

Economics IN ACTION



Improving the **Design and Delivery** of Anti-Poverty **Programs in India**

By Karthik Muralidharan, Ph.D., and Paul Niehaus, Ph.D.

Chair's Corner

Welcome to Economics in Action.



Alumni Spotlight

lan Domowitz, Ph.D. '82 CEO analyzes transaction cost to minimize large-scale risk.



Staff Spotlight

Natalie Wolfe

Powerhouse Brings Efficiency and Spirit to the Department

Department Awards

This year's awards honor undergraduates, graduate students and faculty.

Undergraduate Student Recipients » Graduate Student Recipients » Faculty Recipients »

ECON 173AL: Finance Lab Undergraduate class with investment management professionals offers real-world education and opportunities.

Meet the New Dean of Social **Sciences**

Carol Padden, Dean of Social Sciences, Sanford I. Berman Chair in Language and Human Communication

Faculty in the News

The Key to Getting People to Donate to Charities: Don't Push It

Magnet Schools Struggle to Be Diverse, Says Study

Understanding and combating terrorist groups: Is it all a matter of economics?

San Diego Professor Discusses Radicalization (Video) Are We Tight Yet? The Fed's Problem in Finding the **Neutral Rate**

Worth Every Cent: To Help the Poor, Give Them Cash

ISSUE 13 : DEC. 18, 2015

Alumni Spotlight Chair's Corner

STAFF SPOTLIGHT **Natalie Wolfe**

DEPARTMENT AWARDS **Undergraduate Awards Graduate Awards Faculty Awards**

FEATURE ARTICLES Improving the Delivery of Anti-**Poverty Programs in India** ECON 173AL: Finance Lab Meet the New Dean of Social **Sciences**

Past Issues

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lan Domowitz, Ph.D. '82

CEO analyzes transaction cost to minimize large-scale risk.

By Doug Kurtz



For an average retail investor, changing an investment position can seem as simple as clicking a button. But when large institutional investors change massive positions – affecting all of us through our 401ks and mutual funds – the transactions are immensely complex and complicated. This is the domain of lan Domowitz, who received his doctorate in economics from UC San Diego in 1982, and is CEO of ITG Analytics, a subsidiary of the investment technology giant ITG.

Mostly seamless to the retail investor, the cost of investment transactions can be quite high and is of primary concern for lan, who oversees the technology and strategies deployed by ITG Analytics. Their services help investment sponsors fine-tune trading strategies, optimize portfolios and gain a competitive edge. It is as much a necessity as an opportunity for firms in today's data-fueled investment environment.

Transaction Cost Analysis

So what is transaction cost analysis? A good place to start is to look at the costs associated with a simple investment transaction and where the pitfalls can occur. Take for example a trader who wants to unload a position of 1 million shares of Walmart stock (WMT). The bid price at the time of order placement may be \$65 per share. To sell a position of this size would require multiple buyers and is typically executed in multiple stages, or waves, and possibly in multiple venues.

The risk is embedded in the space and time to execute the order. For example, some of the trade may be able to be executed at the prevailing WMT price of \$65 per share while some may be executed at a higher or lower price. The spread between order price and execution is called slippage.

Moving 1 million shares of WMT will typically move the market price of the stock, so the slippage likely will be a lower price, a cost to the trader. In the past, an order of this size would work through the floor of a stock exchange in stages over the course of a day with each successive transaction moving the price. Little could be done but to hope for a large buyer and a favorable volume-weighted average price (VWAP).

Today, *where* and *how* one executes a trade are crucial factors for trade executions, with options spanning the aptly named "dark pools" (private, nontransparent exchanges) to carefully devised algorithmic strategies in traditional exchanges. Ian notes that, depending on the strategy of the investor, certain venues can be better than others.

These issues are just the beginning of considerations for firms trying to minimize risk in making trades. The transaction cost analysis utilized by Ian and other analysts is not just for equities; it permeates many markets, from foreign exchange to fixed income.

So how does an investor decide what is the right method for a transaction? Especially on a constantly changing, fast-paced trading day, where conditions can deteriorate or advance rapidly? According to lan, perhaps the most constructive service is the ability for professional analysts to help investors insulate portfolio performance from rapidly changing conditions and compare performance. In a wider view, the products and services developed by lan and his team are essential components in thousands of financial

ALUMNI SPOTLIGHT

Alumni Spotlight Chair's Corner

STAFF SPOTLIGHT
Natalie Wolfe

DEPARTMENT AWARDS Undergraduate Awards Graduate Awards Faculty Awards

FEATURE ARTICLES Improving the Delivery of Anti-Poverty Programs in India ECON 173AL: Finance Lab Meet the New Dean of Social Sciences

UC San Diego

Department of Economics

Past Issues

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Economics in Action : Issue 13 : Dec. 18, 2015 : Alumni Spotlight: Ian Domowitz, Ph.D. 82

transactions a day, used by many UC San Diego alumni who don't realize a Triton is behind the services.

