



## TAILORING CONTRACTS FOR POLIO ERADICATION



BY CHARLES SPRENGER

### Chair's Corner

Welcome to *Economics in Action*.



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**Michael Roberts '92**  
Professor of Finance, the Wharton School,  
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## ALUMNI SPOTLIGHT

### Michael Roberts '92

**Professor of Finance, the Wharton School, University of Pennsylvania**

*By Jenelle Dean, Alumni Director, Division of Social Sciences*



#### What were you involved in while you were here on campus (in and out of classroom)?

Outside of the classroom, I played sports — volleyball and golf, mostly — and spent a lot of time at the beach. I also worked a number of odd jobs while in school, including a dishwasher in the Muir commons, an assistant proctor at the old Scripps aquarium/museum and an assistant controller to a small financial management firm in La Jolla.

#### What were your experiences like in the Department of Economics? Which courses/faculty/opportunities made an impact on you?

In my second year, I really took to economics. My close friend, with whom I was very competitive, and I took Mark Machina's Econ 100A class and had a blast. I can still remember Mark reviewing the midterm and drawing a picture of a silver platter on the chalk board to let students know how "easy" a particular question was. Few students appreciated the joke.

After that course, I took as many econ classes as I could, growing particularly fond of econometrics. As good as the economics faculty was (and is!), the econometricians with whom I was fortunate enough to take classes from — Ramu Ramanathan, Rob Engle, Clive Granger, Graham Elliott — made the subject matter particularly appealing.

#### Describe your transition after graduation? How did UC San Diego prepare you for this transition?

After graduation, I worked for an energy consulting firm in Del Mar. My training from UC San Diego Economics could not have been better preparation as my job involved econometric analysis of consumer and producer behavior in the energy sector.

#### What was your career trajectory?

After several years working as a consultant in both the energy and health sectors, I entered the doctoral program in economics and master's program in statistics at UC Berkeley. It was at Berkeley that I found my true passion in financial economics, a field in which I was able to apply my economics and statistics training to answer interesting, important, and practical questions. After graduating from Berkeley, I worked as an assistant professor of finance at Duke University's Fuqua School of Business for three years. For the last 12 years, I have been at the Wharton School of the University of Pennsylvania, where I am currently the William H. Lawrence Professor of Finance.

#### What are your future professional goals?

I hope to continue expanding our understanding of financial economics, and bringing that expansion into the classroom and practice. This is one aspect of finance that I love: Academic research filters into the private (and public) sector relatively quickly.

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## What are some of your favorite things about UC San Diego?

As an academic institution, UC San Diego has few peers. I found the faculty to be outstanding and uniquely generous with their time. The access I had as an undergraduate to the economics faculty played a large role in piquing my interest in the field. I also loved the culture of the institution as one that blended rigorous academics with a more laid-back lifestyle consistent with the geographic setting.

## Any advice for economics students?

Three suggestions:

1. Challenge yourself. Don't be afraid to take "hard" courses.
2. Learn how to write well. People who write well have a distinct advantage in life, regardless of their profession.
3. Pair your economics training with another quantitative field, such as math, statistics, physics, etc. I've found that the interplay between the complex logic of economics and the elegant simplicity of math, for example, prepares students to do most anything in the private sector (finance, consulting, operations, marketing, etc.), public sector (the Federal Reserve, IMF, etc.) or academia (economics, finance).

## Any personal information you'd like to share (partner, family, etc.)?

My wife, Andreea, and I have been married for 12 years. We have two children, Sophie and Max, and two dogs, French Fry and Gumby.

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## Chair's Corner

Welcome to this edition of Economics in Action. In our featured article, Charles Sprenger shows how insights and techniques developed from behavioral and experimental economics can be used to improve delivery of polio vaccinations in Pakistan, where the disease has recently resurfaced. We introduce our new assistant professor Itzik Fadlon and shine our alumni spotlight on Michael Roberts, who graduated with an economics degree in 1992 and rose quickly to become the William H. Lawrence Professor of Finance at the Wharton School of the University of Pennsylvania.

