016). However, constraining cash as a mode of payment can also have negative economic impacts (Chodorow-Reich, Gopinath, Mishra, and Narayanan, 2020). The extent to which governments should en-

courage the transition from cash to digital payments by making cash more costly to use or by subsidizing electronic payments depends on the elasticity of cash use with respect to the relative cost of using cash. In “Towards a Cashless Economy? Evidence from the Elasticity of Cash Deposits of Mexican Firms” (with Pierre Bachas and Anders Jensen), we exploit a natural experiment to estimate this elasticity: Mexico implemented a tax on cash deposited in banks, above a threshold, in 2008 and repealed the tax in 2014. Given the government’s objective of encouraging the transition towards digital payments, the tax did not apply to non-cash deposits (e.g. through POS terminals, mobile and online payments, and bank account transfers). Using data from a large commercial bank at the firm bank account level for 64,000 firms, we exploit baseline variation in firms’ cash intensity (conditional on total deposits) to estimate firms’ elasticity between payment/deposit technologies.

We show that firms strongly reacted to the tax. First, clients bunched sharply at the monthly exemption threshold: the bunching follows the movement of the threshold when it got reduced in 2010 and disappeared within a few months once the tax was repealed. Second, while firms’ average cash deposits were on a downwards trend until December of 2013, they increased by 34% precisely at the time of the repeal, and kept increasing throughout 2014 and 2015. Focusing our well-identified empirical estimates on the repeal of the tax, we find that a one percentage point reduction in a firm’s average tax rate as a result of the repeal led to a 90% increase in cash deposits. This is partly driven by substitution from non-cash (78% of the increase in cash deposits) and partly driven by cash that firms were instead holding outside the bank while the tax was in place (22%). Exploring heterogeneity by firm size, we find that larger firms responded to the tax by substituting to non-cash deposits, while small firms responded by holding their cash outside the banking system. We are currently exploring additional data sets including a census survey of the universe of firms in Mexico to measure the real effects of holding more cash outside of the bank due to the tax on cash deposits.

## 1.2 Savings Constraints

This strand of my research studies the frictions that prevent households from saving, and how technology can reduce these frictions. These papers are motivated by two empirical findings: first, a large number of households report that they do not have sufficient savings to cope with relatively small shocks (Federal Reserve, 2017), and second, take-up and active use of bank accounts remain quite low in developing countries even when accounts are offered without fees (Dupas, Karlan, Robinson, and Ubfal, 2018).

In “How Debit Cards Enable the Poor to Save More” (*Journal of Finance*; with Pierre Bachas, Paul Gertler, and Enrique Seira), we exploit the same natural experiment described above in which debit cards were rolled out over time to cash transfer recipients who already had a bank account. Using administrative transaction-level bank account data, we find that beneficiaries accumulated a savings stock equal to 2% of annual income after two years with the card. Using survey data, we find that the increase in formal savings represents an increase in overall savings, financed by a reduction in current consumption.

Debit cards alleviate two important barriers to using formal financial institutions. First, debit cards lower the indirect transaction costs of accessing money in an account by facilitating more convenient access via a network of ATMs. In a companion paper, “Digital Financial Services Go a Long Way: Transaction Costs and Financial Inclusion” (*American Economic Association Papers*

& *Proceedings*; with Pierre Bachas, Paul Gertler, and Enrique Seira), we find that the median road distance between a beneficiary’s house and the closest branch at which they could withdraw money was 4.8 kilometers (km), while the median road distance to the closest ATM was 1.3 km. We also show in this companion paper that the effect of the debit card on account transactions and savings was larger for beneficiaries who experienced a larger reduction in travel costs.

Second, debit cards reduce the indirect cost of checking balances, which enables individuals to verify that banks are not unexpectedly reducing balances. Upon receiving a debit card, most beneficiaries did not begin saving immediately, but instead appear to have first used the card to monitor account balances and thereby build trust that their money was safe. Two main pieces of evidence support the mechanism of using the card to monitor balances and build trust. First, using the high-frequency administrative data on bank account transactions, we observe that upon receipt of the debit card, beneficiaries initially left small amounts of money in the account and used the card to check their account balances frequently, but reduced balance check frequency over time. Second, in survey data from a subsample of the beneficiaries, those who had their debit cards for a short period of time reported significantly lower rates of trust in the bank than beneficiaries who had their debit cards longer.