Giving Back

Ian balances his commitment to his work with giving back to the university that helped him hone his skill set and build his life (Ian's wife, Marguerite-Victoria Morton, received her graduate degree at UC San Diego in Spanish literature in 1978, and they met on campus). Ian has mentored students, helped them start their careers, and visited campus as a guest speaker, with a goal of making a meaningful investment in the campus he calls home. His specialization, based on a set of analytical and mathematical skills learned at UC San Diego (his doctoral committee consisted of renowned economists Rob Engle, Clive Granger and Hal White), is an example of the creative paths our graduates take and the greater impact Tritons are making in today's financial world.

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Chair's Corner

Welcome to this edition of *Economics in Action*. In our lead article, Karthik Muralidharan and Paul Niehaus describe their research using technology to improve delivery of social welfare benefits in India, which has received attention from the highest levels of the Indian government. We introduce you to Carol Padden, our new dean of Social Sciences; profile Natalie Wolfe, our outstanding business operations manager; and shine our Alumni Spotlight on Ian Domowitz, Ph.D. '82, CEO of ITG Analytics, who discusses his firm's strategies for keeping transaction costs of large investors to a minimum.

CHAIR'S CORNER



Faculty Honors

For the second year in a row, a member of our department was chosen to be one of the "extraordinary minds" the campus placed front and center at its annual **Founders Symposium** in November. Building on his outstanding charitable work as co-founder of GiveDirectly (see the fall 2013 issue of *Economics in Action*), Paul Niehaus gave a TED-style talk on "Ending Poverty With Electronic Payments." He described how experimental impact evaluation and technological innovation are driving a global shift toward electronic cash transfers as the default tool to end extreme poverty. The talk will air on **UCSD-TV**.

Jeffrey Clemens has won the 23rd Arrow Award for the best paper in health economics, given by the International Health Economics Association. The award-winning paper was entitled "Do Physicians' Financial Incentives Affect Treatment Patterns and Patient Health?" and was published in the *American Economic Review*, the flagship journal of the economics profession.

Ivana Komunjer has won the Koopmans Prize for the best article published in the journal *Econometric Theory* over the previous three years. The title of her prize-winning article was "Global Identification in Nonlinear Models with Moment Restrictions."

Ross Starr received a certificate of appreciation from UC President Janet Napolitano for his service on the UC Retirement System Advisory Board. Ross served from July 1, 2010, to June 30, 2014, including two terms as board chair.

Professor Emeritus Dick Attiyeh was selected to be a Revelle College Faculty Fellow. The Revelle College Faculty Fellow and Honorary Fellow program was established this year to recognize the faculty who have made exceptional and sustained contributions to Revelle College – to its students in particular – through education, service or research.

Graduate Students in the Media

Our former and current graduate students are getting a lot of attention in the business media. National Public Radio's "Marketplace" did a story on **research by Andrew Chamberlain**, a recent doctoral graduate who is now chief economist at Glassdoor. The punchline is that the time for job offers to come through now is twice as long compared to only five years ago. My own son recently lived through this, and this article was a great comfort to him before his offer finally arrived!

"Marketplace" also covered **research** by recent doctoral graduate Matthew Gibson and current doctoral student Jeffrey Shrader. Taking advantage of a natural experiment created by time zones in the United States, they found that permanently increasing sleep by an hour per week for everybody in a city increases the wages in that location by about 4.5 percent.

Bloomberg recognized doctoral alumnus Carlos Capistrán, now chief Mexico economist with Bank of America Merrill Lynch, for the best inflation forecasting in Mexico. UC San Diego econometrics training at work!

Of course, our graduate students shine in the world of academia as well. Current student Arman Rezaee

ISSUE 13 : DEC. 18, 2015

Alumni Spotlight Chair's Corner

STAFF SPOTLIGHT Natalie Wolfe

DEPARTMENT AWARDS Undergraduate Awards Graduate Awards Faculty Awards

FEATURE ARTICLES Improving the Delivery of Anti-Poverty Programs in India ECON 173AL: Finance Lab Meet the New Dean of Social Sciences

Past Issues

SUBSCRIBE

Name:

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Economics in Action : Issue 13 : Dec. 18, 2015 : Chair's Corner

won the Poster Prize at the most recent Northeast Universities Development Consortium. This is a major forum in development economics. The Nov. 7-8 conference featured 53 sessions on topics ranging from health and education to migration and conflict. Arman won for his poster "Crowdsourcing Government Accountability: Experimental Evidence from Pakistan." His project uses a cellphone-based information clearinghouse to monitor the performance of veterinarians in rural Pakistan.

Recent graduate Youjin Hahn, now at Monash Business School, took home the Australian Health Economics Society Research Prize for her paper entitled "The Effect of Medicaid Physician Fees on Take-up of Public Health Insurance Among Children in Poverty," published in the *Journal of Health Economics* in 2013. The prize is conferred only once every two years and was unanimously awarded to Youjin by an international panel of judges.

