for all

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THE MAGAZINE OF THE OPPORTUNITY & INCLUSIVE GROWTH INSTITUTE

ANNIVERSARY ISSUE: Kashkari on five years of Institute contributions amid profound economic shocks

DIGEST: Seeking maximum employment

DATA DIVE: When your cup of coffee comes with a shot of inflation

PUTTING RESEARCH TO WORK

Economists and policymakers at the crossroads of research and the real world

With her eyes on a better job, Carmen Luisa Moncion is enrolled in an economic mentoring study in Boston.

FEDERAL RESERVE BANK OF MINNEAPOLIS

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For All
The magazine of the Opportunity & Inclusive Growth Institute

Federal Reserve Bank of Minneapolis

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REFLECTION

BY NEEL KASHKARI

Five years of equipping policymakers for challenge and change

WE LAUNCHED THE OPPORTUNITY & INCLUSIVE GROWTH INSTITUTE in 2017, driven by contradictions we saw in the economy of the Ninth Federal Reserve District. Our region has a remarkably diverse economy and some of the highest educational achievement in the nation, but it also has sharp racial and economic disparities. Sadly, these contradictions are not unique to our district. In them, we saw a need for research that could help us at the Fed—and in the policy community more broadly—better understand these contradictions as we strive for an economy that fully includes all Americans.

At the time of the Institute's launch, the Federal Reserve was grappling with questions that are fundamental to our monetary policy mission: Were we at maximum employment? How would we know it when we got there? In January 2017, the official unemployment rate for the United States was 4.7 percent, on its way to the lowest level in 50 years. Yet, over the next three years the U.S. economy went on to create 6.5 million new jobs. How was that possible? Part of the answer is that those national averages mask important differences across racial, socioeconomic, and geographic dimensions. By connecting with a broad set of scholars and looking at our economy from many perspectives, the Institute would help us to better understand the economy's full potential and thus help us better achieve the important goals Congress has assigned us.

What has happened since then?

The pandemic and ongoing inflation pressures have amplified some of these disparities, posing new challenges. The health and economic impacts of COVID-19 have been very unequal across income, race, and geographic regions. And the highest inflation in 40 years—in part a reflection of the bumpy reopening of the economy as well as the global food and energy crisis fueled by the Russian invasion of Ukraine—is without question unfairly punishing low-income households and communities more than wealthier ones.

In response to these challenges, the Institute has been actively contributing to timely research-based policy debates. For example, the Institute's early call for ambitious surveys to understand the pandemic's impact on Americans helped inform the work of federal statistical agencies. This effort gave public health researchers access to new tools in record time. Recently, the Institute published new research on long COVID that uses surveys to provide some of the first evidence of the condition's impact on labor markets. The Institute was also early to bring together researchers on the unequal impacts of inflation, hosting an event that outlined the key issues in spring 2022. At the same time, the Institute continues to pursue and support long-term research on questions of opportunity and economic inclusion, such as how families provide for retirement, the origins of wealth gaps, and the labor market power of firms.

It has been more than five years since we launched the Institute. While the time has gone quickly, I am proud of what its leaders, staff, visitors, and advisors have accomplished in that time. I am even more optimistic about the Institute's potential to make a meaningful contribution to help the Federal Reserve fully achieve the goals that Congress has assigned us and also to equip other policymakers with data and analyses they need to implement policies that can help all Americans fully participate in our economy's potential. ★

Since 2016, Neel Kashkari has been the president and CEO of the Federal Reserve Bank of Minneapolis. The Opportunity & Inclusive Growth Institute was founded in 2017.

UPDATE

An innovative lab of ideas

Diversity in visiting scholars program is vital to designing policies that enhance economic well-being

After two long years of remote visits, Institute visiting scholars are once again in residence at the Minneapolis Fed, gathering for seminars, chatting over lunch, popping into a neighbor's office to learn about new data, debate an idea, and solve problems.

"It's an environment supportive of growth, exploration, trial and error. It's easy to talk to people, and as a result, one learns an incredible amount," explained David Wiczer, assistant professor at Stony Brook, who spent three months in residence at the Institute in 2019.

That learning is broadened by one of the hallmarks of the visiting scholars program: its diversity.

"Graduate school is a time of high specialization, and so there's a lot of homogeneity in terms of methods and topics that you encounter," observed 2021–22 visiting scholar Jane Olmstead-Rumsey, assistant professor at the London School of Economics. "The Institute is the opposite—there's a lot of diversity among the visiting scholars, which exposes you to new ways of thinking."

> "Every seminar, someone in the audience would want to know, 'How do we implement this policy?'... Knowing these questions are coming makes you adjust your own research to be closer to reality." —ERIC OHRN

Conversations with applied microeconomists have encouraged Olmstead-Rumsey to replicate their experiments using data generated by the structural models of the macroeconomy that she develops. If the results match, that lends credence to the predictions of her models. Fellow visiting scholar Eric Ohrn, associate professor at Grinnell, said that left to his own devices, he engages mostly with public finance and tax research. Institute seminars gave him "a better appreciation for what kinds of questions different methods are good at answering."

These dimensions of diversity are vital to making the Institute an "innovative lab of ideas," said Alessandra Fogli, the Institute's assistant director of inequality research. "Together we tackle issues of inequality and inclusivity, trying to design innovative policies that can affect the well-being of all Americans."

That process is enhanced when policy is connected to research and research is connected to policy.

"Every seminar, someone in the audience would want to know, 'How do we implement this policy?' or 'How might we alter monetary policy to fix this problem?' Knowing these questions are coming makes you adjust your own research to be closer to reality," Ohrn said.

Researchers who have been pushed to tackle practical questions of implementation are better positioned to communicate effectively with policymakers. This spring, Olmstead-Rumsey briefed a congressional subcommittee about the impact of the COVID-19 recession and recovery on women's labor. Institute scholars have briefed Minneapolis Fed leaders on the origins of wealth gaps and innovative interventions to close K-12 achievement gaps. Wiczer has formed a partnership with a historian and computer programmer to analyze New York state's carbon tax proposal.

