# PURDUE UNIVERSITY RESEARCH CENTER IN ECONOMICS

# PURCE

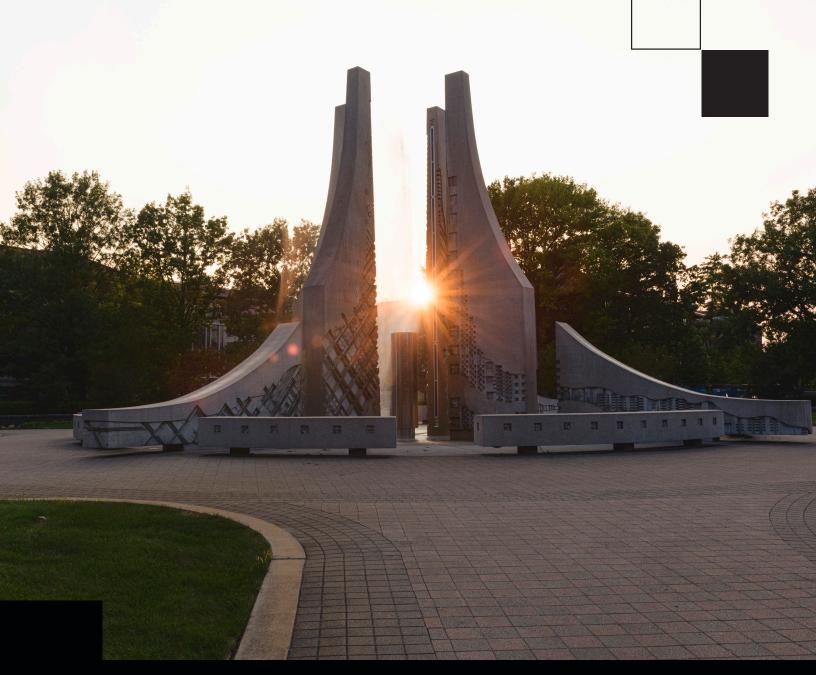
ANNUAL

REPORT

2024-25



**Mitch Daniels School of Business** 



My program mentor, fellow research assistants, and professor have made research and the Undergraduate Research Assistantship program as a whole a memorable and important part of my college career and most likely my life, honestly."

Undergraduate Research Assistant Hussein Sulub, Economics Major, 2025



Dear friends, colleagues, and supporters:

I am pleased to share with you the latest highlights from the Purdue University Research Center in Economics. As described in this annual report, your support and engagement have lifted PURCE to new heights. We have built something rare: a center that not only fosters high-quality academic research, but also ensures that this work reaches the public, informs policy, and inspires students who will shape the next generation of economic thinking.

This year, our monthly Economic Policy Luncheons drew record-breaking attendance — the highest since the series began in 2018. Nearly every event was at or over capacity (our apologies to those standing in the back). We look forward to hosting these events in the larger venue on the top floor of the new business school building when it opens in 2027. What draws this growing audience? Timely, substantive discussions — on tariffs, policy uncertainty, shipping regulations, housing subsidies, stress and health, domestic manufacturing, welfare programs, taxes, labor force participation, and inflation.

Our student programs also reached new heights. The Economic Scholars Program continues to thrive, offering 48 undergraduate students each year a unique opportunity for guided, in-depth discussion of foundational ideas in economics. Three times as many students from a wide range of majors applied. We wish we could serve them all. This year's topics — cryptocurrency, crime, higher education finance, and government regulation — sparked lively and thoughtful debate. I am especially grateful to Hugh and Judy Pence, whose vision and generosity launched this program, and to Melissa and James Emery, whose support allowed us to double the number of students we serve.

Our Undergraduate Research Assistantship Program, the gem of our center, continues to give students hands-on experience working with faculty on real-world research. These students are learning how to do economics, not just read about it. This experience has helped them gain admission to top graduate programs and secure research roles at leading companies and institutions. One graduate is now an economist at NASA.

None of this would be possible without the generosity of our donors. Your investment in PURCE fuels student learning, supports faculty research, and allows us to engage meaningfully with the economic questions that matter most. For that, I am deeply grateful.

Sincerely,

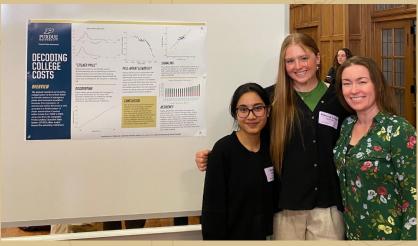
Kevin J. Mumford Professor of Economics

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Kozuch Director of the Purdue University Research Center in Economics

Associate Dean of Graduate Programs





# OUR MISSION

Select faculty are invited to become Purdue University Research Center in Economics affiliates. These top academics conduct data-driven research into how laws, regulations and government programs affect the market economy and the well-being of individuals and society.

Our center shares research findings in top academic journals and media, and also with policymakers and community and business leaders, not to push any particular agenda but to provide data and information that can lead to more informed decisions. As a nonprofit research organization, we rely on the generous support of donors to accomplish our mission.

We have a reputation for first-rate, academic research demonstrated by our ongoing activities and publications. Our research areas include:

# **RESEARCH AREAS**

- Competition
- Crime
- Education
- Fiscal Policy
- Health
- Innovation
- Market Solutions
- Monetary Policy
- State Polices
- Trade
- Work

PURCE affiliates are often called upon to make sense of our world. In the 2024-2025 fiscal year, our faculty served as experts in media outlets and publications including *Inside Higher Ed, Forbes, The Economist, Slate,* Politico, CNBC, the Associated Press and Yahoo! Finance.

We are housed in the Mitch Daniels School of Business, one of the top business schools in the country, with 4,145 undergraduate students and 1,105 graduate students. Our school's strengths in analytical and quantitative analysis reflect Purdue's roots in STEM. The Daniels School's curriculum at both the undergraduate and graduate levels emphasizes calculus-based analytics and data analysis.