### Faculty Honors

Professor **James Hamilton** has been selected to hold the Robert F. Engle Endowed Chair in Econometrics. The chair is named for UC San Diego econometrician Rob Engle, who was awarded the Nobel Prize in 2003 for his work in time series econometrics. The appointment of Professor Hamilton to hold the Engle Chair recognizes his outstanding research articles and his influential textbook "Time Series Analysis", which at last count had passed 17,000 Google Scholar citations.

**Charles Sprenger** was one of only two UC San Diego faculty members to be honored by the Alfred P. Sloan Foundation with a Sloan Research Fellowship for 2016. This was the second year in a row that a UC San Diego economist won a Sloan Research Fellowship, following **Paul Niehaus** last year, an extraordinary occurrence given that in economics these awards ordinarily go only to the very top departments. We are extremely proud of Charlie for receiving this rare honor. Please see our lead article for a small sample of Charlie's research.

The London-based International Growth Centre (IGC) selected **David Lagakos** as its lead economist for Ghana, a title he is sharing with Christopher Udry of Yale University. The IGC is funded by the United Kingdom's Department for International Development and supports research teams in 14 countries throughout Africa and South Asia. David will help bring to fruition cutting edge research projects that are of interest to the IGC and to policy makers in Ghana.

### Graduate Program

**Shanthi Manian** was selected as a scholar for the **Bouchet Graduate Honor Society**. The Bouchet Society recognizes outstanding scholarly achievement and promotes diversity and excellence in doctoral education and the professoriate. Shanthi has been a leader in the UC San Diego Women in Economics program. See her accompanying article on our Women in Economics conference.

We are looking forward to greeting our new class of 23 graduate students this fall. They are divided roughly equally between domestic and foreign. The foreign students represent a wide range of countries: Argentina, China, Estonia, India, Italy, the Russian Federation and Taiwan.

Also in this issue, **Erin Wolcott** describes her research on tightness in the US labor market. As reported in another article, the U.S. labor market was certainly tight enough for our graduate students this year: All of those who explored the market got excellent U.S. jobs.

### Undergraduate Program

In addition to the undergraduate research assistantships described in an accompanying article, we piloted peer tutoring labs this year for the first course in the undergraduate microeconomics core (Econ 100A). The idea was to offer a place where students could work on their homework and then get help from peer tutors if they need it. Preliminary results were so promising that we received funding from the university that will allow us to offer peer tutoring labs for the entire micro and econometrics cores next year.

### CHAIR'S CORNER



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Our Intermediate Microeconomics Video Handbook was also inaugurated this year, and has received nearly 85,000 views at UC San Diego! In addition, it has been used by classes at other UC campuses, including Berkeley, Irvine, Los Angeles, Riverside and Santa Barbara.

## Outreach and Alumni

Our Economics Roundtable will continue to bring exciting speakers to UC San Diego in the coming academic year. On October 12, we will hear from Narayana Kocherlakota, currently Lionel W. McKenzie Professor at the University of Rochester and formerly president of the Federal Reserve Bank of Minneapolis.

**Daniel Chiquiar**, PhD '03, has been appointed chief economist for the Central Bank of Mexico. Congratulations to Daniel!

## Regime Changes

A domino effect resulted in the elevation of one of our faculty to Acting Dean of the School of Global Policy and Strategy (GPS). After current Executive Vice Chancellor Suresh Subramani stepped down, his place was taken by current Dean of GPS Peter Cowhey, whose place was taken by Professor **Gordon Hanson**. We are very much looking forward to working with Gordon in his new role.

I am completing my term as chair, and Professor **Eli Berman** will be taking over. Eli is full of exciting new ideas for the department. I am grateful for having had the opportunity to lead this outstanding department, and I look forward to seeing it reach new heights in the years to come.