"What stands out to me about my experience at the Institute is really what stands out about the Institute in general," said Wiczer. "It's one of a few places where you get a bunch of people together who care about getting the right answer—being rigorous, applying cutting-edge economic techniques—to questions that often are overlooked."

—Lisa Camner McKay

The research community at the Institute includes visiting scholars, consultants, economists, research analysts, and research assistants. These scholars bring a diversity of backgrounds, interests, and expertise to research that deepens our understanding of economic opportunity and inclusion as well as policies that work to improve both. We talked with four of them about their work.

BELINDA ARCHIBONG

Assistant Professor of Economics, Barnard College, Columbia University

MAKING ECONOMIC OUTCOMES LESS ARBITRARY

Belinda Archibong did not grow up knowing she wanted to study economics. But she did confront at a young age the reality that characteristics over which we have no control can affect our economic outcomes, regardless of the amount of work we put in.

Archibong, a visiting scholar at the Institute, was born in Nigeria. Her mother was a lawyer and the family enjoyed a middle-class life. After immigrating to the United States, her mother's foreign degree meant she could not initially practice law and instead worked low-wage jobs that meant the family struggled financially. At the same time, Archibong enjoyed the good fortune of having a mother who valued quality education for her children and was able to make it happen.

"That really crystallized my understanding of the role of arbitrariness of country of origin and gender and ethnicity and family, and how all this affects peoples' economic outcomes," Archibong explained. "I thought that was unfair. I remember being 12 and thinking, how does this happen?"

That question of "how" usually comes down to institutions that mediate access to education, the labor market, a healthy environment, and other components of economic opportunity. Much of Archibong's research agenda centers on understanding how institutions affect the distribution of resources and how they can be reformed to improve access for everyone.

"The role of arbitrariness of country of origin and gender and ethnicity and family, and how all this affects peoples' economic outcomes—I thought that was unfair."

—Belinda Archibong

For instance, she has shown how the British colonial government in Nigeria exploited prisoners' labor to build infrastructure that increased colonial revenue, a system that distorted incentives for incarceration and had long-lasting effects on Nigerians' trust in legal institutions, including the police.

During her visit at the Institute, Archibong plans to study how to leverage online job postings to get around the social networks that traditionally play a big role in hiring—to the disadvantage of less-connected groups, including women and minorities. Data from the largest online job platform in Nigeria revealed that qualified female applicants do not apply to as many jobs or to as high-level of jobs as their male counterparts. A pilot study of a simple intervention informing women that they are qualified for a job increased the likelihood they applied. Archibong plans to continue experiments with both job applicants and hiring managers to find ways to achieve more equitable access to labor markets.

—Lisa Camner McKay

DIDEM TÜZEMEN

Senior Economist, Federal Reserve Bank of Kansas City

SEEKING INCLUSION AMID ECONOMIC TURBULENCE

Over the past 50 years, most recessions in the United States have led to a larger share of men losing jobs than women. But in 2020, a couple of weeks after the pandemic began, Didem Tüzemen and a colleague pored over government statistics and found that this recession was having the opposite effect.

In past recessions, male-dominated jobs in industries such as construction and manufacturing were hit hardest. But most industries hit hardest by the pandemic recession—such as education and health care—were dominated by female workers, in particular women of color.

To uncover an economic trend and report it within weeks was exciting, Tüzemen said. "Using data is extremely important to say something new. And we want to say something new which will also be timely so that it can have some impact on policy."

Tüzemen has long been interested in how economic and policy changes affect workers, especially the ways in which some groups of workers are affected more than others.

Her investigation of the 2020 recession's immediate effect on women led to further research showing how their employment and labor force participation, especially among women of color with children, have taken longer to return to pre-pandemic levels than those of men and White women. Tüzemen has also studied job loss due to automation and offshoring, showing that it has led workers without college degrees in all sectors to drop out of the labor force.

As a math-loving college student, Tüzemen studied physics, which uses math to understand nature, and economics, which uses math to understand human behavior. She said she ultimately pursued an advanced degree in economics because she felt that she could use it to answer questions that have a direct impact on people's daily lives.

Now, as an economist, her focus is on workers and their livelihoods. That focus aligns very closely with the mission of the Institute.

"Asking these detailed questions about the impact of policy changes, or the impact of long-term, structural changes to the economy on different groups, is important to make sure everybody wins from these big changes," Tüzemen said.

—Tu-Uyen Tran

PETER ARCIDIACONO

William Henry Glasson Distinguished Professor of Economics, Duke University

THE ROOTS OF SELF-SORTING IN COLLEGE

Peter Arcidiacono has published more than 40 articles in economics journals—and about half have been about education. He first discovered economics in college, a setting that has retained his fascination.

"I think a lot about how individuals sort within schools, into majors for instance," said Arcidiacono, an Institute visiting scholar.

That sorting process has significant economic consequences for students because majoring in STEM fields and economics

leads to higher-paying occupations, on average, than majoring in other disciplines. This fact, in turn, has consequences for income inequality because female, Black, and Hispanic students continue to be underrepresented in many STEM majors and economics. Arcidiacono's research seeks to better understand the factors at both the individual and university level that contribute to this sorting. This knowledge can then be used to craft policies that improve representation.

Take grading, for instance. STEM fields typically give lower grades than other disciplines. That turns out to be a deterrent for some women, who enter college just as well prepared but who on average care more about their grades than men, Arcidiacono's research suggests.

And while it's not exactly a state secret that chemistry grades on a different curve than art history, it's also not knowledge all first-year students have. "It's not clear to me why we should have such different grades across fields," Arcidiacono said, "especially when we're incentivizing people to go into lower-paying fields by offering them higher grades." Standardizing grading across disciplines could increase total participation in STEM and decrease the gender gap.