PURCE's mission of using empirical economic methodologies to analyze the effects of laws, regulations and government programs fits perfectly with Purdue's strengths.

With its main campus in West Lafayette, Indiana, Purdue University is a world-renowned, public R1 university. Student enrollment is 58,009, of which 76% are undergraduate students. Purdue students graduate in over 200 majors.

# PURCE STAFF



**KEVIN J. MUMFORD** *Kozuch Director* 



BENJAMIN VAN KAMMEN Interim Associate Director



JODI AYERS Lead Administrative Assistant



KARIS PRESSLER
UGRA Program Mentor



NICOLE BROOKS Media Relations Specialist

# WHO WE ARE

# PURCE AFFILIATED FACULTY

Timothy Bond Professor of Economics

Jim Bullard Dr. Samuel R. Allen Dean, Distinguished Professor

of Service and Professor of Economics

Jillian Carr Associate Professor of Economics

Mario Crucini Semler Chair and Professor of Economics

Mike Eriksen Director, Dean V. White Real Estate Finance

Program and Professor of Economics

Mara Faccio Tom and Patty Hefner Chair in Finance and

Professor of Finance

**Huseyin Gulen** Finance Department Head and Professor of

Finance

Aaron Hedlund Associate Professor of Economics

**Russell Hillberry** Professor of Agricultural Economics and Courtesy

Appointment in the Department of Economics

**David Hummels** Distinguished Professor of Economics

Mohitosh KejriwalProfessor of EconomicsStephen MartinProfessor of Economics

Troiscosi or Economics

Jonathon McClure Assistant Professor of Economics

**Laura Montenovo** Assistant Professor of Agricultural Economics

**Kevin Mumford** Associate Dean of Graduate Programs, Kozuch Director of PURCE, and Professor of Economics

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Victoria Prowse Marge Magner Chair and Professor of Economics

Mohammad Rahman Daniels School Chair and Professor of

Management Information Systems

**Lindsay Relihan** Assistant Professor of Economics

**Brian Roberson** Economics Department Head and Professor of

**Economics** 

Ralph Siebert Academic Director, Economics Master's Program

and Professor of Economics

Anson Soderbery Associate Professor of Economics

Justin Tobias Loeb Chair in Economics and Professor of

**Economics** 

**Chong Xiang** Professor of Economics

Cathy Zhang Professor of Economics

**Ben Zou** Associate Professor of Economics

# PUBLICATIONS

# **ACADEMIC PUBLICATIONS**

Our center's faculty affiliates had dozens of peer-reviewed research papers accepted at top academic journals, including:

American Economic Journal: Economic Policy
Financial Management
Journal of Applied Econometrics
Journal of Econometrics
Journal of Economic Behavior and Organization
Journal of Financial and Quantitative Analysis
Journal of Monetary Economics
Journal of Urban Economics
Regional Science and Urban Economics
Review of Economics and Statistics

Cathy Zhang, "On the Emergence of International Currencies: An Experimental Approach," with coauthors Marcos Cardozo and Yaroslav Rosokha, Journal of Economic Behavior and Organization. In this paper, the authors integrate theory and experimental evidence to study the emergence of different international monetary arrangements based on the circulation of two intrinsically worthless fiat currencies as media of exchange. The study of international currencies as media of exchange is a fundamental aspect of international economics with a long and diverse history. The objective of this study is to contribute to a more comprehensive understanding of currency preferences of buyers and sellers and the conditions under which different international currency regimes arise.

The theoretical framework for the experiment is based on a two-country, two-currency search model developed by Zhang.

# **SUMMARIES**

Justin L. Tobias & Timothy N. Bond, "Semiparametric Bayesian Estimation in an Ordinal Probit Model with Application to Life Satisfaction Across Countries, Age and Gender," Journal of Econometrics. In this paper, the authors employ a new model to study the relationships between age and life satisfaction, or "happiness," across countries, age and gender.

They find that, of the countries studied, employment is strongly connected to the reported happiness of men, and being employed is more important to men than it is to women. They also find that men's life satisfaction rises before and just after retirement but then levels off or declines. Their research may inform mental health policy and provide context to the ongoing debate between economists and psychologists over the happiness-age relationship.



Mohitosh Kejriwal, "An Improved Procedure for Retrospectively Dating the Emergence and Collapse of Bubbles," with coauthors Linh Nguyen and Pierre Perron, Journal of Time Series Analysis. In this paper, the authors develop a new way to retroactively determine when economic bubbles begin and end.

Their approach improves upon older methods, providing estimates of when bubbles emerge and collapse with greater precision, and introduces an algorithm that can handle more than one bubble. This information can help policymakers design measures to lessen the harmful effects of economic bubbles.

Ben Zou, "Home Location Choices and the Gender Commute Gap," with coauthors Yizhen Gu, Naijia Guo and Jing Wu, *Journal of Human Resources*. In this paper, the authors study whether a household's choice of home location explains why women's commutes tend to be shorter than men's.

Using a unique dataset of home mortgages in Beijing, they find that households' new homes are on average 10% closer to the wife's workplace than to the husband's. When deciding where to buy a new house, households systematically prioritize reducing the wife's commute. The authors contrast this with the view that women search for nearby jobs, concluding that both factors may play a role but that home location choices are a key driver of the gender commute gap.



Aaron Hedlund, "Was China's Housing Boom a Bubble?" with coauthors Carlos Garriga, Yang Tang and Ping Wang, Federal Reserve Bank of St. Louis Review. In this article, the authors examine what influenced house price appreciation in China during the 2000s and early 2010s.

They find that both income and population growth can largely explain house price increases in China. While their analysis does not rule out the possibility of a housing bubble in China during this time period, they determine that a bubble is not necessary to explain the behavior of Chinese housing markets.