Sincerely,



James Rauch

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## Itzik Fadlon

### *Addressing Issues of Retirement, Savings and Health*

#### FACULTY SPOTLIGHT



Itzik Fadlon joined the department in June 2016 after a year as a postdoctoral fellow in disability policy research at the National Bureau of Economic Research.

He grew up in Israel and completed his undergraduate studies in economics and management at Tel Aviv University. After starting the master's program in Tel Aviv, Itzik moved to the United States for doctoral studies in economics at Harvard University, from which he graduated in May 2015.

Itzik was recently awarded the Outstanding Doctoral Dissertation prize by the National Tax Association, and was appointed in June 2015 as a Faculty Research Fellow in the program on aging at the NBER. He is extremely excited to finally join the department at UC San Diego and to have its extraordinary faculty as his colleagues. He is also very much looking forward to move from cold Boston with its unpredictable weather to sunny San Diego.

#### Research

Itzik's primary fields of interest are public finance, health economics and labor economics. He is passionate about applying both theory in analyzing the behavior of households, firms, and the social planner, and quasi-experimental research designs that use newly available administrative data on labor market behavior and health outcomes.

With the rise in life expectancy and the aging of the workforce around the developed world, Itzik has become particularly interested in addressing issues of retirement, savings and health. For example, in his research to date, Itzik studies how households respond to health shocks and how these responses can be used to draw implications for the design of social insurance; he theoretically studies savings behavior in the presence of non-optimizing agents and the effect of a benevolent planner on overall retirement savings; and he empirically investigates how firms, which play an increasingly significant role in retirement savings, set their contributions to employees' savings accounts.

He is currently working on studying intra-household dependencies in health and the effects of survivors benefits on widows' retirement and economic well-being in the United States.

Going forward, Itzik expects his research to continue focusing on topics in health and retirement as they affect households and translate into the design of optimal social policies. Specifically, his planned research is motivated by the increasing demand for medical and long-term care and its interaction with government health-care and labor-market policies. This research includes studying the effects of old-age pension and retirement on health and health-care utilization, understanding the care-giving role of family members and their impact on health and well-being at older ages, and assessing how the quality and availability of primary health-care providers affect patients' health and contribute to the prevalent disparities in health outcomes across racial, ethnic and income groups in the United States.

#### Teaching at UC San Diego

During his first year at UC San Diego, Itzik will be teaching courses in public finance for graduate students at the department and for master of public policy students at the School of Global Policy and Strategy.

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### GRADUATE RESEARCH

## Beyond Wage Inequality: the Divergence of Labor Market Tightness

By Erin L. Wolcott

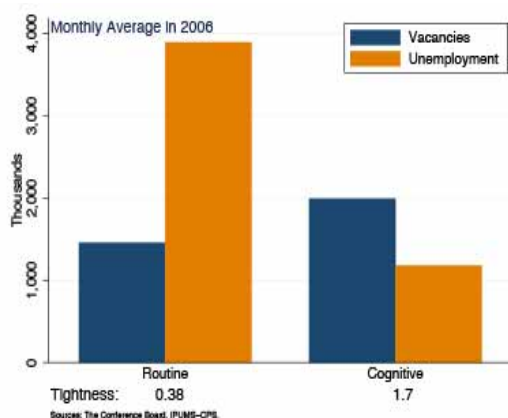
Since the late 1970s, technological change and competition from abroad have changed the job skills that U.S. firms demand in the labor market. Technological advancements have tended to complement jobs requiring cognitive tasks and replaced jobs requiring routine tasks, which has increased the wage differential between these two segments of the labor market.

My research shows the impacts of cognitive-biased technological change (CBTC) do not stop there. I find CBTC has also increased labor market tightness and job finding rates of cognitive workers relative to routine workers. In other words, routine workers are worse off along two fronts—not only has their relative wage declined, but also their relative probability of finding a job has declined.

### New Empirical Fact

A key parameter in this analysis is labor market tightness.