Arcidiacono's next project picks up another component of higher ed sorting: the decision-making processes universities use to admit students. Arcidiacono says recent momentum to drop the use of standardized test scores—on the logic that they are correlated with income—actually works against equity. That's because other admissions criteria universities use tend to be even more correlated with income.

Even if universities choose not to place weight on test scores, Arcidiacono believes the data has value. How admissions decisions are made, the grading criteria in each discipline, the likelihood that a student with a certain portfolio of grades and test scores will succeed in a certain major—all of this is information a university could share with students to help them make their best choices.

If universities are uncomfortable with what that data reveals, Arcidiacono suggests, the solution is for them to invest the resources to change those patterns.

—Lisa Camner McKay

CARLYWILL SLOAN

Assistant Professor of Economics, West Point

RACIAL INEQUITY IN THE CRIMINAL LEGAL SYSTEM

Growing up in a quiet suburb of Austin, Texas, CarlyWill Sloan had little exposure to crime or policing until she moved to Memphis, Tennessee, to attend Rhodes College.

The stark contrast between her peaceful campus and the high crime and heavy police presence in neighborhoods just blocks away led to a growing awareness of inequity both in exposure to crime and in policing.

"That, in many ways, motivates a lot of my work," Sloan said, "trying to understand what we can do to reduce those disparities."

Inspired by public debate about police violence against minority groups, including the murder of George Floyd in Minneapolis in 2020, Sloan and a co-author analyzed the outcomes of 1.6 million 911 calls in two cities. The dispatch logs they used described the nature of the call, address of the call, the first officer(s) dispatched, and whether force was used at the scene and by which officer. In both cities, officers are assigned to calls based on their beat or how close they are. Sloan found White officers are much more likely to use force in predominantly Black and Hispanic neighborhoods than in White neighborhoods for the same types of calls.

"It's very difficult to think about what kind of changes we want to make in a police department if we don't know whether race is an important determinant," Sloan said.

Her results suggest that police violence against minority groups is not caused by a few "bad apples" or by aggressive police tactics that affect all citizens equally. Race does matter, and it matters in a systemic way.

Sloan also explored how race affects the way prosecutors handle cases. Prosecutors, she said, wield a great deal of power in a criminal justice system where a vast majority of cases never go to trial but are disposed through plea deals or dismissal. Her analysis of 76,000 misdemeanor cases in New York County shows that Black defendants are more likely to be convicted than White defendants for similar property crimes, especially if facing a White prosecutor.

As an economist, studying the criminal justice system is important to Sloan because she cares about equity, she said. When racial bias exists, "it actually ends up being a double whammy for minority communities because they're much more likely to be at risk of some type of use-of-force, and then that distrust of officers can make it really hard to protect them against crime."

—Tu-Uyen Tran

"It's very difficult to think about what kind of changes we want to make in a police department if we don't know whether race is an important determinant."

—CarlyWill Sloan

2022–23 Institute Visiting Scholars

The Institute annually invites selected scholars from many disciplines to pursue research while in residence at the Minneapolis Fed.

Francesco Agostinelli
Assistant Professor of Economics
University of Pennsylvania

Stefania Albanesi
Professor of Economics
University of Pittsburgh

Belinda Archibong
Assistant Professor of Economics
Barnard College
Columbia University

Peter Arcidiacono
William Henry Glasson Distinguished
Professor of Economics
Duke University

William Collins
Terence E. Adderley Jr. Professor
of Economics
Vanderbilt University

Jeanne Commault
Assistant Professor of Economics
Sciences Po Paris

Niklas Engbom
Assistant Professor of Economics
Stern School of Business
New York University

Marina Mileo Gorzig
Researcher
Mathematica

Dirk Krueger
Walter H. and Leonore C. Annenberg
Professor in the Social Sciences and
Professor of Economics
University of Pennsylvania

Alessandra Peter
Assistant Professor of Economics
New York University

Kevin Rinz
Economist
U.S. Census Bureau

Modibo Sidibe
Kathleen Kaylor and G. Richard Wagoner Jr.
Assistant Professor of Economics
Duke University

CarlyWill Sloan
Assistant Professor of Economics
West Point

Felix Tintelnot
Associate Professor
University of Chicago

Gustavo Ventura
Professor of Economics
Arizona State University

Teegawende Zeida
Assistant Professor of Economics
Brock University

The journey from research to improving lives can be fickle and slow. These economists and policymakers join forces at the crossroads of

RESEARCH & THE REAL WORLD

By Jeff Horwich

Partners in progress Ruthie Liberman of the Boston nonprofit EMPath has joined with Institute advisor Larry Katz for a multiyear study of EMPath's job-mentoring platform. Solid findings could unlock funding to help thousands. But partnering with academic researchers takes patience and a willingness to accept the verdict.
KAYANA SZYMCZAK

In the movies, academic books tumble from their shelves as a military helicopter sets down in the front yard: "Professor, we have to go—your government needs you."

For Janet Currie, the summons earlier this year was less dramatic—but still not exactly convenient. It was the end of the week, and the White House was calling: Could she be in D.C. on Tuesday?

"The first thing I thought was, 'No, I can't do that,'" said Currie, an Institute advisor and professor of economics and public affairs at Princeton. She had just started a visiting professorship across the country. The White House wanted to talk about removing lead water pipes, a topic she hadn't worked on for a few years and that had already received funding in the 2021 infrastructure bill. It wasn't clear how much time she would have or who would be in the audience.

"Then I just thought about it a little more," Currie said. "And I thought, 'Well, I *could* actually do this. And I probably *should* do this.'"

Good call. Come Tuesday, she found herself in the Roosevelt Room for a solid hour with the president, vice president, and much of the Cabinet and economic team. A follow-up courtesy tour was interrupted when President Biden called her back to the Oval Office for more conversation.

While noting the importance of the recent infrastructure investment, Currie used her moment to shift policymakers' attention to something new: rigorous childhood testing for lead. "In Flint, if those kids were being properly tested for lead, they would've discovered what was going on much earlier," said Currie. Public health "is also a part of our infrastructure. And I think I was able to make that point successfully by putting it in that context."