Ralph Siebert, "The Impact of Private Label Introduction on Assortment, Prices, and Profits of Retailers," with coauthor Meilin Ma, Journal of Industrial Economics. In this article, the authors study how the introduction of private-label brands affects retailers' prices, demand and profits.

Through analysis of the U.S. fresh beef retail market from 2006 to 2016, they find that introducing a private-label brand increases a store's profits mainly by changing its product assortment to divert consumers from purchasing less profitable name-brand products to more profitable private-label products. These findings offer new insights for how retailers and multi-product firms should think about adding private labels in markets where products are differentiated.

# RESEARCH HIGHLIGHTS

# New Study Shows Worker Health Declines as Sales Surge

What are the measurable consequences of higher workloads on employee health?

The phrase "work-life balance" inherently implies a tradeoff between professional success and personal well-being outside of work. Many people have felt the strain of increased expectations and workload imposed on them by an employer, but anecdotes are a poor way to understand whether increased strain causes health to worsen or to understand the magnitude of that effect. However, the true health sacrifices workers sometimes make for their company can be objectively evaluated through careful economic research.

Two PURCE faculty affiliates examine the consequences of higher workloads on employee health in their paper "No Pain, No Gain: Work Demand, Work Effort, and Worker Health," published in *The Review of Economics and Statistics*. Purdue's **David Hummels**, Distinguished Professor of Economics, and **Chong Xiang**, Professor of Economics, and coauthor Jakob Munch, Professor of Economics at the University of Copenhagen, find striking impacts on the health of workers when companies' sales increase rapidly.

To identify these effects, Hummels, Xiang and Munch used Danish administrative data that enabled them to consistently track workers and the companies they work for over time. Danish healthcare is free and universal, and workers use of the healthcare system is carefully tracked. This means that, unlike the U.S., access to healthcare does not depend on income or employment status, and researchers can link use of the healthcare system to changes in the employees' work environment.

These data enable the researchers to measure two key behavioral responses. First, how do companies adjust their workforce in response to sharp increases in sales – either by hiring more workers or asking existing workers to put in longer hours? Second, how do workers' health outcomes change when their work intensity rises?

They find that workers log longer hours and earn more money as the company they work for increases sales. These increases in sales subsequently lead to a higher likelihood of workers purchasing anti-depressants and heart-disease medication. In addition, when working for companies experiencing sales increases, employees are more likely to be hospitalized with diagnoses related to stress and burnout, heart attack, stroke and severe liver disease. The last of these is considered an indicator of alcoholism.

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This isn't a case where workers are complaining about work stress for no real reason. It has real, and lasting, health consequences."

# DAVID HUMMELS

Distinguished Professor of Economics

To be certain they were identifying a causal effect of work intensity on health, Hummels, Xiang and Munch investigated the timing and persistence of these adverse health effects as well as which workers are most affected.

In the months following, a sharp increase in sales, workers begin to experience negative health effects they had not suffered previously. Unfortunately, some of these health effects persist even after the surge in sales slows down. Use of anti-depressants and heart-disease-drugs remains elevated for years after heightened sales. These effects are even greater for at-risk workers, such as workers over age 50, and those who were already working long hours before the sales increase occurred.

In addition to these novel results, the researchers quantify the anticipated change in employee well-being when working in a firm with growing sales, accounting for both higher earnings and worsening health.

They find an average worker's welfare loss accounts for nearly one quarter of their earnings gains for rising sales. Even though employees may make more money in periods with higher sales, the health consequences these workers face significantly offsets these benefits.

"This isn't a case where workers are complaining about work stress for no real reason," says Hummels. "It has real, and lasting, health consequences."

Reducing excessive work hours and managing workloads is one way companies can combat the negative health outcomes associated with rapidly increasing sales. Another possible solution is to implement measures that support employees' mental health.



# Rethinking Social Support

How household factors influence the effectiveness of safety nets

When layoffs sweep through industries, millions confront an unsettling reality: depleted savings, limited job prospects and a pressing need for financial support. In an economy where many households lack a financial cushion, losing a job places entire families at risk of financial freefall. With fewer savings to fall back on, people increasingly rely on programs like unemployment insurance and welfare assistance. But do these systems provide the right kind of support for households with different needs, and who benefits most from them?

Economists Peter Haan of FU Berlin and DIW Berlin and **Victoria Prowse** of Purdue University examine these questions in their paper, "The Heterogeneous Effects of Social Assistance and Unemployment Insurance: Evidence from a Life-Cycle Model of Family Labor Supply and Savings," published in *American Economic Journal: Macroeconomics*. Their study explores how factors like family structure, savings, and age shape the effectiveness of these programs revealing unexpected insights into who truly gains stability from them. Understanding these patterns is essential for building a more resilient safety net that can support people across varied financial situations and life stages.

"The big picture idea is to better understand how the social safety net impacts families," says Prowse. The research centers on two key forms of assistance: unemployment insurance, providing temporary income for job loss, and welfare assistance, ensuring that families below a certain income have enough to meet basic needs.

### The life-cycle model: A new lens for social programs

To better understand how different households experience social support, Prowse's research employs a life-cycle model — a framework that captures changes in financial needs over time. This model considers shifts in income, family structure and assets as individuals move through life stages.

"The life-cycle framework really allows us to distinguish between people in these different circumstances," Prowse says. The framework can reveal how the impact of unemployment insurance and welfare assistance can vary with age, savings and family dynamics. These nuances are especially clear in how social support interacts with family and financial stability. A young single worker without substantial savings might depend more on welfare benefits, which provide essential support for low-income workers. In contrast, a married mid-career individual with a spouse's income may find unemployment insurance a more suitable safety net. "As the title of the paper suggests, there's heterogeneity," Prowse says. "Different households have different circumstances, and that's really relevant to all these programs and their effectiveness."