Undergraduate Program

We have an exceptionally active Undergraduate Economics Society (UES), headed by William Shewfelt. Its recent event, the Internships in Business Panel, was a resounding success. There were 78 attendees and an excellent panel with speakers from Amazon.com, Ernst and Young, UBS Investment Bank, Lockheed Martin and *The New York Times*. Their marketing committee, led by Vicky Ho and Ryan Szeto, deserves special recognition for the outstanding turnout. UES External Relations Vice President Shailen Naik did a great job with booking speakers and UES Professional Development Vice President Jackie Vallon managed event logistics with precision.

The Department of Economics and its alumni Economics Leadership Council proudly welcome another cohort of Rising Leaders in 2015-16. The UC San Diego Rising Leaders Program is a career-launching scholarship opportunity for undergraduates interested in investment banking, finance or general business. The program was designed to promote the professional mobility of our top undergraduates majoring or minoring in economics, management science, international studies-economics or joint mathematics-economics. In addition to receiving a \$1,500 academic scholarship, this program provides an alumni volunteer industry advisor to coach recipients and help them prepare for – and possibly secure – a career-launching internship. The program includes two industry tracks: investment banking and general finance/business. In spring of 2015, two students were selected as Rising Leaders-investment banking track: Mason Chu, an economics major; and Kyle Yu, a joint math-economics major. Currently we are reviewing Rising Leaders applicants for the general finance/business track of the Rising Leaders Program, with students to be selected by the end of the fall 2015 quarter.

Outreach and Alumni

The Allied Social Sciences Associations conference will be held in San Francisco, California, Jan. 3-5, 2016. We look forward to seeing many of our doctoral alumni there – especially at our cocktail party, which will be held on Monday, Jan. 4, from 6:30 to 8:30 p.m. in the Golden Gate 1 and 2 Room at the Hilton Union Square (headquarters hotel).

Sincerely,

James Rauch

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Natalie Wolfe

Administrative Powerhouse Brings Efficiency and Spirit to the Department

By the Department of Economics



Natalie Wolfe is a finance and human resources professional who plays a very important role in maintaining the excellence in the Department of Economics. In March, Natalie moved into her current role as business operations manager for the department.

What does a business operations manager do? UC San Diego's Department of Economics is by most measures the largest in the Division of Social Sciences. Working directly with the chair, management services officer and director of Student Affairs, the business operations manager keeps our large and complex ship afloat by overseeing our operating budget, gifts and endowments, contracts and grants funds, and human resources.

Career at UC San Diego

Born and raised in San Diego, Natalie graduated with a Bachelor of Arts in psychology from UC San Diego in 2006. Shortly after

graduation, she began her staff career as the intake advisor at Muir College, where she advised students and managed the logistics of freshman and transfer orientations. Natalie found this to be extremely fulfilling work. "It's really rewarding to see these students, with so many questions and concerns before their first year, grow and get involved on campus, and then go on to their next chapter, with jobs, grad school and starting families," she said.

Natalie moved to the International Center and continued to work with undergraduates as the office manager for the Programs Abroad Office, supervising 10 student assistants and managing the annual Study Abroad Fair. She loved working with students before and after their programs. "The change in them is striking; I have seen students leave feeling a little afraid and unsure of if they should even go, and come back with new levels of confidence in themselves, new lifelong friends from all over the world, and wanting to go again," she recollected.

Improving the Department

In 2013, the Department of Economics hired Natalie as the administrative/fiscal coordinator, and she made immediate improvements. First, she realized that economists like to be reimbursed for travel and other expenses quickly and with minimal hassle, and she made it happen. Then she managed our unwieldy seminar series (up to 120 seminars annually) with ease and took over organizing all department conferences and events. When our former business operations manager departed, we encouraged Natalie to apply for the position, and she has brought her intelligent and level-headed approach to the job.

UC San Diego's Department of Economics boasts an extraordinary group of talented employees, including two Exemplary Employee of the Year recipients, and each person has benefitted from working with Natalie on a project. "Natalie has consistently been recognized by her fellow staffers and her peers for her willingness to step in and help with any sort of project," noted Management Service Officer Sue King.

Enhancing Department Spirit

UC San Diego Department of Economics

ISSUE 13 : DEC. 18, 2015

Alumni Spotlight Chair's Corner

STAFF SPOTLIGHT Natalie Wolfe

DEPARTMENT AWARDS Undergraduate Awards Graduate Awards Faculty Awards

FEATURE ARTICLES Improving the Delivery of Anti-Poverty Programs in India ECON 173AL: Finance Lab Meet the New Dean of Social Sciences

Past Issues

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Economics in Action : Issue 13 : Dec. 18, 2015 : Staff Spotlight: Natalie Wolfe

The sight of serious-minded economists competing against one other in a soccer game while encased in clear body-sized inflatable spheres is hard to imagine. But that is what happened this year when Natalie organized a Bubble Soccer game for the department. Following a suggestion by anonymous faculty coconspirators, she launched the first of what we hope will be many opportunities for faculty, staff and graduate students to interact in a fun environment.