ENOUGH TO SIMPLY "ADD TO THE KNOWLEDGE BASE"?

While most economists won't find themselves with a rapt audience at the White House, "even those who devote their energies to resolving purely theoretical issues imagine that somehow in the end their efforts will prove socially useful." So said former Fed Vice Chair Alice Rivlin in her 1986 presidential address to the American Economic Association.

Can you get here Tuesday? Institute advisor Janet Currie got little notice when the White House sought her expertise on lead poisoning in children. Accepting the sudden invitation brought the economist an hour with the Cabinet, one-on-one time with President Joe Biden, and a chance to shift the conversation.
ADAM SCHULTZ / WHITE HOUSE

At the time, Rivlin bemoaned American political and policy processes that were "fragmented" and rancorous, in which "many of the most sophisticated and realistic members of the [economics] profession, conscious of all these difficulties, have abandoned the attempt to advise governments on policies in favor of the more manageable tasks of adding to the knowledge base."

Translation: Economists want to make a difference with their work. But even in 1986, it was often easier just to publish and stay clear of the fray.

The ambivalent relationship of academic economics to the policy world is embodied in the National Bureau of Economic Research (NBER). Every year, economists post more than 1,200 working papers through the private, nonpartisan organization to gain exposure and feedback before seeking formal publication. However, accessing that wide audience comes with a stipulation.

"To this day, NBER research is bound by a restriction that the founders imposed," according to the bureau's self-written history. "Studies may present data and research findings, but may not make policy recommendations or make normative statements about policy."

Wariness of policy advocacy has value in a field that strives toward scientific credibility and precision. It nonetheless creates a gap to fill between the research findings and the lives they might change. Filling that gap is the challenge that Rivlin laid out to the prior generation: "The objective of economists ought to be to raise the level of debate on economic policy, to make clear what they know and do not know, and to increase the chances of policy decisions that make the economy work better."

HEEDING THE CALL

In a 35-year career focused on policy-rich topics like children's health and early childhood education, Currie has become zen about her lack of control in the policy realm.

"You never know when it's going to happen," she said. "For academics, you work on something and you would like to tell everyone about it, but no one cares at the moment. When they do call you, it's about something that maybe you did a long time ago—or maybe it's not your research, but you're qualified to talk about it. I think you just have to be open to be helpful when you can."

Nor can you control how your work is interpreted. Currie has swung from "radioactive" (in her words) when her early research on the Head Start program showed racial differences in program outcomes—finding herself mysteriously disinvited from a key advisory panel—to "the darling" a decade later when different political winds brought her work a fresh appraisal.

Institute Senior Research Economist Amanda Michaud placed her call on hold a few times before uprooting herself in 2021 to serve as a senior economist for the White House Council of Economic Advisers. "Initially I was skeptical about how much influence the council actually would have," Michaud said. She felt uncertain "about whether I would be effective in the role, whether the people who were directing the organization would use me effectively."

The pandemic shifted her calculation. "It was a crisis situation," said Michaud. "The value of doing something well was very high, and the cost of doing something poorly was very high. There was less room for only doing things for the sake of politics. It was a very serious time."

Michaud says she was "pleasantly surprised" by the earnest interest of officials in what economists had to offer, and by the ability of academic economists—including herself—to adapt to a new way of working.

She recalls assignments to analyze the impact of the Paycheck Protection Program and changes to the child tax credit. "If I was doing an academic study of this, it might take me a year. But at the council, you would have two days," Michaud said. "My initial reaction was, of course, one of panic: How can I possibly be choosing something so important with so little time? But then I realized that I was actually very prepared to do this."

Meeting the needs of policymakers required Michaud to apply her economic models more broadly than in the academic context. "Our quantitative models are built such that when [data] go into them, they'll replicate what the world has looked like in the past." But policymakers typically want an assessment of various present or future scenarios. "We have to have more of a loose-but-useful understanding of what those outcomes would look like in different situations," said Michaud. "We're not always so good at putting those in our papers, because they seem tangential to the main point. But they are very important for practical policymaking."

> "The objective of economists ought to be to raise the level of debate on economic policy, to make clear what they know and do not know, and to increase the chances of policy decisions that make the economy work better."
>
> **Alice Rivlin**, former Fed vice chair, in 1986

TAKING THE LONG ROAD

Harvard labor economist and Institute advisor Larry Katz can reminisce about daily pressures of working with the press and policymakers from his time as chief economist for the U.S. Department of Labor in the early '90s. Since then, however, he has become a foremost practitioner of a different channel, where progress is measured over decades: working directly with nonprofits and government agencies to implement and test research-based ideas.

Katz—with Institute advisor Raj Chetty and former visiting scholar Nathaniel Hendren—is closely associated with the Moving to Opportunity (MTO) research, a randomized controlled trial that found young children in high-poverty neighborhoods have substantially improved earnings as adults when their parents were given a housing voucher and specialized counseling to move to low-poverty neighborhoods. Katz helped design the program while at the Labor Department, and in 1994 the U.S. Department of Housing and Urban Development (HUD) began the MTO study with 4,600 families in public housing.

This kind of longitudinal research requires a very long attention span. Earnings results for children in the MTO study did

Research and real lives
Carmen Luisa Moncion (left) arrived from the Dominican Republic with a master's degree and experience managing a hotel. Now living in Boston, she is studying English and working at a shipping warehouse while dreaming of a job with better prospects. Moncion and job mentor Angelisa Nivar (right) are part of AMP Up Boston, a partnership between economics researchers, the Boston Housing Authority, and the Boston nonprofit EMPath. Funding is limited and researchers need clear data; for every participant like Moncion, another hopeful applicant was placed in a control group without mentoring services.
KAYANA SZYMCZAK

not emerge for 20 years. It takes still longer for institutions with capacity to act—public housing authorities, in this case—to assemble the will and funding to put the ideas into action, as Seattle and King County did when they launched the ongoing Creating Moves to Opportunity program in 2018 for subsidized housing residents.