### **Balancing security and incentive**

The study finds that social support programs impact households differently based on family structure. "Single households are the most sensitive to these policies," Prowse notes, with findings showing that single individuals and married women often find welfare assistance more useful, while married men benefit more from unemployment insurance. This distinction highlights the need for tailored programs that address diverse household needs.

Based on these findings, Prowse suggests that policymakers balance economic support with incentives for independence. "There's always a trade-off between providing an acceptable standard of living and getting people in this kind of poverty trap," she explains. While a minimum level of long-term support is essential, overly generous benefits can lead to dependency and a decline in work skills, which she describes as "human capital" degradation. Prowse recommends steady, basic support, with more generous benefits phased out over time to encourage workforce re-entry and independence.

The big picture idea is to better understand how the social safety net impacts families."

VICTORIA PROWSE

Marge Magner Chair of Economics

# RESEARCH HIGHLIGHTS

# What Stands in the Way of Large Firms Being Replaced?

Why do some large firms seem almost immune to competition, remaining dominant not just for decades but across centuries? While innovation and entrepreneurship are often heralded as engines of economic progress, a crucial question remains underexplored: why do new firms so rarely succeed in replacing the old guard?

In "Impediments to the Schumpeterian Process in the Replacement of Large Firms," published in *The Journal of Finance*, **Mara Faccio**, the Tom and Patty Hefner Chair in Finance, and **John McConnell**, Burton D. Morgan Chair of Private Enterprise Emeritus, investigate a less-explored but critical component of Joseph Schumpeter's theory of creative destruction. While extensive research links innovation and new firm creation to economic growth, the replacement — or lack thereof — of dominant incumbent firms has received comparatively little attention. Building on research that limits firm turnover to slower economic growth, the study investigates why large firms often remain dominant and identifies the barriers that hinder their replacement.

A range of historical and theoretical perspectives frame this inquiry. Schumpeter himself revised his thinking over time: his early work emphasized the disruptive force of new firms, while his later views acknowledged that incumbent firms might sustain their dominance through internal innovation funded by vast capital reserves. Schumpeter's contemporaries offered more critical views, attributing corporate persistence to anticompetitive behaviors, such as restricting rivals' access to finance or manipulating political processes to erect barriers to entry.

To answer their question, Faccio and McConnell constructed a large dataset spanning over 100 years and up to 75 countries. It includes archival records of the 20 largest firms circa 1910 in each of 60 modernday nations, 50 years of data (from 1921 to 1971) on privately held and publicly traded Italian companies, and contemporary data from the 2000s. The study explores whether firms that were among the 20 largest in their country at the start of each period remained so decades, or even a century, later, and under what conditions.

A central finding is that political connections, defined as instances in which a director or an officer of a firm is a member of the government or parliament of its country, significantly increase the likelihood that the firm will maintain its dominant status over long periods. These connections matter more than firm quality indicators like innovation output, productivity or profitability. Even after controlling for these variables, politically connected firms are consistently more likely to remain among the largest in their countries. Importantly, the study shows that these firms generally do not outperform others in financial or operational terms, casting doubt on the notion that they remain large due to being the best.

Faccio and McConnell also investigate the interaction between political connections and regulatory environments. They show that the ability of politically connected firms to maintain dominance is contingent upon the presence of barriers to both trade and capital flows. Politically connected firms are significantly less likely to remain among the largest when markets are open to international competition. In contrast, reduced trade and capital openness greatly increases the likelihood that politically connected firms retain their dominant position.

Robustness checks, including case studies, alternative firm size metrics, and controls for mergers and group affiliation, support these conclusions. The broader implication of the findings is stark: political entrenchment, bolstered by regulatory barriers, inhibits the natural economic evolution expected in a competitive market. It impedes the Schumpeterian process, stifles firm turnover, and thereby hinders long-term economic growth. By contrast, in more open economies, market forces are better able to displace outdated incumbents, fostering a healthier economic dynamism.

Politically connected firms are significantly less likely to remain among the largest when markets are open to international competition.

# Examining Barriers to Adopting New Technologies

An example from the early 20th century

By the end of the 1920s, the U.S. had more than 120 automobiles per 1,000 people, transforming where Americans lived, worked and traveled. The rest of the world, however, struggled to keep up, as the median level of automobile adoption outside the U.S. never surpassed four per 1,000 people over the same time period. What factors drove this stark contrast in the adoption of the automobile, and what can they reveal about how new technologies spread internationally today?

Purdue economist **Mario Crucini** seeks to answer this question in his research paper, "Early 20th Century American Exceptionalism: Production, Trade and Diffusion of the Automobile" published in the *Journal of International Economics*. Crucini and coauthors Dong Cheng, Hyunseung Oh and Hakan Yilmazkuday investigate why the U.S. automobile stock per capita was consistently 50 times higher than the median across other countries even with innovations in production and declining prices.

To start, the researchers unearthed historical archives on the international production and trade of automobiles, estimating the stock of automobiles in use by individuals in 23 countries between 1913 and 1940. Crucini next augmented U.S. automobile price data with comprehensive measures of international trade frictions. These frictions drove up the price of automobiles in foreign countries relative to the U.S., resulting in fewer foreign purchases.

These trade frictions were significant, varying by type and across nations. For example, the median tariff imposed on U.S. automobile exports was 20%. This tax on imports combined with other costs such as export markups, shipping costs, as well as retail and distribution costs, often doubled the cost of an automobile internationally relative to the U.S. market.

Further, the cost of operating an automobile is often overlooked, with gasoline being the most obvious expense. The U.S. was a dominant producer of oil and gas during this period of history, benefiting from relatively inexpensive gasoline and low excise taxes. Other countries often imposed tariffs and higher excise taxes that made fueling automobiles significantly more

expensive. Crucini and his coauthors show that the user cost of an automobile would have been about twice as high abroad. This made owning and operating an automobile financially unfeasible for many outside of the U.S.