One implication of the low levels of savings in emerging economies due to frictions like the ones described above is that banks struggle to attract deposits, which are a more stable source of funding than short-term debt (Ivashina and Scharfstein, 2010). A popular product around the world to attempt to overcome these frictions and attract deposits by incentivizing people to save is prize-linked savings (PLS). These accounts offer lottery tickets for cash prizes as an incentive to save, often in lieu of paying a fixed interest rate. The number of lottery tickets received is typically a function of the amount of new savings accumulated. Like a traditional lottery, PLS offers a small chance at winning a large prize (but unlike a traditional lottery, PLS customers keep the principal they deposit), so households seeking skewness might open a PLS account if offered. There are several reasons that people might seek skewness in returns and thus be drawn to PLS, including overweighting small probabilities and having nonconcavities in their utility function—which can arise from demand for indivisible assets in the presence of financial constraints.

In “Using Lotteries to Attract Deposits” (revise and resubmit at *Journal of Finance*; with Paul Gertler, Aisling Scott, and Enrique Seira), we worked with a bank in Mexico to conduct an RCT of prize-linked savings. We randomly assigned 40 out of 110 bank branches across 19 states to offer PLS over a two-month period, and measured the effects on account openings, deposits, and savings over the subsequent five years. The branch-level randomization makes our estimates relevant for a bank considering offering PLS to attract deposits, as we are also able to measure the effect of PLS on the present value of branch-level profits.

Offering PLS caused a 36% increase in the number of accounts opened and a 21% increase in the number of deposits during the lottery months in treatment branches relative to control branches. Using data from Mexico’s Central Bank to link individuals’ accounts across different banks, 96% of account openers at treatment branches during the lottery months were previously unbanked at any bank. There was a persistent effect on the *flow* of deposits at treatment branches for about three years after the lotteries ended. As a result, the stock of savings increased steadily over time in treatment branches relative to control branches, and the branch-level difference in the stock of savings is statistically significant from about eight months to 2.5 years after the lotteries ended. Finally, accounting for the bank’s return on deposits and its operational, marketing, and incentive

costs, we estimate that offering the lottery incentive for two months led to a 6% increase in the present value of branch profits.

### 1.3 Credit Markets

I have a pair of projects on frictions that constrain search and competition in consumer credit markets.

In “The Impact of Price Comparison Tools in Consumer Credit Markets” (with Erik Berwart, Sheisha Kulkarni, and Santiago Truffa), we are motivated by the large amounts of price dispersion that have been documented in various consumer credit markets (Agarwal, Grigsby, Hortaçsu, Matvos, Seru, and Yao, 2020; Argyle, Nadauld, and Palmer, 2023; Stango and Zinman, 2016). In our setting of the Chilean consumer credit market, the *same* consumer receives substantially different offers on interest rates for consumer loans: based on survey data we collected, the average within-consumer standard deviation in annual interest rates was 5.8 pp, compared to an average interest rate of 21%. Consumers who are unaware of this dispersion may shop less and take out more expensive loans than would be optimal if they were aware of the dispersion.

We used administrative data from the Chilean financial regulator on the universe of consumer loans merged with borrower characteristics to build a price comparison tool that shows loan seekers a conditional distribution of interest rates based on similar loans obtained by similar borrowers in our administrative data. We then conducted an RCT with 82,000 prospective borrowers recruited through Google ads targeted to people searching for keywords related to consumer loans in Chile. We randomized whether we showed participants the price comparison tool, a simple tool showing the potential cost savings from search, or a control video. We also cross-randomized whether we asked participants their priors about the distribution of interest rates that banks would offer them and their expectations about the number of banks at which they would search. We find that consumers think interest rates are lower than they actually are, and the price comparison tool caused consumer loan seekers to increase their priors about the interest rate they would obtain by 49%. Consumers also underestimate price dispersion, and our price comparison tool caused them to double their estimates of dispersion.