And it was not until 2019—25 years after the research began—that Congress approved a "demonstration project" for HUD to advance the concept. The total expansion: 666 additional vouchers in nine cities, subject to another multiyear study. "Most public housing authorities in the U.S. don't have serious housing mobility plans," Katz said. "The hope is that these pilots and the continuing evidence will then diffuse, but that's much easier said than done and takes years."

In the meantime, Katz has become deeply involved in another area where he believes the mounting evidence should motivate wider action and where progress is a similarly slow burn: job training.

"We've had decades of research and evaluations of job-training programs, many that were quite disappointing," said Katz. "But we did see kernels of programs that seemed to work better." Rather than train workers to land an initial decent job, he believes the evidence points to an approach that trains people in need of new skills for sectors where the data show long-term prospects for a job ladder within the field.

"The fact that we've had evidence on some of the effectiveness of sectoral employment training programs for over a decade, and the movement is sort of just taking off, tells you how long and difficult it is," he said. "We're building up the evidentiary base, but in all these cases scale is still a huge issue. We have good examples of [programs] in the thousands, but not in the millions of participants."

THE RISKS AND REWARDS OF WORKING WITH ECONOMISTS

Many large policymaking entities, including federal government agencies and the Federal Reserve System, have the counsel of in-house economists. That is not the case for many working on policy at the local and nonprofit level, where linking your fortunes to an academic economist comes with trade-offs.

The mission of the Boston-based nonprofit EMPath is to help people move themselves out of poverty. Using Katz's team to implement and evaluate their new job-mentoring program—a partnership with Boston Housing Authority called "AMP Up Boston"—means not everyone is going to get their help. That's because economists want to compare the outcomes of treatment groups (who get assistance) and control groups (who don't).

"Having a control group is not something we love to do," said Ruthie Liberman, EMPath vice president for public policy. "It's a very hard thing for staff to do these orientation sessions—where everybody there wants to be in the program—knowing that only half are going to be selected." Liberman says EMPath and the housing authority balked at the initial AMP Up study design, in which only 1 in 3 low-income participants would receive the full suite of services. As a result, the study was delayed while they raised more money to support a larger treatment group.

Partnering with economists for a credible academic assessment takes patience—a harder virtue to sustain when your instinct is to help as many people as possible. And when results begin to flow in four years, EMPath must brace for the economists' honest assessment of its core job-mentoring platform. "It's something I think a lot about, and I'm nervous for that," said Liberman. "We've seen tremendous outcomes in the [previous] evaluations that we've done. … We expect good results. But there's always the possibility they will just be kind of 'meh.'"

Nonetheless, a credible randomized controlled trial is what EMPath needs if they want the funding required to scale up.

TAKING POLICY TO THE PEOPLE

PRINCETON SOCIOLOGIST KATHRYN EDIN first broke into the public consciousness in 1997 with her book *Making Ends Meet* (with co-author Laura Lein), providing an intimate look at how low-income mothers survive—and work—while on welfare.

"It was a wild time," said Edin, an advisor to the Institute. "I did hundreds of radio and TV talk shows. I once did four in a single day—everything from NPR to Black gospel radio to Christian radio from Bemidji, Minnesota. You name it, I did it."

Academic research has its place, and Edin has dozens of journal articles to her name. But over the course of eight books with popular appeal, she has come to appreciate the fundamental role of public sentiment in driving major changes to important policy such as the welfare system and the structure of the Earned Income Tax Credit.


JEFFREY MACMILLAN

In meetings with policymakers, Edin has found that well-told stories are often stickier than numbers.

"I think I have shifted public conversation," Edin said. "And sometimes had an influence on policy."

In meeting with policymakers, Edin has found that well-told stories are often stickier than numbers. She gives the example of a current U.S. senator who has committed to memory the names of the families in his state that he read about in her 2015 book, *$2.00 a Day: Living on Almost Nothing in America*, with co-author H. Luke Shaefer.

As a sociologist on the Institute Advisory Board, Edin comes from a field with a different relationship to policy than economics. "In some ways sociology is a more normative profession," Edin said. "If you look at my department, just in the last month, four of my colleagues have published prominent op-eds. And that happens all the time."

Still, "I don't view myself as an advocate," Edin said, and she advises students whose primary interest is advocacy to leave academia to pursue that passion.

Nonetheless, Edin said, "If you ask me, based on the evidence, what I think the best way forward is, I'm going to tell you." And the medium shapes the message. "If you're going to write a popular book, your editor is going to expect you to say, 'What are we going to do about this?'"

Compared to past successes, one of Edin's current policy passions has been slow to gain traction: transforming child support into a "family building" institution from a structure she says is excessively punitive toward low-income fathers.

Along with jeapordizing an important funding stream for state child support bureaucracies, the research challenges deeply held prejudices. Trying to move perceptions and policy on child support "has been my most frustrating experience," Edin said. "Everyone knows child support is tearing apart Black and Brown families, but it's hard to convince the public that these guys aren't deadbeats."

In a career of pursuing this kind of evidence-based policy reform, Edin says she has learned to pace herself and find refuge in academic work. "I'm a little tired of beating on that drum," she said of her current efforts on child support. "But every once in a while, I jump back into the ring."

> “The fact that we’ve had evidence on some of the effectiveness of sectoral employment training programs for over a decade, and the movement is sort of just taking off, tells you how long and difficult it is.”
>
> **Larry Katz**, Harvard economist and Institute advisor

“Having someone like Larry as our principal investigator, hopefully we’ll come out with strong results and join with him” to publicize them, Liberman said. “It’s that gravitas and it’s the gold seal of approval that’s necessary to indicate that you are evidence-based.”