The researchers also estimated the price and income elasticity of demand for automobiles, studying how changes in price, income, taxes and trade costs contributed to the greatly diminished foreign adoption levels.

They found that eliminating income differences reduces the adoption gap from a factor of 46 to a factor of seven. In other words, if income levels were the same across countries, the gap in automobile ownership would shrink from 46 times lower outside the U.S. to only seven times lower. This means income differences played a major role in limiting automobile ownership, effectively making automobiles a luxury good abroad.

Additionally, if foreign gas taxes were comparable to U.S. levels, the adoption gap would reduce to a factor of about three. The researchers found that even without export markups, tariffs, shipping costs and differences in retail and distribution costs, the U.S. still had a relatively high adoption factor of about two.

Put simply, even without these added costs, car ownership in the U.S. remained significantly higher than in other countries. This is possibly due to complementary infrastructure such as roads, gas stations and repair shops, which would have advanced at a faster rate in the U.S. Although reliable measures of these economic factors are available in the U.S., they are mostly unavailable in foreign countries for this period.

Today, the transition to electric vehicle (EV) technology is well underway, and trade policy is taking center stage in legislative discussions. This begs the question: how can these findings be applied to the diffusion of new technologies in modern economies?

"While EV production and automobile supply chains are far more evenly distributed among industrialized countries than was the case of the combustion-power automobile in the early 20th century, the parallels are worth stressing," says Crucini.



It takes a special mind to translate economic research into digestible stories meant for all readers.

Wolf Williams considers himself a "quantitative creative." His is the discerning mind behind the feature stories that promote PURCE faculty affiliate research. Williams holds a master's degree in Economics from Purdue (2022) and has served PURCE as a communications specialist for more than four years. As a freelance writer for the center, he presents economic theory as lively narratives.

"My favorite part about the position is how much fascinating economic research I get to read from Purdue economists. I get to learn everything, from the effects of school bullying on skill development to how short-term rentals affect housing prices," he says.

In his full-time position as a financial content writer at Commerce Trust in St. Louis, Missouri, Williams combines his analytical expertise with creative passions. His career journey challenges the traditional track for graduates with economics degrees, showcasing how the field opens doors to diverse opportunities.

"My professional journey has been informed by my interests, and I feel an economics degree can supplement a wide range of careers. Writing has always come naturally to me, so I found it to be a natural career fit," he says.

At Commerce Trust, Williams navigates a highly regulated and complex industry where precision and clarity are non-negotiable. This requires not only a

strong grasp of economic and financial concepts but also the ability to make them engaging and accessible to a wide audience. This mirrors the work he does for PURCE.

"In order to make the content accessible, you need a decent understanding of the concepts involved. My knowledge of economic concepts, data and policy come in handy, especially when I'm collaborating with subject matter experts," he explains.

Williams is invaluable to PURCE's mission of sharing research-based, data-driven insights.

My favorite part about the position is how much fascinating economic research I get to read from Purdue economists. I get to learn everything, from the effects of school bullying on skill development to how short-term rentals affect housing prices."

WOLF WILLIAMS

# IMPACT

PURCE faculty affiliates represent the center and the business school at conferences and research seminars around the world.

### **CALIFORNIA**

American Economic Association Meeting

### FI ORIDA

University of Central Florida, UCF Symposium of Real Estate Markets University of Miami, Vienna Global Macro

### **ILLINOIS**

Midwest Economic Association Meeting Northwestern University, Chicago Entrepreneurship Workshop

### **INDIANA**

Purdue University's Center for International Price Research Mini-Conference Macro-Trade-History, Digitalization of Work & Life Conference, Midwest Health Economics Conference, Mid-Midwest Applied Microeconomics Workshop, Midwest Macroeconomics Meeting, Vernon Smith Experimental Economics Laboratory, Celebration Conference for Grand Reopening University of Notre Dame, ND/Midwest Economics of Education Conference

### KENTUCKY

University of Kentucky, Midwest Econometrics Group

### **LOUISANA**

Agricultural and Applied Economics Association Meeting

### **MASSACHUSETTS**

NBER Summer Institute, Corporate Finance NBER Summer Institute, International Finance & Macroeconomics

### **MICHIGAN**

Institute for Social Research's Social, Behavioral & Economic COVID Coordinating Center conference

### OHIO

The Ohio State University, Economic Science Association North American Meeting Population Association of America Conference

### **PENNSYLVANIA**

Midwest International Trade and Theory Conference Penn State University, International Conference on Empirical Economics

### **SOUTH CAROLINA**

University of South Carolina, Frontiers in International Finance Research Conference

### **TENNESSEE**

Vanderbilt University, Econometric Society North America Summer Meeting

### **TEXAS**

American Economic Association Annual Meeting Financial Management Association Annual Meeting

### **UTAH**

Western Finance Association Annual Meeting

### **VIRGINIA**

University of Virginia, UVA McIntire

### **AUSTRALIA**

Deakin University, 11th Annual Natural Experiments Workshop

### **COSTA RICA**

INCAE Business School, Money, Search and Matching Conference

### DENMARK

Urban Economics Association European Meetings

### **FRANCE**

University of Paris Dauphine, Globalization and Labor Markets

### **GERMANY**

CESifo, Urban and Real Estate Economics

### **NETHERLANDS**

European Economic Association Annual Congress

### **SINGAPORE**

Singapore Management University, Jinan Conference on Urban Economics

### SPAIN

**ESADE Macro Meetings** 

### **SWITZERLAND**

University of Bern, CRED Workshop on Regional and Urban Economics

### UNITED KINGDOM

London's Imperial College Business School, Search in Housing Markets Conference

# OUR EVENTS

PURCE hosts informational and networking events for the public and for select groups that highlight our faculty, their research and the research's ability to explain the effects, both intended and unintended, of policies.