Labor market tightness is the ratio of job openings to unemployed workers. If a labor market is tight (large tightness ratio), there are many vacancies for every unemployed worker and firms generally have a difficult time filling their openings. In contrast, if there is slack in a labor market (small tightness ratio), there are few vacancies for every unemployed worker and firms are readily able to fill their openings.



Click graph to enlarge.

ratios in two periods for which data exists. The far right column of the table lists the gap between cognitive and routine tightness ratios. In 1979, the cognitive market was 44 percent tighter than the routine market. Averaging over the period from 2005-15, this gap in market tightness skyrocketed to more than 300 percent. Overall, dispersion in labor market tightness has increased substantially during the past 30 years, to the relative detriment of routine workers.

Time Period	Data Source	Routine Tightness	Cognitive Tightness	Percent Gap
1979	BLS, IPUMS	0.450	0.648	44
2005-	Conference Board,	0.315	1.264	302

Using a novel data set, I calculate tightness ratios for two segments of the U.S. labor market. The figure plots the average number of vacancy postings (blue) and unemployed workers (orange) in the routine and cognitive markets for a given month in 2006. The key takeaway is that in the routine market unemployed workers exceed openings, while in the cognitive market openings exceed unemployed workers. Tightness ratios, which are simply the blue bars divided by the orange bars, are listed at the bottom of the figure.

In striking contrast, 1979 tightness ratios are less than one for both the routine and cognitive markets (i.e. vacancies exceed unemployed workers for both the routine and cognitive markets). The table lists average tightness

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## Analysis

To understand what is driving the divergence in labor market tightness, I build and calibrate a structural search and matching model for two periods: the 1970s and the 2000s. In the model, I assume there are workers with heterogeneous ability who can choose between searching for routine and cognitive jobs. I plug in empirical estimates for most of the parameters, and discipline the remaining parameters such that the model generates the tightness gaps listed in the table above.

The key insight from this exercise is that in order for the model to match the data, cognitive jobs must have become more than two times more productive than routine jobs in the past 30 years. In other words, technological change that is extremely biased toward cognitive occupations has increased inequality in labor market conditions beyond wages.

Economists and policy makers have long known about increasing wage inequality between routine and cognitive jobs. My research identifies and explores the mechanisms underlying an additional dimension of inequality between these two job markets: No matter how much wages adjust, workers in the routine market are still disadvantaged relative to workers in the cognitive market when it comes to finding a job. This improved understanding of U.S. labor markets can inform policies to more effectively mitigate rising inequality.

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Only a few years ago, the world seemed on the verge of eradicating polio once and for all, but from 2013-2014 there was an increase in new cases. Of 350 new worldwide cases in 2014, 297 occurred in Pakistan, constituting a “global public health emergency,” according to the World Health Organization.

Polio largely affects children under 5 years old. Lacking data on which children need to be vaccinated, the government aims to achieve complete coverage through door-to-door mass vaccination drives. These drives usually last two or more days and are conducted approximately every month. Drives are conducted by government vaccinators, who are given a supply of oral vaccine and a neighborhood map and are asked to complete a suggested target number of vaccinations.

Before our project, vaccinators self-reported achievement and no technology existed for monitoring vaccinations. Consistent with a large literature on public sector absence, vaccinators often fall short of their suggested targets but rarely report doing so. Our project begins by introducing a high-resolution monitoring technology. Each vaccinator in our sample is provided a smartphone, equipped with a reporting application. This application permits precise observation of when and where vaccinations are conducted.

Given the temporal nature of vaccination drives — they involve repetitive tasks conducted over a number of days — our project seeks to understand whether using information on vaccinator’s patience could help to improve vaccination outcomes.