Natalie's creativity and imagination led her to revamp much of our communal space and coordinate social events for the department. She enjoys the challenge and the results. "Organizing events is like putting together a puzzle. It's satisfying when all the different pieces fall into place and people have a good time," she noted.

Relaxation and Motivation

For relaxation, Natalie travels, studies yoga and searches Pinterest for craft inspirations. And she finds meaning and motivation from her work in the department: "I'm working more with graduate students ... these students come in to the program from all walks of life, grow and bond over their experience here, and go on to do wonderful things. And for the first time, I also get to work closely with faculty. I'm constantly reminded of how lucky I am to be able to know such talented staff, students and faculty, so I genuinely want to help them succeed in any way I can."

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Department Awards

Each year the Department of Economics honors students and faculty with awards for scholarship and teaching. Please join us in congratulating the 2014-15 winners.

Undergraduate Students

Each year the Department of Economics grants one **academic achievement award** to the top graduating senior from each of our three undergraduate majors: economics, management science and joint mathematics-economics. Recipients are chosen by faculty vote from a pool of top students in the graduating class of each major. The award is mentioned at their college commencement ceremonies, and awardees receive a total cash award of \$500. For more information on these annual awards, email **economics@ucsd.edu**.

Seymour Harris Award for Excellence in Economics Recipients: Christopher Campos



I transferred to UC San Diego from Los Angeles Pierce College in fall 2012. Coming in, I knew I wanted to pursue graduate studies, but I was undecided on whether it would be mathematics or economics. In my attempt to explore as much of both fields, I enrolled in economics honor courses, did independent study in mathematics, got involved in small research activities with UC San Diego graduate students and professors, and wrote a senior thesis. I also enjoyed being a teaching assistant for intro and intermediate microeconomics courses, and helping students with

econometrics homework as a Stata Lab tutor. In my final year at UC San Diego, I decided I would apply for doctoral programs in economics and am currently a first year doctoral student in the Department of Economics at UC Berkeley.

This award commemorates Seymour E. Harris, a prominent government advisor from the 1940s through the 1960s. He was a noted member of the Harvard University Department of Economics faculty and the founding chair of the UC San Diego's Department of Economics.

Joel Dean Award for Excellence in Management Science Recipient: Alyssa Orr



I came to UC San Diego undeclared, but after taking some introductory economics classes during my freshman year, I realized it was the field for me. I vividly remember sitting in ECON2 learning about game theory for the first time. When Professor Tang told the class that there was an upper-division class dedicated solely to the topic, I knew it was a class I couldn't pass up. Every one of my economics classes had aspects that were both challenging and fun, and I owe a lot of my success to the phenomenal professors and TAs I had throughout my time at UC

San Diego. It was difficult but worth it to balance my management science classes along with two minors (mathematics and accounting), my sorority and being a campus-tour guide. I'm happy to say that I'm now working as an analyst at a valuation company in Irvine.

This award commemorates Joel Dean, a prominent management scientist who was also a noted faculty member of the business school at Columbia University. He was a visiting professor at UC San Diego's Department of Economics throughout the 1970s and was one of the pioneers of our management-science major.

Award for Excellence in Joint Mathematics-Economics Recipient: Yining Zhu

ISSUE 13 : DEC. 18, 2015

Alumni Spotlight Chair's Corner

STAFF SPOTLIGHT Natalie Wolfe

DEPARTMENT AWARDS Undergraduate Awards Graduate Awards Faculty Awards

FEATURE ARTICLES

Improving the Delivery of Anti-Poverty Programs in India ECON 173AL: Finance Lab Meet the New Dean of Social Sciences

Past Issues

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Yining is currently working as a research assistant at the industrial relations section of Princeton University. She is interested in applied microeconomics and plans to pursue a doctoral degree in economics.

This award was established in 2008 and is granted to our most outstanding joint mathematics-economics student.

Graduate Students

Walter Heller Memorial Prize (Best Third-Year Paper)

This award is given annually in memory of **Dr. Walter Perrin Heller** (1942-2001). Dr. Heller was a leading 20th-century economic theorist and an early member of the UC San Diego faculty. He joined the department in 1974 and remained active until his death in 2001. This award formally recognizes our graduate students who have shown the most promise in their future careers in research.



First Prize Mitch Downey

"Partial Automation: Routine-Based Technical Change, Deskilling, and the Minimum Wage"



Runner-up Zachary Breig

"Dynamic Delegation"

Best Graduate Student Research Seminar Presentation

Graduate Student Research Seminars are organized by the students for the students to encourage presentation of early research in order to receive feedback from peers and to keep research projects on track. This award is designed to encourage graduate students to present research projects at all stages of development, especially those that have not yet been presented. The best presentation at the Graduate Student Research Seminars is selected annually by a committee of peers.