### ECONOMIC POLICY LUNCHEONS

Our monthly luncheons on the West Lafayette campus continue to draw an audience of local elected officials, business and community leaders, students, and academic peers. Each event offers a catered lunch, presentation and a Q&A with the speaker. Our fall 2024 and spring 2025 economic policy luncheons regularly reached room capacity and featured:

**September 2024:** Jim Bullard on "Status of the U.S. Economy." Our Dr. Samuel R. Allen Dean Jim Bullard started off the academic year with an overview of his research and some insights on the current state of the economy.

October 2024: Lars Peter Hansen on "Designing Prudent Policies in the Face of Uncertainty." This special guest, the David Rockefeller Distinguished Service Professor of Economics and Statistics at the Booth School of Business, explored ways to confront broad notions of uncertainty.



**November 2024:** Chong Xiang on "Is Work Stress Real?" What may lead to work stress, how bad can it get, and who is most at risk? Professor of Economics Xiang addressed these questions, citing a recently published research paper.

**December 2024:** Russell Hillberry on "The Jones Act: Ineffective and Inefficient, but also Unfair." Hillberry described a century-old federal law, the Jones Act, that requires maritime vessels carrying freight between U.S. ports to be U.S.-built, U.S.-owned and U.S.-crewed.

January 2025: Mike Eriksen on "Can Housing be too Safe?" Everyone desires a safe and suitable home, but increased safety comes at the cost of affordability. Eriksen provided an overview of building codes in the U.S. and tradeoffs involved with their adoption.

**February 2025:** Mario Crucini on "Early U.S. Exceptionalism in Automobile Manufacturing." Crucini addressed early U.S. exceptionalism in auto manufacturing. Almost a century ago, the U.S. was unrivalled in the production, adoption and export of automobiles. How did the U.S. achieve that position in the world and what can be learned from history to inform the EV transition?

March 2025: Victoria Prowse on "Taxes, Benefits and the Inequality of Income." Our Marge Magner Chair in Economics explored how tax and welfare policies shape the distribution of income. Drawing on data, economic models and empirical analysis, she examined the effects of taxation and social benefits on labor market behavior and inequality.



**April 2025:** Roberto Salinas-León on "Trump 2.0, Tariffs and Trade." Guest speaker Salinas-León, president of the Mexico Business Forum, discussed the evolution of U.S.-Mexico economic ties and the new threat of a "trade war" in the region.

# SPECIAL EVENTS

Faculty affiliate Anson Soderbery co-organized and PURCE supported the October 25-27, 2024, Empirical Investigations in International Trade XXXI conference. Economists specializing in empirical international trade presented their latest research. There were more than a dozen presentations, and Andreas Moxnes of Oslo's BI Norwegian Business School was the keynote speaker.

The center and its faculty affiliates plan or participate in events for public and private audiences each year, including the Greater Lafayette Chamber of Commerce's annual Economic Forecast Luncheon. On November 12, 2024, center director Kevin Mumford and affiliate Jillian Carr spoke to hundreds of Lafayette area leaders; they were invited by the Chamber to present on and answer questions about the current economic climate and expectations for the coming year. Mumford presented data on the Indiana economy and Carr focused on the economics of crime.



# PHD STUDENT RESEARCH FUNDING

Research grants are available to PURCE faculty affiliates as well as PhD students being advised by a PURCE faculty affiliate. Recipients produce policy-relevant research papers that are published in top academic journals.

# **ECONOMIC SCHOLARS PROGRAM**

Students who have successfully completed a principles of economics course are invited to apply for the Economic Scholars Program, a one-credit hour independent study course, typically capped at 12 students, that meets weekly to discuss readings. The program is taught by a different professor each semester, and focuses on a different economic topic. Formative texts, including Frédéric Bastiat and John Rawls, are read and discussed alongside recent economic works. A year ago, PURCE expanded Econ Scholars from one to two sections each semester so more undergraduate students have the opportunity to each earn scholarship money while exploring economics topics in great depth.

In fall 2024, Jillian Carr's Econ Scholars looked at the economics of crime. They discussed the role of public legal systems in civic life and developed a framework and criteria against which to weigh legal systems. Cathy Zhang and her students examined the economics of money and payment systems. They discussed readings on the role of different forms of money throughout history and analyzed how different policies may affect the use of new forms of money. Cryptocurrencies, digital

wallets and contactless payments were part of the discussions.

In spring 2025, Kevin Mumford focused on education finance and addressed the role of government in education, school choice, student loans, and more. Stephen Martin and his Econ Scholars dove into the role of government in the U.S. economy. They discussed the Great Depression and social safety nets, among other topics.

# UNDERGRADUATE RESEARCH ASSISTANTSHIP PROGRAM

The center's Undergraduate Research Assistantship (UGRA) program arose out of a desire to give undergraduates more direct exposure to economic research — something that's often reserved for graduate students.

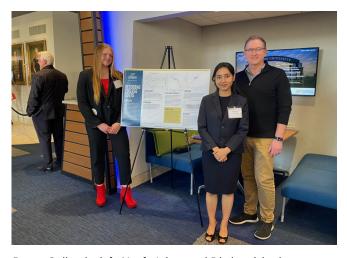
Students meeting strong criteria are paired with a professor and are paid to assist with real research projects. Through hands-on work and weekly cohort meetings, UGRAs learn research design, quantitative data analysis, database management and presentation skills.

In fall 2024 and spring 2025, these special students, thanks to the growth of the competitive program and the mentorship the undergrads receive, were challenged in new ways, including presenting at research conferences. See the next few pages for more on this exceptional program.