### Bonus Contracts to Understand Patience and Tailored Incentives

With our monitoring technology in place, we introduce temporal bonus contracts designed to identify the patience of vaccinators. We offer a fixed bonus of 1,000 rupees (around \$10) for completing a total of 300 vaccination attempts over a two-day drive. Vaccinators set daily targets  $v_1$  and  $v_2$ , corresponding to vaccination attempts on day 1 and day 2 of the drive, respectively. If either of the vaccination targets,  $v_1$  or  $v_2$ , is not met, the bonus is not received.

A patient vaccinator, one who is more willing to defer leisure, may choose to allocate the majority of her vaccinations to day 1, while an impatient vaccinator may leave most of her vaccinations to day 2. As such, bonus contract choices can be used to structurally estimate the extent of patience for each vaccinator.

We use the individual patience parameters from the first drive to tailor incentive contracts in a follow-up drive. Our exercise has a clear policy rationale. We envision a policy maker, endowed with information on workers’ patience, who would like to achieve a specific policy objective. The specific policy preferences we attempt to implement involve a policy maker who wishes to ensure smooth provision of service through time. For polio, this may be a desirable objective to ensure that vaccinators canvas neighborhoods regularly and have a high probability of vaccinating at households with irregular schedules.

The optimal policy is simple. To ensure smooth provision of service,  $v_1 = v_2$ , the policy maker must give each worker an interest rate proportional to her rate of patience. For example, if a vaccinator’s rate of

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patience puts 50 percent less weight on day 1 relative to day 2, vaccinations on day 2 would count 50 percent less toward her total target relative to vaccinations on day 1. To provide proof-of-concept for such tailored contracting, we randomly provide half of vaccinators with a tailored contract and half with a random contract in a follow-up drive.

## Results

In a sample of 349 vaccinators, we document two principal results.

First, substantial individual differences in patience exist across vaccinators. These individual differences are important, as they suggest some possible gains from individually-tailored contracts. Without individual differences, there is effectively nothing to tailor on.

Second, tailored contracts work. Relative to random contracts, vaccinators with tailored contracts provide significantly smoother service.

Our results have several implications.

First, and most important, our results show the value of structural estimates of patience. The corresponding point predictions for individual behavior have empirical content and are potentially actionable for improving outcomes. Our tailored contracts provide a proof-of-concept for leveraging structural estimates for policy purposes. Such evidence may prove valuable when considering extensions to other contract forms, firm or policy objectives, and other domains.

Second, the results show a path by which government service may falter. Government workers are crucial to service delivery, and impatience of workers may be a mechanism for bad delivery. This is a largely undiscussed avenue by which governments fail to provide services efficiently. Beyond the standard policy levers, such as detecting shirking and increasing pay, our data indicate that temporal incentives may also be instrumental for improving worker productivity.

## Acknowledgements

This article reports results from a recent working paper “Using Preference Estimates to Customize Incentives: An Application to Polio Vaccination Drives in Pakistan,” by James Andreoni, Michael Callen, Karrar Hussain, Muhammad Yasir Khan, and Charles Sprenger. The paper is available at [nber.org/papers](http://nber.org/papers).

Charles Sprenger is Associate Professor of Economics in the Department of Economics and Associate Professor of Economics and Strategy in the Rady School of Management at UC San Diego.

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# Economics

## IN ACTION

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## First Women in Economics Alumnae Conference

By *Ying Feng, Shanthi Manian and Valerie Ramey*

In January, the inaugural Women in Economics Alumnae Conference offered new mentoring opportunities to Ph.D. students in economics. The conference at the University of California San Diego, a new initiative of the Women in Economics mentoring program, brought together eight alumnae speakers with 35 graduate student and faculty attendees.

It was successful in providing exposure to female role models in the economics profession and fostering research and mentoring connections between current graduate students and alumnae.

"I was feeling confused about the future and not sure where to go with my research," said Jue Wang, a fourth-year Ph.D. student. "But seeing the successful alumnae and hearing about their different paths to success renewed my motivation."