We observe whether participants obtained a loan after they were treated, as well as the terms of that loan, using administrative data (as we collected their national identification number when they participated in the RCT). The price comparison tool did not affect the number of institutions at which consumers searched or the interest rates they obtained, but did increase their probability of taking out a loan by 5%. In contrast, asking participants their expectations about interest rates and search caused them to obtain 2% lower interest rates on consumer loans without affecting their probability of taking out a loan.

We are currently collecting endline phone survey data to achieve two objectives. First, we are collecting detailed data on search histories to understand the full search process including informal search (e.g., calling the branch to get a sense of the probability of approval or expected interest rate before applying). Given the results in the administrative data, it is important to learn whether the tool caused people to search more but still not obtain better rates or if it did not cause them to search more. It is also important to learn whether the mechanism through which asking about their expectations led people to obtain better rates was through more search or, alternatively, a better-directed search (e.g., by thinking more carefully up front about which bank to shop at first).

Second, we are collecting data on what people who did not take out a loan did instead: e.g., receive funding from an alternative source such as an informal moneylender or a family member, or forgo the planned expense.

In another, earlier-stage project, “Impacts of a Consumer Credit Platform on Competition and Credit Terms” (with Xavier Giné, Dean Karlan, and Jonathan Zinman), we are focused on both search and competition in consumer credit markets. Banks are increasingly facing lending competition from FinTechs that use technology to reduce travel and search costs, evaluate creditworthiness using alternative data, and reduce application processing times, both in consumer (Buchak, Matvos, Piskorski, and Seru, 2018) and small business credit markets (Gopal and Schnabl, 2022). In Mexico, the financial regulator is accelerating this process by developing a credit card application and comparison app where consumers can apply for credit cards once through the platform and have their application evaluated by multiple banks and FinTechs, rather than having to separately apply to each lender.

Over the past few years, we have worked with the regulatory arm of Mexico’s Central Bank as they developed this app. Once a consumer applies through the app, after each bank decides whether to offer a credit card to the consumer and what terms to offer, the consumer will be able to compare the individualized credit card offers from each bank through the platform. Importantly, the offers will be binding as long as the information that the consumer provided is accurate. This new tool will simultaneously address two problems: (i) by enabling consumers to apply to many banks through a single application in the platform and subsequently presenting consumers with a range of personalized offers, it will drastically reduce search costs, and (ii) being run by Mexico’s financial regulator, it will not suffer from distorted incentives and bait-and-switch tactics that are likely to affect privately-run price comparison platforms. From the perspective of banks, the platform has both a positive aspect of lowering customer acquisition costs and a negative aspect of increasing search and competition, given that banks benefit from the current lack of consumer search.

We are currently piloting interventions with Mexico’s Central Bank and will conduct numerous RCTs to address three related research questions. First, how accurate are people’s predictions about their future card usage, and does providing them information about accuracy affect the credit card they choose and outcomes such as interest payments over time? Using data on predicted use collected through surveys and comparing this to administrative data on actual credit card usage, we will be able to identify mispredictions at the user level, including whether users with certain characteristics are more likely to mispredict and whether they tend to mispredict their consumption or their repayment capabilities. Based on these findings, if many people (or many people within certain subgroups like first-time credit card borrowers) mispredict, we will work with the Central Bank to develop and test targeted information interventions for people looking for credit cards on their platform.

Second, what is the impact of the platform on the terms of the credit cards people obtain, and on downstream outcomes such as total interest payments and default? We will use a Google ads recruitment strategy similar to the one used in the project in Chile, and randomize whether we send users to the credit card platform or to a randomly chosen bank’s credit card application website.

Third, how does competition affect credit card terms offered, including the interest rate, fees, and non-monetary characteristics? We will ask banks on the platform to send a table with the credit card offer they commit to making the client conditional on  $0, 1, \dots, N$  other banks making an offer. This elicitation will be incentive-compatible because one of those offers will be chosen by

the platform as a binding offer made to the client; which offer is chosen will depend on the actual number of other banks that make an offer. We will randomize whether the user is defaulted into having their application sent to all banks on the platform (and the user can opt out of each bank) or defaulted into having to manually select each bank that they want their application sent to. This will create random variation in how many banks receive the user's application, which will enable us to tease apart the effects of competition from adverse selection.