Erin Wolcott

"Changing Skill Sets: Opportunism or a Last Resort?"

Teaching Assistance Excellence

Annually the department recognizes graduate students who demonstrate great efforts in their teaching, as emphasized by glowing teaching evaluations from undergraduates, graduate peers and their faculty supervisors. Nominations are solicited from the faculty, and awards are made by the graduate committee. Each of these recipients showed clear commitment to the teaching mission of UC San Diego.



Richard Brady



David Coyne

Grant Johnson

Bong Hwan Kim

Economics in Action : Issue 13 : Dec. 18, 2015 : Department Awards







Claudio Labanca



Vincent Leah-Martin

Nels Lind



William Chi Chiao Leung



Clive Granger Research Fellowship

Six fellowships, named after Nobel Prize winner and longtime Department of Economics faculty member Sir Clive Granger, are awarded each year for the most promising graduate student research.

The fellowship carries a small stipend and allows the student to make more rapid dissertation progress by minimizing work obligations for a quarter. Nominations are made by the faculty running the thesis workshops (in consultation with their colleagues) and awards are made by the Graduate Committee.



Faculty

Undergraduate and Graduate Teaching Awards

In recognition of faculty and graduate students who demonstrate great effort in teaching, the department awards annual prizes for the best undergraduate and graduate teaching. Awards for undergraduate teaching are given to the best faculty member(s), lecturer(s) and associate-in(s) teaching undergraduate

Economics in Action : Issue 13 : Dec. 18, 2015 : Department Awards

Faculty

Faculty

courses. Recipients of the undergraduate teaching award are selected by a committee composed of the department chair and past faculty awardees who review undergraduate student evaluations. Awards for graduate teaching are given to to the best core-course instructor(s) and the best elective-course instructor(s). Recipients of the graduate teaching award are selected by current doctoral students.



Johannes Wieland, Ph.D. Undergraduate teaching



Erin Wolcott

Undergraduate teaching Associate-In



Richard Brady Undergraduate teaching



Maxim Sinitsyn

Undergraduate teaching Lecturer



Andres Santos, Ph.D. Graduate Core Course teaching Faculty



Simone Galperti, Ph.D.

Graduate Core Course teaching Faculty



Julie Berry Cullen, Ph.D.

Graduate Elective Course teaching Faculty



Karthik Muralidharan, Ph.D.

Graduate Elective Course teaching Faculty

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Economics in Action : Issue 13 : Dec. 18, 2015 : Improving the Delivery of Anti-Poverty Programs in India

UC San Diego Department of Economics



Economics

IN ACTION

By Karthik Muralidharan, Ph.D., and Paul Niehaus, Ph.D.

The government of India spends over 40 billion dollars annually on social-sector programs (including subsidies), but the delivery of services is marked by high levels of leakage and corruption. For instance, estimates suggest that only 30 to 70 percent of funds allocated for flagship anti-poverty programs, such as the National Rural Employment Guarantee Scheme (NREGS) and the Targeted Public Distribution System (TPDS), actually reach their intended beneficiaries.

To improve the design and delivery of anti-poverty programs in India, the government of India has launched the ambitious Aadhaar initiative, which aims to issue unique biometric IDs linked to bank accounts to all residents. It is hoped that this biometric payments infrastructure will allow direct-benefit transfers to intended recipients and reduce leakage. India is not alone in its enthusiasm. The potential for biometric-payment systems to improve the performance of public welfare programs – and also provide financial inclusion for the poor – has generated enormous interest around the world. A recent **survey article** has documented the existence of 230 programs in over 80 countries that are deploying biometric identification and payment systems.

Yet there are several reasons to be skeptical about Aadhaar's impact. First, implementation challenges are nontrivial, and the whole system may fail even if only some components fail, potentially making the project a "white elephant." Second, the initiative may be subverted by politically powerful vested interests whose rents are threatened. Third, there may be exclusion errors if genuine beneficiaries are denied payments, leaving the poorest worse off. Fourth, there may be negative effects on access to programs (like NREGS) if the loss of rents reduces incentives for officials to implement the program. Finally, even assuming positive impacts, the cost-effectiveness of the system is unknown. Overall, there is very little evidence to support either the enthusiasts or skeptics of biometric-payment systems.

Evaluating the Impact of the AP Smartcard Program

We aimed to fill this evidence gap by working with the government of the Indian state of Andhra Pradesh (GoAP) to evaluate the impact of the Andhra Pradesh Smartcard program, which used biometrically authenticated Smartcards to make payments to the National Rural Employment Guarantee Scheme and Social Security Pension beneficiaries (Muralidharan, Niehaus and Sukhtankar 2015).

Before the introduction of the Smartcard system, payments were delivered via the post office system with pen-and-paper authentication and record keeping. This created significant opportunity for corruption, as it was relatively easy for officials to pay beneficiaries less than they were entitled and to overreport work done, and to request additional payments from the government (to which beneficiaries were not entitled) and simply pocket them.