### Speakers

Xiaohong Chen, Ph.D., 1993, the Malcolm K. Brachman Professor of Economics at Yale University, served as our keynote speaker. We also welcomed Aislinn Bohren, Ph.D., 2012; Dalia Ghanem, Ph.D., '12; Pauline Kennedy Ph.D. '03; Elena Pesavento, Ph.D. '00; Jennifer Poole, Ph.D., '07, Sarada, Ph.D., '11; and Jing Cynthia Wu, Ph.D., '11.

Since our budget limited the number of alumnae we could invite, we put together a diverse list of alumnae speakers representing a range of Ph.D. cohorts, research fields and career paths. The list includes one full professor, one principal at an economic consulting firm, two associate professors and four assistant professors, with graduation years ranging from 1993 to 2013. In terms of research interests, theoretical and applied econometrics, macroeconomics, microeconomic theory and applied microeconomics were represented.

Career paths varied, from the traditional academic trajectory to other success stories. For example, Sarada worked in the private sector before moving back to academia, and Pesavento does consulting work in addition to her academic position. Poole recently served on the White House's Council of Economic Advisers.

Chen's keynote talk described how the challenges she had faced became blessings in disguise. From a serious bike accident during graduate school to not getting tenure at her first academic position, she overcame numerous obstacles to become an extremely successful academic economist. In addition to the keynote, each speaker gave a 20-minute presentation about her research. Some speakers presented an academic paper, while others gave a general overview of their research and career.

### Panel discussions

To address the challenges faced by women in the economics profession, we held two panel discussions. The professional issues panel, hosted by UC San Diego faculty member Michelle White, discussed journals and conferences to target for professional advancement, strategies for networking, and strategies for negotiating salary and other benefits on the job market. The panel members also discussed how their gender has affected their professional advancement. They gave specific advice for how to deal with subtle sexism, inappropriate jokes and disproportionate demands on women for departmental service.

We also had a work-life balance panel, hosted by Ramey. This panel addressed issues related to dual-career families, especially going on the job market with an academic partner; and questions around when to have children, how to balance parental and professional responsibilities, and how to overcome the challenges facing working mothers. Finally, the panel discussed creative and nontraditional paths to an academic career. Registered attendees had the opportunity to submit questions anonymously to the panel.

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**Oct 12** **Economics Roundtable Narayana Kocherlakota, University of Rochester**



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before the conference. Those attending the panel also asked questions during the panel.

The conference received funding from the Department of Economics; the Division of Social Sciences; the Office of the Vice Chancellor for Equity, Diversity, and Inclusion; and the Women's Center at UC San Diego.

Overall, the conference was very successful and accomplished its goals. The formal sessions provided useful information and perspective to current Ph.D. students, particularly women, while unstructured breaks and dinner offered important opportunities for informal exchanges. Given the positive response from both the alumnae and the attendees, we hope to continue this event and host another conference with a different set of alumnae speakers in about four years.

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UC San Diego

## Undergraduates Work with Grad Students, Gain Experience through Pilot Program

By *Melissa Famulari*

Many of our undergraduate students are interested in getting involved in research. Our graduate students are conducting research, and a research assistant could help them complete their research projects more quickly.

Department of Economics Chair Jim Rauch and Vice-Chair for Undergraduate Education Melissa Famulari wondered whether both groups of students would benefit from working together, so they piloted a program this year to pay undergraduate students to work as Research Assistants for our graduate students.

The program was very successful, with 16 undergraduates gaining hands-on research experience working with graduate students and 12 graduate students getting help with their research projects.

The program started with an email before the start of fall classes to our juniors and seniors letting them know they should complete an application on our web page if interested in working as a research assistant (RA) for a graduate student. The undergraduates were encouraged to apply if they had completed their microeconomics and econometrics core and had at least a 3.3 GPA. Over the next few days, 119 undergraduates applied.

Then we let graduate students who had Advanced to Candidacy (CPhil) — meaning they had completed their core requirements, passed their qualifying exams and presented their research idea to their dissertation committee — know the department would fund an undergraduate research assistant for fall quarter, with a potential for extension into the winter quarter. Fifteen of our graduates were interested in working with an undergraduate RA and started to interview the undergraduates for the position.