Greg Russ, chair and CEO of the New York City Housing Authority, was instrumental in calling housing authorities’ attention to the MTO research. When someone mentioned the findings to him at a HUD meeting in 2015, Russ was leading the public housing authority in Cambridge, Massachusetts. Chetty, Hendren, and Katz were just down the road at Harvard; after tracking down their new paper, Russ reached out and set up an informal meeting. From there, he worked the phones to assemble more than a dozen leaders from other housing authorities for a conference with the economists.

To Russ, this kind of serendipitous connection is too ad hoc, and it happens too rarely. “We don’t have a good way of baking-in the partnership of research and implementation,” Russ said. The list of obstacles is formidable. In addition to concerns about the fairness of control groups, studying program participants can seem invasive. Staff are already stretched for time and budgets, and social service programs rarely come with funding and flexibility for testing new ideas. “I’d like to set aside housing vouchers for policy development and research,” Russ said, but that is not generally allowed under the federal housing program rules.

Russ says these factors prevent policy practitioners from reaching out to academic collaborators. Meanwhile, economists can become enthralled with interventions that look good on paper, without an appreciation for the day-to-day challenges of program administrators and participants. “I think we underestimate, as program people, the power of some of these ideas,” said Russ. “I think on their side, they underestimate how difficult it is to run the program.”

Russ and Liberman credit Katz for establishing a template for academic-policy collaboration—a back-and-forth process with a long-term commitment. Katz considers interviews and focus groups essential to assuring his work has impact. “Sitting back in your office and looking at the data is incredibly important,” said Katz. “But we can actually talk to participants—figure out what’s motivating them, and how they understand what’s going on.”

Call it anecdotal evidence, but these qualitative findings shape the research design into something less likely to fall apart in practice. Personal stories, Katz said, also “become very valuable in being able to speak with policymakers.”

THE POWER OF (UNDERSTANDABLE) DATA

Nearly 40 years ago, Alice Rivlin worried that politics was turning off economists who might otherwise seek to make a difference. Today’s bitter partisanship and information overload arguably create an even rougher climate for research to cut through.

And even well-meaning government officials can struggle to make use of the information at their disposal. A recent experiment presented 192 high-ranking civil-service employees across 22 federal agencies with a test, of sorts. The officials received sample evidence for five hypothetical programs in their area of expertise and were asked to assess the value of each.

The study by Mattie Toma and Elizabeth Bell found the policymakers’ assessments were “markedly inelastic with respect to impact.” That’s a polite way of saying the actual evidence they were provided about the programs was largely irrelevant to the decisions they made. Follow-up surveys identified the primary barrier: “[Even] experts in these types of decisions,” the authors find, “place less weight on impact-relevant, evidence-based features of programs due to the cognitive complexity of the decision environment.”

However, the researchers conclude with some better news: The officials’ assessments improved when provided with simplified “decision aids” that boiled down the numbers and used presentation techniques borrowed from psychology and marketing. In terms of practical impact of research on policy, it seems the evidence is only as powerful as the tools we use to communicate it.

Institute economist Amanda Michaud sees signs of hope in a profession-wide shift to research driven by real-world data. “When I was in grad school, I think many of us imagined ourselves being theorists in the future,” Michaud said. Yet, “almost universally across my classmates, I’ve seen them move into more intensive data work.” This shift could improve the poten-

tial for economics to influence policy and public understanding. "The availability of data and the emphasis on data is something that makes our profession and our methodology easier to communicate to anybody," Michaud said. "If you can show a result in the data, everybody can usually understand that."

Princeton's Janet Currie sees increasing barriers to data as a concurrent danger. Her prime example is a plan to suppress detailed data from the U.S. Census Bureau in light of fears that bad actors might exploit it to identify individuals. Dependable survey data is also under threat as Americans increasingly screen calls or decline to participate. Even as economists make strides in working with and communicating about data, Currie believes it is a pressing policy priority for economists "to educate the public about the importance of having good data."

For economists who want to increase their odds of a wider impact, today's world offers more outlets than ever to expound on their research, from #econtwitter to podcasts to policy-focused websites like VoxEU. Currie's econ students want to make a difference with their work, and her advice to them is the same she follows herself: Work on something you care about. Learn to translate your ideas for a general audience. And be ready when you get the call.

"Don't chase after the topic of the moment," said Currie. "You don't want to work on something that nobody's ever going to care about, but there's a broad set of topics that are going to come up one of these days. Pick one of those and work on it—so that when it comes up, you can be in a good position to say something." ★

Formidable obstacles
Greg Russ, chair and CEO of the New York City Housing Authority, tours NYCHA's Queensbridge Houses in Queens in 2019. As a leader of housing authorities in Cambridge, Minneapolis, and now New York, Russ has been an advocate for integrating research with a daily mission to provide housing and social services. The reality of managing complex programs while meeting research needs, however, creates an uphill climb.

MICHAEL APPLETON / NEW YORK CITY HOUSING AUTHORITY

Ambitious QUESTIONS Transformative ANSWERS

Shaping an agenda on economic opportunity and inclusion: A conversation with William A. Darity Jr., Greg Kaplan, Abigail Wozniak, and Mark Wright BY LISA CAMNER MCKAY

The Opportunity & Inclusive Growth Institute was founded in 2017 to conduct and share research that works toward expanding economic opportunity and inclusive growth for all Americans. Five years in, how has the opportunity and inclusion research agenda evolved?

Anniversaries offer a moment to pause and reflect: Where have we come from, and where are we going? So for this issue, *For All* gathered four individuals who have been instrumental to the work of the Opportunity & Inclusive Growth Institute over the last five years and asked their perspective.

Mark Wright served as research director of the Minneapolis Fed from the Institute's early days until July 2022, when he assumed a new role at the Federal Reserve Bank of St. Louis. He steered the effort to bring together a diverse and distinguished group of social scientists to serve on the Institute's founding advisory board. Those advisors include Greg Kaplan, professor of economics at the University of Chicago, and William A. ("Sandy") Darity Jr., the Samuel DuBois Cook distinguished professor of public policy, African and African American studies, and economics at Duke University. They were joined by Abigail Wozniak, who has led the Institute as its first director since her arrival in early 2019.