The new system used a network of locally hired, customer-service providers (CSPs) to biometrically authenticate beneficiaries and make cash payments in villages. It thus provided beneficiaries with the same effective functionality as intended by Aadhaar-linked direct-benefit transfer.

ISSUE 13 : DEC. 18, 2015

Alumni Spotlight Chair's Corner

STAFF SPOTLIGHT Natalie Wolfe

DEPARTMENT AWARDS Undergraduate Awards Graduate Awards Faculty Awards

FEATURE ARTICLES Improving the Delivery of Anti-Poverty Programs in India ECON 173AL: Finance Lab Meet the New Dean of Social Sciences

Past Issues

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Economics in Action : Issue 13 : Dec. 18, 2015 : Improving the Delivery of Anti-Poverty Programs in India

The key to the scientific credibility of our **evaluation** was a landmark agreement with the government of Andhra Pradesh to *randomize* the order in which subdistricts in eight districts of Andhra Pradesh would be covered by the new system over a two-year period. Since subdistricts that received the Smartcard program first (the treatment group) were chosen by lottery, they were on average identical to those that received the program two years later (the control group). Thus, differences in program delivery across treatment and control subdistricts after two years could be exclusively attributed to the Smartcard program.

Carried out in close collaboration with the government of Andhra Pradesh and covering close to 20 million people, this was one of the *largest randomized controlled trials ever done*. We report several results below.

Results

First, our experience confirms that **implementing** such a complex project at scale is nontrivial, and will face considerable technical, administrative and political challenges. Despite exemplary efforts by the government of Andhra Pradesh to achieve a 100 percent coverage rate in treatment subdistricts, the share of Smartcard-enabled payments in those subdistricts was approximately 50 percent after two years. Enrolling beneficiaries who missed initial enrollment "camps" was a serious challenge, highlighting the importance of processes for continuous enrolment. (See our companion **implementation report** for further lessons regarding effective implementation of a biometrics payment system.)

Yet despite the incomplete implementation, beneficiaries in "carded" subdistricts experienced a faster, more reliable and less corrupt payment experience. The Smartcard system reduced the lag between working on a National Rural Employment Guarantee Scheme project and collecting payment by 29 percent, and reduced the unpredictability in the lag by 39 percent. Further, it reduced the time workers spent collecting NREGS payments by 19 percent

Smartcards also reduced leakage. NREGS beneficiaries in treated subdistricts reported a 24 percent increase in weekly earnings, while fiscal outlays did not change, resulting in a 41 percent reduction in leakage (a 12.7 percentage-point reduction relative to the average leakage of 30.8 percent in the control areas). Similarly, reported pension earnings went up by 5 percent, while official disbursements did not, leading to a 49 percent decline in leakage (a 2.9 percentage-point reduction relative to average leakage of 6 percent in the control areas).

We also find that the proportion of households reporting having worked on NREGS *increased* by 18 percent. We show that this result is explained by a significant reduction in the fraction of quasi-ghost beneficiaries, defined as cases where officials reported work against a beneficiary's name and claimed payments for this work, but where the beneficiary received neither work nor payments. These results suggest that the introduction of biometric authentication made it more difficult for officials to over-report the amount of work done (and siphon off the extra wages unknown to the beneficiary).

Overall, the evidence suggests that Smartcards improved beneficiary experiences in collecting payments, increased payments received by program participants, reduced corruption, broadened access to program benefits, and achieved these without substantially altering fiscal burdens on the state. Consistent with these results, we find that 90 percent of NREGS beneficiaries and 93 percent of Social Security pension (SSP) recipients who experienced Smartcard-based payments reported that they prefer the new system to the old.

We find that Smartcards were very cost-effective. The monetized value of time savings to beneficiaries (approximately US\$ 4.3 million) *alone* was greater than the cost of the new system (approximately \$4 million) for NREGS. The reduction in NREGS leakage (approximately \$38.5 million) was over nine times the cost of the program. SSP leakage was reduced by approximately \$3.3 million relative to implementation costs of approximately \$2.3 million. All estimates are for the eight study districts only and would be higher if extended to all of Andhra Pradesh.

Overall, our study finds that the Smartcards improved "state capacity" to implement anti-poverty programs and led to closer implementation than enabled by the government. We find substantial economic benefits to taxpayers and program beneficiaries from biometrically authenticated payments, and the results suggest that using Aadhaar-enabled direct benefits transfers to beneficiaries can indeed be a game changer for governance in India.

Policy Impact

This work has had considerable impact over policy throughout the past couple of years. The results have been featured in Op-Ed columns in leading newspapers in India as well as in international news outlets and leading economics blogs. The results have also been presented to very senior policy

Economics in Action : Issue 13 : Dec. 18, 2015 : Improving the Delivery of Anti-Poverty Programs in India

makers in India. We were both invited as keynote speakers at the recent Delhi Economics Conclave in November 2015 as part of a program that included the prime minister, finance minister, governor of the Central Bank (RBI), and the chief economic advisor to the government of India. We have also recently secured a \$5 million grant from the Bill and Melinda Gates Foundation for working alongside the government of India to improve the design and delivery of anti-poverty programs, and we look forward to being able to conduct high-quality research that is also directly shaping policy that will affect the welfare of hundreds of millions of people in India.