The graduates wanted help with data, including data entry, providing summary statistics and running regressions. They wanted help running experiments. They wanted help converting images of Chinese history books into text files, which could then be searched for key words. They wanted help converting the location codes of people who responded to the Census before 1940. Even with the wide variety of tasks, most of the undergraduate RAs were able to help!

Here are some selected comments from the graduates regarding their RAs:

- “I’d love to get an extension for my current RA, who was of great help to me this quarter.”
- “I have been working with an excellent undergrad RA on my job market project. This project includes primary data collection in Senegal, and she has been a great help with data entry and cleaning. We now finally have clean baseline data, and I would love for her to have the opportunity to work on some basic data analysis.”
- “She helps me mostly with data entry and data organization. ... She also has good insights and gives me suggestions on the kind of analysis I can perform.”
- “She did a great job last quarter. ... It is a big project, and it will take me a long time to do all the jobs myself. I would really appreciate it if I could get (the RA) another quarter.”

Here are some selected comments from the undergraduates:

- “I feel like I am making a real contribution to economics by being involved in this program.”
- “This experience has been wonderful and beneficial to me, as I have learned a lot about research and the way it is conducted.”
- “It is a really eye-opening process working on her research, and I started to study R programming, which is really useful.”
- “As an RA, I have gained experience that I cannot learn in a classroom setting. While I have used Stata and Matlab in a couple of my courses, what I did in class is completely different from what I am

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**Narayana Kocherlakota,**  
**University of Rochester**



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doing now.”

An additional benefit of the program mentioned by many of the undergraduates was to get a clearer idea about graduate school:

- “A really helpful experience for me because I am planning on applying for Ph.D. program next year and this gives me hints on what I’m going to do when I become a graduate student.”
- “As a Math-Econ major looking to go to graduate school, I have sincerely appreciated the relationships and work I have been able to participate in and cultivate by being an RA. I have been able to ask questions about research and get a more holistic picture about what graduate school entails.”
- “As I am considering going to graduate school, this experience is really helpful to me, as I can see what exactly is going into economic research and how it is done. ... (The graduate student) has also given me tips and advice concerning graduate school.”

Given the success of the pilot program for both groups of students, the department hopes to be able to fund undergraduate RAs for our graduate students next year.

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# Economics

## IN ACTION

UC San Diego  
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## Job Placement Strong for Grads

By the Department of Economics

This year, we had a relatively small class on the job market. Among them, four accepted positions as assistant professors of economics; one accepted a postdoctoral fellowship; one took a research position in the federal government; and two accepted private sector research positions.

More than half of our students accepted faculty and post-doc positions at universities:

Four of our students will stay in California: development economists Sarojini Hirshleifer and Arman Rezaee accepted assistant professor positions at UC Riverside and UC Davis, respectively. Behavioral/experimental economist Alison Sanchez accepted an assistant professor position at the University of San Diego. Fellow behavioral/experimental economist Adam Greenberg will become a post-doc at UCLA's Anderson School of Management.

Econometrician Jungbin Hwang will move to the east coast, as an assistant professor at the University of Connecticut.

The others will begin exciting careers as researchers in government and private sector institutions:

Environmental and resource economist Brigitte Roth Tran will go to Washington, D.C. in a research position at the Board of Governors of the Federal Reserve System. Development economist Michael Levere will take a research position at Mathematica Policy Research, a leading public policy consulting firm located in Princeton, N.J. Industrial organization economist Ayal Chen-Zion will join a growing group of UC San Diego grads as a researcher at Amazon.com in Seattle.

Congratulations to the graduate students and the faculty who supported them for our students' success on the job market this year. And thank you for all the hard work that justifies the department's continuing reputation for producing top-notch economists.