ILLUSTRATIONS BY DANIEL HERTZBERG

The Institute's focus is on research that can help expand opportunity and inclusion in the economy. This focus often touches on inequality, a feature of the economy that we can more readily measure than opportunity or inclusion. But there are also distinctions among these three concepts. What are the relevant connections between opportunity, inclusion, and inequality?

Abigail Wozniak: I think this question is really relevant when we think about how we should steer the Institute. As the director, I am often involved in conversations about inequality, and the Institute has ongoing projects that seek to better measure economic inequality.

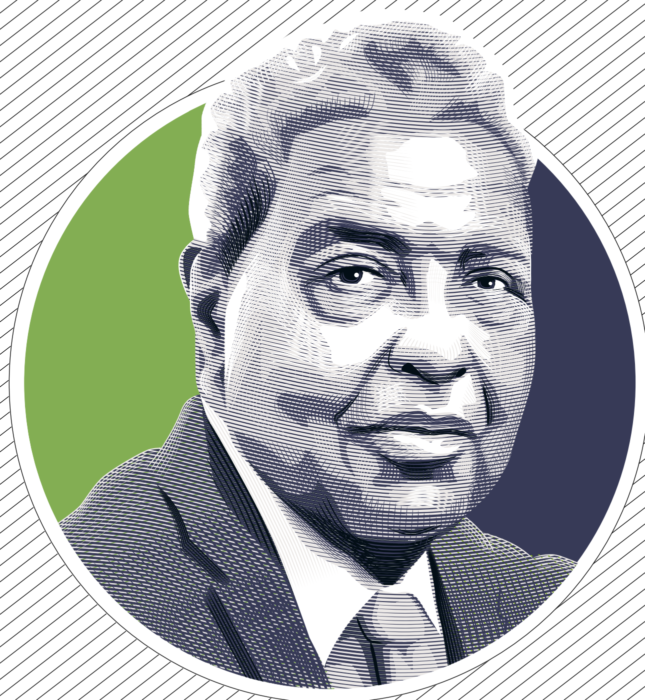
Yet inequality is not in our name. And I think there's an important reason for that, which is that the ultimate goal the Fed is looking to pursue is to ensure that people have the ability to fully participate in the economy, they are fully utilizing their talents, and they have a range of choices to fulfill what's best for them in terms of economic participation. But we are not seeking to necessarily equalize outcomes. There are examples of economies that have attempted to equalize outcomes, and they've done so in ways that really constrain opportunity or constrain inclusion. These would not be economies that you would point to and describe as particularly enabling opportunity.

Greg Kaplan: I agree that it's a great decision to not have the word "inequality" in the name of the Institute. I teach classes on the macroeconomics of inequality, and I tell my students, "You tell me whatever message you want to make about inequality, and I'll find you a statistic that will make it."

I think the reason that statistics can tell such a range of stories about inequality is that what we really are talking about are *distributions*. Whenever we work with a large-dimensional object like the U.S. economy, there's not going to be an easy way to summarize it. Even if we're talking about just one dimension—income, for instance—you get very different stories about "inequality" across groups and over time if you look at different parts of the distribution.

Sandy Darity: I think it's useful to make a distinction between *inequality* and *inequity*. It is not at all clear that all forms of inequalities are necessarily a product of unfairness. I think that it's the issue of unfairness that, ultimately, we really are concerned about.

I worked on the analysis "The Association between Wealth Inequality and Socioeconomic Outcomes," led by Omer Ali, in which we demonstrated that with the exception of political equalities, the degree of wealth inequality didn't have much to do with well-being measures. What's critical is the nature of the social floor in a society. Does the society ensure that everyone has the minimum conditions for a decent existence?



"There are conditions under which producing equal outcomes is a precondition for producing equal opportunity. That happens when we shift away from thinking about inequality across a general population to inequality between social groups."

— SANDY DARITY —

"Maximum employment is an explicit distributional goal. We're not told to get employment for some and not for others. We're trying to get *maximum* employment, and while we can debate how to define it, in some sense it must be related to equality of opportunity to get jobs."

— MARK WRIGHT —

I think that part of the issue that Abbie raised involves the distinction between equal opportunity and equal outcomes. And I think there are conditions under which producing equal outcomes is a precondition for producing equal opportunity. That happens when we shift away from thinking about inequality across a general population to inequality between social groups.

Mark Wright: I agree exactly with what Sandy said. I don't think you can have equality of opportunity in a world in which outcomes are so different that one person's children will not have the same opportunities as another person's children in the future. Equality of opportunity is a necessary condition to have fair or equitable outcomes, but generating that equality of opportunity depends on the outcomes themselves. So you can't completely separate the two.

What are some of the pressing questions at the frontier of the economic opportunity and inclusion research agenda?

Kaplan: One recent advance is that, for probably the first time, I think we have useful structural models and tools to study the distributional implications of different paths of inflation and disinflation. That's something that I think is a real practical concern where good progress has been made.

But there are a number of other issues at the frontier of the research agenda that have not yet been successfully incorporated into macroeconomic models. How can we model the building of community and community capital? How do we model culture, its evolution, and its impact on outcomes and opportunities?

And I think there's a lot more to be done around housing and urban policies. There's very little research that models the effects of the geographic distribution of economic activity within a country, city, or community on overall growth. For example, what are the longer-term implications of trends in housing disparities?

A final frontier I'll mention is labor markets. How do we set up the current generation of young people to participate in the labor market in a meaningful and productive way as they grow?

Wozniak: The research that I do comes from a tradition in economics that uses policy changes and other situations that look like experiments and tries to learn from them in a social setting, similar to the type of research in *Freakonomics*.

What I hope we'll see in the next five to 10 years is taking what this approach does well, which is using and evaluating real-world policies, and then layering on questions about why policies get set the way they are and what details of those policies matter. In other words, not looking only at "we threw education dollars at this district and not at that district, let's compare outcomes." But instead asking, How exactly were those dollars used? What were the kinds of adjustments the other district made?