# UGRA PROGRAM HIGHLIGHTS

The PURCE Undergraduate Research Assistantship (UGRA) program cohort for 2024-2025 included 12 undergraduate students majoring in economics with some double-majoring in statistics, physics, industrial engineering or math. The undergraduate research assistants were paired to assist 10 PURCE faculty affiliates in their research tasks including cleaning data, generating databases, inputting data and performing regression analyses. Here are several program highlights from the 2024-2025 academic year.

## CONTRIBUTING TO THE CONVERSATION



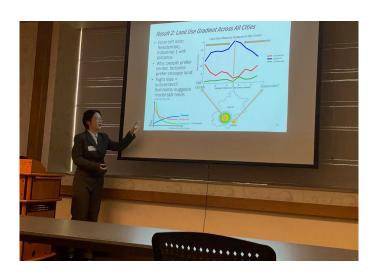
Becca Caliendo, left, Nayfa Johan and Distinguished Professor of Economics David Hummels teamed up to decode college costs.

PURCE faculty affiliate and Distinguished Professor of Economics David Hummels has launched a Substack with Purdue Trustee Chair in Teaching and Learning Excellence Jay Akridge. In Finding Equilibrium: Two Economists on Higher Ed's Future, the two draw upon more than a quarter-century of higher education leadership to provide research-informed, data-forward and solutions-oriented writing on higher education's present and future. A typical post garners about 3,000 reads; their February 2025 piece "Indirect Cost Cuts Could Gut University Research" racked up more than 9,000 reads.

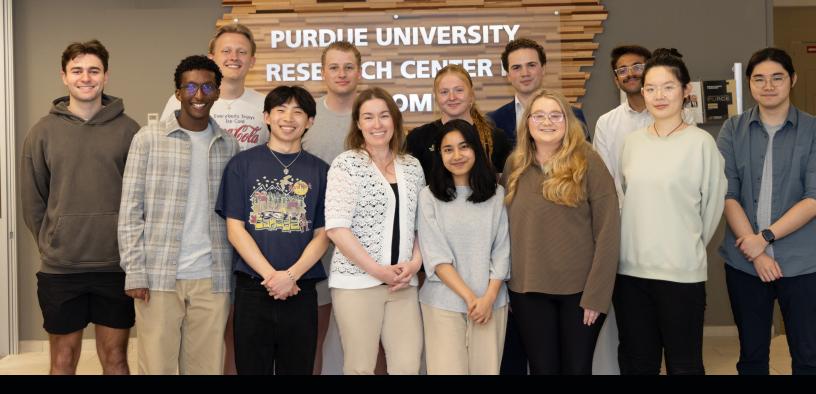
Hummels invited his PURCE undergraduate research assistants, Nayfa Johan and Becca Caliendo, to coauthor a post. In "The Real Cost of Attending College is Falling," Caliendo and Johan analyzed Integrated Postsecondary Education Data System (IPEDS) data from 2008-2022 showing that the net price of college has decreased over time relative to the sticker price. Their Substack post was cited in a March 6, 2025, *Inside Higher Ed* article.

# PRESENTING AT PURDUE'S UNDERGRADUATE RESEARCH CONFERENCE

Four UGRA students presented at the Purdue University Spring Undergraduate Research Conference in April 2025, where more than 950 presentations were showcased. Becca Caliendo and Nayfa Johan presented their college cost research with their UGRA mentor David Hummels. Yizhou Fang analyzed 2.5 million land transactions in China from 2000-2019 to test evidence of the Monocentric Model in residential, commercial, and industrial land use. Fang was mentored by Associate Professor Ben Zou. Finally, Jakub Jasinski analyzed how tuition and enrollment affects rental market trends in the towns surrounding Big 10 colleges and universities. Jasinski earned a first-place prize for this research talk and was mentored by Professor Mike Friksen.



Yizhou Fang presented on Land Use Gradients in China at the university's Spring Undergraduate Research Conference.



# IN THEIR OWN WORDS

Every week, the PURCE UGRAs are asked to share what they are learning in the program. Here are some responses.

- I'm learning to manage my expectations. My UGRA professor noted to triple the expected working time on a task. I was humbled this week."
- I'm learning how to structure the code, data files and analysis results I've done into an understandable file structure."
- I am learning that research can be rewarding, but almost never immediately. Today I ran into an issue with my Stata code that was identical to an issue I had almost two months ago. Now I am able to recognize that error and know what the issue is."
- Working with historical data means balancing precision
  with practicality direct matches aren't always possible,
  so smart approximations are necessary. Exploring
  upstream supply chains has helped refine my approach
  and gain additional insight on the interdependence of
  goods production. Feedback from my UGRA professor and
  discussions with fellow research assistants have reinforced
  the value of collaboration. I've also come to terms with the
  idea that perfection is a constant battle, where constant
  tweaks lead to better insights. Having a good time doing
  research!"
- I'm still learning that real-world data is much messier than what I used in class, and many things don't work the way I expected. Sometimes, even after spending hours testing different code or cleaning categories, the result barely changes. Even though it's frustrating sometimes, it's helping me become more patient and analytical."

# THE FUTURE IS NOW

UGRA program participants who have graduated from Purdue are making strides in both their graduate programs and in the workforce. Here's where recent PURCE undergraduate research assistants have landed in the world.