Karthik Muralidharan and Paul Niehaus are associate professors in the Department of Economics. They received their doctorate in economics from Harvard University and are affiliates of the National Bureau of Economic Research (NBER), the Bureau for Research and Economic Analysis of Development (BREAD), the Jameel Poverty Action Lab (J-PAL), and the Center for Effective Global Action (CEGA).

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UC San Diego Department of Economics

ECON 173AL: Finance Lab

By Michael Willoughby, Ph.D.

Economics 173AL, Finance Lab, was created to complement the Financial Markets (Econ 173A) course. The department reaches into the professional "buy-side" community through the CFA Society of San Diego to bring guest speakers whose primary employment involves specific areas of investment management, such as pension consulting; managing bond portfolios; managing equity portfolios for medium and large cap investors and hedge funds; alternative investments; mergers and acquisitions; and research, selections and trading at all levels. Speakers have two to 20 years of experience in their fields.

Purpose

The primary purpose of the lab is to bring "street" vocabulary into the classroom so that students can integrate their theoretical vocabulary with a working, professional vocabulary. A speaker is scheduled every two to three class meetings, and background material from current events, practitioner publications and academic journals are reviewed in advance. The class meeting following a speaker is used to debrief about the content of the presentation.

We emphasize preparation in order to make the most of an outside speaker's availability. Speakers are not asked to teach but to describe, and they use term-of-art, professional words that are a mix of theoretical and specialized vocabulary. This means that students need to be prepared to grasp the context of the presentation and ask intelligent questions.

Results

The course meets on Mondays and Wednesdays, 4-4:50 p.m. Speakers generally stay after class for 30 to 45 minutes to converse with students. As a result, four students have been hired by various speakers' firms as interns, and three students have been hired as full-time employees. One student was hired by the director of the San Diego office of a Boston firm and, after training, was assigned to the firm's London office. A second student was hired by USB Financial Services and after two years there was admitted to the Sloan School of Business at MIT. All of the speakers describe how surprised they are at the level of knowledge demonstrated by students during the Q-and-A.

ISSUE 13 : DEC. 18, 2015

Alumni Spotlight Chair's Corner

STAFF SPOTLIGHT Natalie Wolfe

DEPARTMENT AWARDS Undergraduate Awards Graduate Awards Faculty Awards

FEATURE ARTICLES Improving the Delivery of Anti-Poverty Programs in India ECON 173AL: Finance Lab Meet the New Dean of Social Sciences

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Meet the new Dean of Social Sciences

Carol Padden, Dean of Social Sciences, Sanford I. Berman Chair in Language and Human Communication

By Inga Kiderra

A longtime member of the UC San Diego community – first as a graduate student, then as a faculty member and, most recently, as an administrator – Carol Padden is a MacArthur "Genius" Award-winning scholar of sign languages. She was named the fourth dean of the Division of Social Sciences in June 2014, after an extensive national search. Her appointment began Oct. 1.

Among the first cohort to be hired into UC San Diego's Department of Communication, Padden has been on the faculty since 1983, when she earned her doctorate from the university's Department of Linguistics. Padden, who holds the Sanford I. Berman Chair in Language and Human Communication, is an affiliate member of the Center for Research in Language, the Human Development Program, and the Department of Education Studies. She served as associate dean and faculty equity advisor in the Division of Social Sciences from 2008 to 2013. In early



Carol Padden

2014, she was tapped to be the university's interim vice chancellor for equity, diversity and inclusion.

Padden's main areas of research are language emergence, sign language structure, and cultural life in deaf communities. She plays a central role in promoting research on sign languages around the world and in shaping policy and practices that promote the full participation of deaf people in society.

As dean, Padden leads a dynamic and highly ranked academic division spanning 10 academic departments and 16 interdisciplinary programs and research centers that focus on some of the most pressing and important social issues of our time.

You've been part of the UC San Diego community for 36 years. How has the campus changed in that time – or has it?

A lot of the qualities of the campus seem the same as when I came here and now. The quality, the recognition, the type of faculty we have here feel very much the same. We're recruiting a lot of the same type of faculty as we did earlier. We look for faculty who like the interdisciplinary nature of the campus, who like working with and partnering with faculty in very different departments. There's a lot of intellectual ambition on campus – and that part has not changed. Of course the physical campus has grown. It looks different, but in terms of the mission, the ambition, the goals of the university – they still feel the same. The university feels still just as ambitious now as when I came.

Nearly 50 percent of UC San Diego undergraduates earn a degree in social sciences. What do you think draws students to these majors?