## 2 Teaching

I teach Entrepreneurial Finance and Venture Capital (FINC 445) in the full-time and part-time MBA programs. This is an elective course focusing on the unique financial issues faced by entrepreneurial firms. It primarily serves students who are broadly interested in entrepreneurship or venture capital (VC), including those who may be involved in an entrepreneurial venture at some point in their careers, those interested in pursuing VC careers, and those interested in asset management. The course presents an overview of the VC industry, discusses qualitative and quantitative valuation strategies for early-stage firms, analyzes the structure and economic implications of VC deals and term sheets (including terms such as liquidation preferences, option pools, and anti-dilution provisions), and explores the incentives around exits through an acquisition or initial public offering (IPO).

The course is heavily case-based: we cover eleven cases throughout the quarter. Given the rapidly changing VC landscape, the course also necessitates more frequent updating of cases than many other courses: in the three years that I have taught the course, I have brought in four new cases that were not previously taught in the course. Each quarter, I also invite three external speakers per section (who are often VC partners, corporate VC investors, angel investors, entrepreneurs, and lawyers representing both startups and VC firms) to give students the practitioner's perspective.

The most recent time that I taught the course in Fall 2022, my average teaching evaluation score across three sections (averaging over the two questions "Overall, how satisfied were you with this course?" and "Overall, how satisfied were you with this instructor?") was 5.3 out of 6, compared to a Kellogg average of 5.0. These above-average evaluations also show substantial growth compared to my first year of teaching, when my average score was 4.5 compared to a Kellogg average of 4.9. I won the Sidney J. Levy teaching award for the 2022–2023 academic year.

I have overseen four MBA student independent studies in Fall 2021, Winter 2022, Fall 2023, and Winter 2024. These independent studies were taken by MBA students who were interning at a VC firm and sought to earn academic credit for their internship and a project/course deliverable related to their work at the VC firm. In addition, at the request of MBA students I've given a number of talks to students interested in VC outside of class, including a "VC 101" workshop at the Kellogg Private Equity & Venture Capital Conference in 2022 and 2023, and a "Cap Tables and Term Sheets" lecture at the Kellogg Entrepreneurship & Venture Capital (EVC) Club's Interview Prep Group in 2021 and the EVC VC & Startup Bootcamp in 2023.

I also co-taught (with Anthony DeFusco) a PhD-level Household Finance independent study which PhD students in the Finance, Managerial Economics and Strategy (MECS), Financial Economics, and Economics programs took for credit. I co-taught this independent study in Winter 2022 and Winter 2023, and each time there were 5–6 students taking the course for credit and another 5–10 students auditing it as a reading group. For a subset of the students taking the course



for credit, it contributed to one of their second-year field sequences. In the course, we cover an overview of household finance research, competition in credit markets, financial technology, savings and wealth accumulation, macroeconomic implications of financially constrained households, and search models in household finance.

### 3 Service

I have served Kellogg, Northwestern, and the broader academic community in a number of ways.

#### 3.1 Internal Service

I am serving on the dissertation committee for Matheus Sampaio (fifth-year PhD student in Finance) and have also been a regular advisor but am not on the dissertation committee for Jinpu Yang (sixth-year PhD student in Finance). PhD students are also assigned a first-year advisor in the summer between their first and second years, and I am currently advising Nicolas Min (second-year PhD student in Finance) in this capacity. I have also written letters of recommendation for the following pre-doctoral research assistants who worked for me or for the Finance Department as Research Fellows, with the university where they are pursuing their PhD in parentheses: César Landín (UBC), Xinghuan Luo (UC Davis), Erick Molina (Wisconsin), and Tiange Ye (USC).

I have also served in the following service roles at Kellogg and Northwestern:

Position	With	Academic Years
Coordinator of Research Fellow (pre-doc) Recruiting	Jacopo Ponticelli	2020–present
Junior Recruiting Committee	9 others	2022–2023
PhD Admissions Reader	8–9 others	2020–2023
Development Economics Seminar Organizer	Ameet Morjaria	2022–present
Development Economics Seminar Organizer	Leander Heldring	2021–2022
Finance Department Seminar Organizer	Nicolas Crouzet	2021–2022
Development Rookiefest Selection Committee	Ameet Morjaria	2021–2022

#### 3.2 External Service

I am an Associate Editor at the *Review of Finance* serving a three-year term from 2024–2026.