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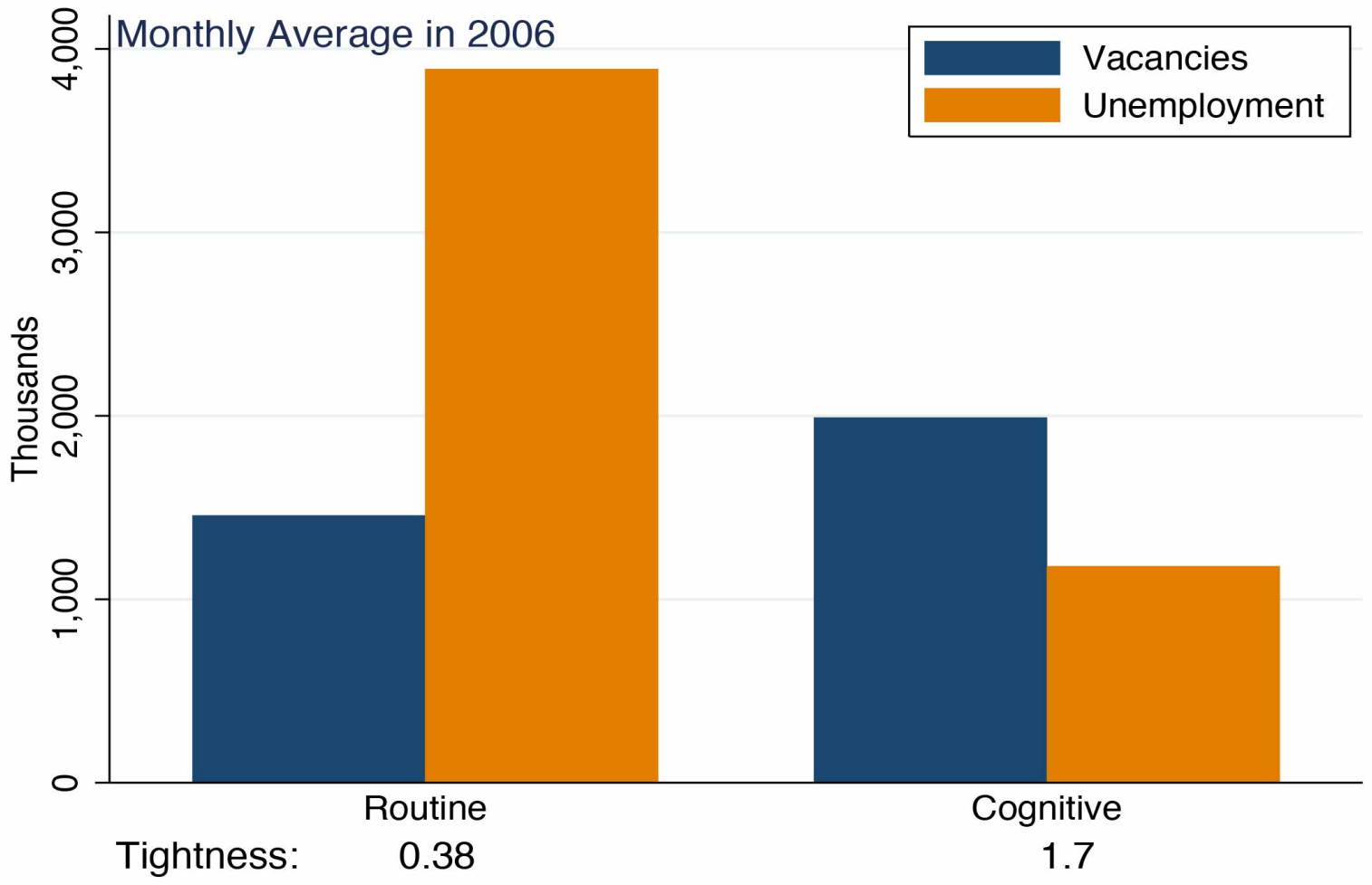
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