I think the students who major in social sciences, they're interested in problems of society, problems of how to get people working together for a common goal. I think students who might major in physics or biology or engineering but take minors or another major in the social sciences want a rich view of the world, because the division is dedicated to doing the science of society. We care about the history. We care about ideas, how people think about problems, how people work toward a solution.

ISSUE 13 : DEC. 18, 2015

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What do you consider most distinctive about UC San Diego's Division of Social Sciences?

What I think is most distinctive are the partnerships that our faculty have all over campus. When I first came here, I got my Ph.D. in linguistics and I moved to the communication department. While I was in communication, I continued to work with people in psychology, in cognitive science. I was working with faculty within the division. But now I'm working with faculty outside the division and that's become quite common. We have permeability across divisions that's not found in a lot of other places. And that's unique about the division, as well as the campus.

When students seek you out for advice – graduate and undergraduate – what do you tell them?

I try to get them to talk about what they love, what they care about the most. Sometimes, if you're just coming out of high school, you're not sure what you personally care about. You might know what your family or your friends care about. So, your time here at UC San Diego is to discover that about yourself: What is the thing that will become your life's mission? I always try to get at what kinds of questions do you keep coming back to? What kind of skills would you like to have? I think it's okay for people not to be completely articulate about what they want. That's what an education provides – it gives you direction, tools, a sense of purpose. You're spending time with people in a way that you may never do again. You want to take that opportunity and give yourself the space and the time to figure out what's going to drive you as you move on.

The undergraduate years are a period of discovery. As a graduate student, you've gone through that. I like to tell graduate students, "You know, coming to graduate school is expensive – financially and emotionally. You better be sure you love what you're doing because it will get you through the frustrations." What will guide you through a graduate program is that focus on the thing that you care about the most.

You're a renowned scholar. When people introduce you, "MacArthur 'Genius' Award winner" is now almost always attached to your name. And you love teaching as much as research. So why go into administration?

Right – you would think I would take the award and, you know, ride off in the sunset. But I think they don't give the prize to people who will do that. They give the prize to people, I like to think, because they're constantly looking for new challenges, a kind of new way of thinking about this purpose that I talked about.

My whole life has been about problem-solving. When I started graduate school in 1978, people had a lot of misconceptions about language – not just sign language but about what it means to have language. I became used to explaining things to people, arguing for things, persuading people to do things. So I put that into teaching. And I've had a long, very satisfying – and it continues to be – research career. I think somewhere along the line I felt like, okay, I know how to run a meeting. I know how to manage a group of people. I know how to reach a goal – for a grant or to write a paper. It seemed like administration would be a useful place to put all of these skills to use. This opportunity came along … And for the first month, I thought, "Oh god, what have I done?" But it's feeling good – it's feeling right.

What is one thing most people don't know about you?

Well, I think people have figured this out, but when I started in the field, there weren't very many people doing work on sign language linguistics. Now there are many more. And there was a small group of deaf people like myself working in this field. So, I've always felt like I'm one of a very small number. You have a sense of observing the world. I'm a very keen observer – of social practices, of people who are successful communicators, very good at presenting their research and able to talk about a difficult topic in a clear, accessible way. So often when I'm in a meeting, I'm listening but I'm also observing.

What experiences would you say inform you most as a leader?

I think, from the time I was very young, I've often been the only one doing what I'm doing. I tend to be drawn to issues of access, issues of participation, inclusion, all of that. I think inclusion doesn't mean just participation. A lot of people think it means that: It means being there. And I think of inclusion as both being there and also having a voice, having something to say about how things are done and why. People often need encouragement, a sense that a place is welcoming. If you do that for people for whom access is difficult, you open up possibilities of creativity, innovation. I think it helps to regulate the communicative environment, to keep it open, to keep it relevant and to keep it contemporary.

Economics in Action : Issue 13 : Dec. 18, 2015 : Meet the new Dean of Social Sciences

What is your greatest hope for the future of this division? And the campus?

We have some new initiatives that we're developing. And I'd like to really push them up to the next level. We have groups of people working in the area of design, in social mobility, in global health. And all of these things, they represent ways of thinking about what's socially important about our world – whether we're trying to create things that will change how people interact with one another, or we're trying to take something that seems specific to health and medicine and let people see how it's cultural and social. Fundamentally, the problems of medicine are also social issues: How do people get medicine? How to make it affordable? How can you assure health across your population? These are all social questions. They have very deep cultural implications. And I'd like to move these initiatives to the next level. We also have a lot of new, important, exciting smaller initiatives that are emerging. I'd like to give opportunity for them also.

I think the division needs to be doing several things at the same time: It needs to be pushing its best ideas forward while also providing opportunity, incubating the next generation of ideas. And then we do partnerships with other divisions. That's part of the way business is done here on campus. Faculty are already doing that. What I do is I try to stay alongside or behind the faculty. I don't want to be in front, because they always know where to go. So I'm looking for these new opportunities. It's my job here to create space for them.

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