I was selected as an affiliated professor at the MIT Jameel Poverty Action Lab (J-PAL) in 2023. J-PAL selects affiliates who conduct randomized evaluations around the world to design, evaluate, and improve programs and policies aimed at reducing poverty, and publish the results of these evaluations in high-quality economics journals.

I have refereed papers for the following journals: *American Economic Review*, *Quarterly Journal of Economics*, *Journal of Political Economy*, *Review of Economic Studies*, *Journal of Finance*, *Journal of Financial Economics*, *Review of Financial Studies*, *American Economic Journal: Applied Economics*, *American Economic Journal: Economic Policy*, *American Economic Review: Insights*, *Economics Letters*, *Journal of Banking & Finance*, *Journal of Development Economics*, *Journal of Political Economy: Microeconomics*, *Journal of Public Economics*, *Management Science*, *Review of Economics and Statistics*, *World Development*, *Economic Development and Cul-*

*tural Change, Journal of Human Resources, Journal of Financial and Quantitative Analysis, and Review of Finance.*

I have discussed the following papers:

Conference	Authors	Year
Financial Intermediation Research Society (FIRS)	Chava, Ganduri, Paradkar, Zeng	2019
American Finance Association (AFA)	Aggarwal, Kulkarni, Ritadhi	2020
Midwest Finance Association (MFA)	Aydin	2020
Money and Finance Research Group (MoFiR)	Brown, Hetschel, Mettler, Stix	2020
Western Finance Association (WFA)	Azevedo, Lafortune, Olarte, Tessada	2020
American Finance Association (AFA)	Cai, Szeidl	2021
CEPR Conference on Household Finance	Song	2021
NBER Inequality, Discrimination, and the Financial System	Annan	2021
NBER Household Finance Summer Institute	Barboni, Field, Pande	2021
Society for Financial Studies (SFS) Cavalcade	Balyuk, Williams	2022
CEPR–ES Financial Intermediation and Corporate Finance	LaPoint, Sakabe	2022
WashU Annual Conference on Corporate Finance	Ghosh, Vats	2022
Asian Bureau of Finance and Economic Research	Jiang, Yu, Zhang	2023
Central Bank Research Association	Fiorin, Hall, Kanz	2023
North American Winter Meeting of the Econometric Society	Mariani, Ornelas, Ricca	2024

I was on the Program Committee for SFS Cavalcade (2021, 2022, 2023, and 2024), MFA (2022 and 2023), Midwest International Economic Development Conference (2022), WFA (2024), and the AFA PhD student poster session (2024). I have chaired sessions (including recruiting discussants) at the 2023 MFA meetings, the 2023 Northeastern Universities Development Consortium (NEUDC), and the 2024 North American Winter Meeting of the Econometric Society. I organized a session at the 2018 AEA annual meetings that was selected for inclusion in the *American Economic Association Papers & Proceedings*.

I have written letters of recommendation for the following research assistants who worked for me outside of Kellogg (e.g., hired through a coauthor’s university), with the university where they are pursuing their PhD in parentheses: Andrés Cruz (UT Austin), Joel Ferguson (UC Berkeley), Gabriela Lecaro (Michigan), Rosie Li (Yale), Elena Stacy (UC Berkeley), and Francisco Villarroel (Syracuse).

Finally, in Spring 2020 I co-founded the Webinar in Finance and Development (WEFIDEV) with Giorgia Barboni (Warwick) and Nicola Limodio (Bocconi). Our goal in founding WEFIDEV was to support junior researchers in sharing their early-stage work when meeting in-person was impossible due to COVID-19. We have since hosted 35 webinars between Fall 2020 and Spring 2023, every two weeks during the fall and spring quarters; the webinar will continue in the 2023–2024 academic year with an additional organizer, Kim Fe Cramer (LSE). We have built a community of nearly 300 early-career researchers on our mailing list from around the world (38% Europe, 24% North America, 24% South America, 10% Asia, and 5% Africa), and our webinars have an average attendance of over 30 attendees. We have also hosted two in-person WEFIDEV conferences sponsored by CEPR, Kellogg, and Warwick, hosted in London in 2022 and at Kellogg in 2023; our third in-person conference will take place at Bocconi in 2024.

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