- Economics PhD programs: Michigan State University, University of Colorado Boulder
- Master's programs: Agricultural Economics (Kansas State University), Data Science (Columbia University), Operations Research (Columbia University), Mathematical Statistics (Purdue University), Statistics (University of Chicago)
- JD program: Ohio State University College of Law
- Workforce: Financial Analyst (Roche Diagnostics), Global Retirement & Insurance LPD (Prudential Financial), Operations Research Analyst (National Aeronautics and Space Administration), Portfolio Management Analyst (NISA Investment)

# FACULTY LINES

Since PURCE's founding, generous donors have funded the academic year salary, summer salary and benefits for several Department of Economics faculty members. We funded these faculty members during the 2024-2025 academic year:



### MARIO CRUCINI

The Daniels School's Jerry and Rosie Semler Chair in Economics was invited to present at Harvard Business School, Miami University, and at the Allied Social Sciences Association Conference in San Antonio, TX, among other events. He taught a graduate course on International Macroeconomics and an undergraduate Senior Honors Thesis, and was awarded Distinguished Teaching Awards for each. His paper, "Early 20th Century American Exceptionalism: Production, Trade and Diffusion of the Automobile," was published, and he's currently researching the aggregate real exchange rate.



## TIM MOORE

Last academic year Moore furthered his important research on the opioid crisis. He also published a paper with a former graduate student. Todd Morris and Moore's paper, "Shaping the Habits of Teen Drivers," appears in *American Economic Journal: Economic Policy*. Moore was awarded a Daniels School Distinguished Teacher Award for his summer 2024 Health Economics course. In summer 2025, Moore became a Professor of Economics at Monash University in Melbourne, Victoria, Australia.



### **VICTORIA PROWSE**

Our Marge Magner Chair and Professor of Economics received several Daniels School teaching awards, including the Department of Economics Award for Excellence in Undergraduate Teaching; a Distinguished Teacher Award for her Econometrics course; and a Distinguished Teacher Award for Advanced Data Analysis. She was invited to present at conferences in Oxford, UK; the University of East Anglia in Norwich; and Princeton University, among other places. Prowse was featured in an Associated Press news video on why workers are quitting. Among her new published papers is "How cognitive skills affect strategic behavior: Cognitive ability, fluid intelligence and judgment" in *Games and Economic Behavior*.

# **FACULTY RETIREMENTS**

In early December 2024 the Daniels School celebrated the long, distinguished career of John McConnell, the Burton D. Morgan Distinguished Chair of Private Enterprise (in Finance) and a longtime center affiliate. McConnell was a visiting assistant professor at Purdue in 1974, after receiving his PhD here, and he joined the faculty permanently in 1976. He has been one of the top researchers in his field of corporate finance for decades. A 2005 study ranked him the third-most prolific researcher in the field of finance over the past half century. He was voted the Salgo-Noren Outstanding Teacher six times by student votes. PURCE congratulates McConnell on his retirement from Purdue.

In April 2025 we celebrated John Umbeck, one of the Daniels School's most decorated faculty members and a cofounder of PURCE. His retirement brings 50 years of excellence to a close. Umbeck joined Purdue's economics faculty in 1975 and has received more than 25 awards for his outstanding teaching. In collaboration with Jack Barron and Justin Tobias, he established PURCE and became the center's first director. His expertise has been sought far beyond the campus boundaries, as he has served as a consultant for more than 50 corporations and government agencies. Umbeck also has offered expert testimony before the U.S. Senate and the House of Representatives, among many other groups. He built a reputation as a tough, but fair, instructor, and he had an innate ability to bring clarity to even the most difficult topics. We salute his contributions to the field of economics and his dedication to his students and colleagues.

# **ACCOLADES**

PURCE affiliates and staff are recognized by organizations for their expertise and leadership. Here are a few recent highlights.

### MARIO CRUCINI

was named a research associate by the National Bureau of Economic Research, International Finance and Macroeconomics Program. This program studies financial interactions among nations, including crossborder capital flows, exchange rates, responses to global financial crises, and transmission of economic shocks. A NBER research associate is a tenured faculty member who has been selected through a competitive process for the respected affiliation.

### STEPHEN MARTIN

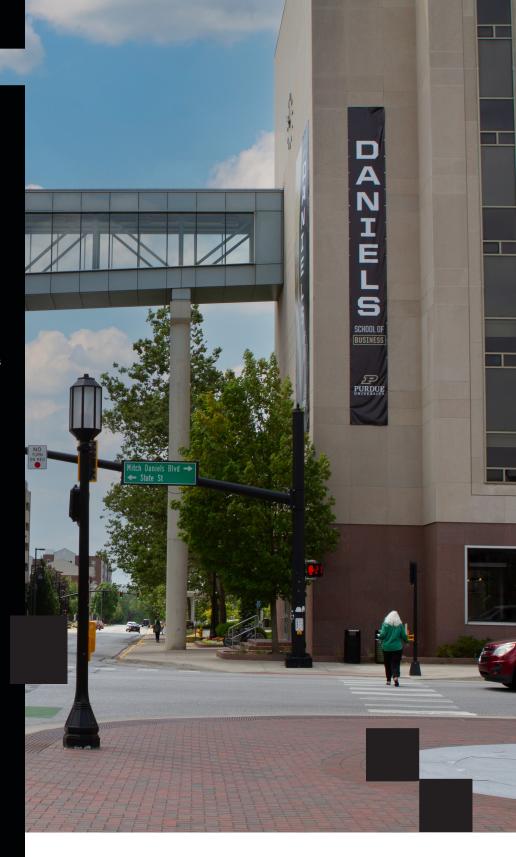
was honored by the UK's University of Reading at its 2025 "Advances in Industrial Organization and Competition Policy" conference. Organized by the university's Department of Economics and the Centre for Economic Institutions and Business History and held at its London Road Campus, the event featured sessions with colleagues, co-authors, students and admirers celebrating Martin's life and work.

### KARIS PRESSLER

was named a Purdue Office of Experiential Education (ExEd) Fellow. The program director and mentor for PURCE's Undergraduate Research Assistantship program launched a Substack newsletter called "Hello Humanity" that shares letters and stories from her own experiential education experiences to motivate and encourage undergraduate research assistants.

### BEN ZOU

was awarded the Excellence in Reviewing Award by the *Journal of Human Resources*.





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