One development I see in recent research is the understanding that policy operates at the community level. For a long time, this approach focused on individual participants. Now there's a shift towards recognizing that, for instance, a jobs program rolls out in a *community*, not just to individual workers that we then add up together. Thinking about community-level outcomes will be an important addition to this kind of analysis.

Darity: I've been actively involved in the process of trying to develop a subfield that we refer to as stratification economics. Its focus is to better understand inequality across social groups, whether they're racial groups, gender groups, ethnic groups, groups that are distinguished by religious affiliation, or groups that are distinguished on the basis of caste. Whatever the way in which we identify these distinct social groups, we need to better understand what the sources are of the disparities that these groups experience, particularly those that are marginalized.

What I think is really unique is the circumstances that have occurred in the past two years or so, particularly in the aftermath of the highly visible murder of George Floyd, when a number of professional organizations, including economics, have engaged in some form of reckoning with their own tradition of research. One of the significant changes that has occurred is, I think, a greater degree of credibility and interest in research on racial inequality. I don't know if this change in orientation is something that's going to be permanent in the economics profession, but for somebody who's been laboring in this area for many years, it's certainly a refreshing turn.

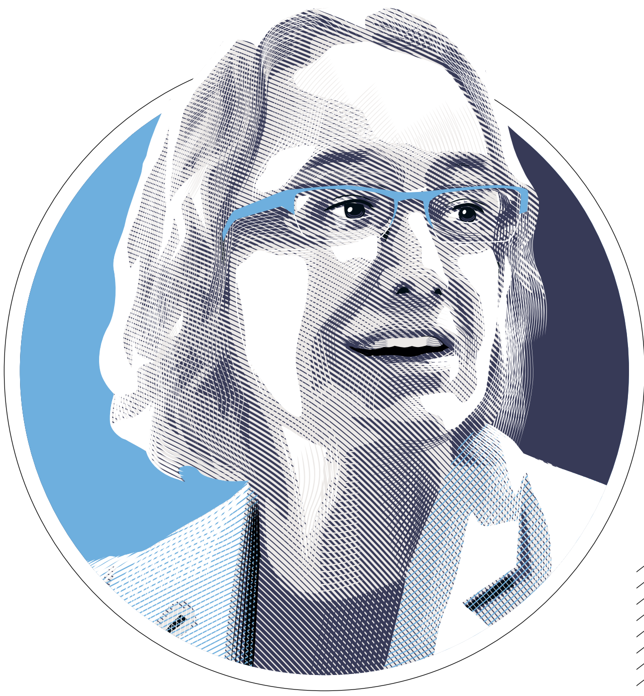
What is the Fed's role in the research agenda that has been articulated here? Are there particular advantages of doing this research within the Federal Reserve System? What in particular does the Fed need to know?

Wright: The Fed is a creation of Congress; we do what Congress tells us to do. One of those tasks is to use monetary policy to pursue stable prices and maximum employment. Maximum employment is an explicit distributional goal. We're not told to get employment for some and not for others. We're trying to get *maximum* employment, and while we can debate how to define it, in some sense it must be related to equality of opportunity to get jobs. So we need to do work on that to understand it.

Congress has also told us to represent our districts, which inevitably gets us into discussions of inequali-

"The vast majority of Ph.D. economists, including economists at the Fed, never talk to a policymaker except when they're giving a briefing to somebody at the Fed. … At the same time, policymakers have no sense of what questions are easy for economists to answer … and what are questions that are just like, wow, that's a great question, but to be honest, people will be thinking about that for all of human existence."

— GREG KAPLAN —



"There seems to be a potential for policies that seem incremental to actually be relatively transformative. … This is a great thing economics does: It really looks at long-run impacts."

— ABIGAIL WOZNIAK —

ty across regions, inequality within our districts. It also means that we have to represent the views of the people who live in our district at meetings in Washington, and much of the time, the people in our district are talking about distribution, opportunity, and inclusion.

One thing I would love to know more about is the extent to which institutional change is influenced by the Fed. For example, around 2018, 2019, firms changed their hiring practices to waive requirements such as drug tests or credit checks when the labor market got tight. In fact, they started recruiting directly from communities that didn't have as many opportunities in the past.

I think that was important, because it shows you that the connection between monetary policy and distributional outcomes doesn't just work through the traditional movements of aggregate demand, but there are spill-on effects to other institutions that affect these outcomes too.

Darity: I would say amen to that. And in the context of some other work that I've been engaged on in the past, I see a very strong role for the Fed. A few years ago, a team of us did a series of studies on wealth inequality at the metropolitan level, looking at outcomes of specific national origin communities. So instead of looking exclusively at categories like Blacks or Asians or Hispanics, we attempted to drill down and look at specific communities within those groups—for example, Cubans in Miami, Florida, and Mexican Americans in Los Angeles, etc.

I would love to see the regional Federal Reserve Banks expand those kinds of studies and make them sustainable over time, in multiple cities.

In addition to supporting and pursuing research, the Institute aims to make research findings usable by policymakers both inside and outside the Fed. What does "usable" research look like? What are the challenges in making rigorous research accessible or usable by policymakers?

Wozniak: I think underscoring why it's hard to communicate well is a useful part of this conversation. There are at least two reasons. Being able to describe the world to people in a way that resonates with them and that they find useful is really important. But when you use rigorous research tools to study the world, those contributions come out at a very slow rate. Especially the last two years, we have had to think about how we communicate in a way that's more "real time"—yet that also maintains the rigor that we strive for.

The second reason is, often many researchers have good points that go in different directions, and somehow we have to find the space that's useful to everybody. I often say that economic advising cannot look like a dog walker trying to walk five dogs. Policymakers need to know not only is this going to help some people, but how many people is it going to help? And is it worth the tradeoff with the other thing that we're going to have to give up because we chose to do this? You need to know the magnitudes to answer that question, and those are places where there is often a lot of disagreement. We have to find a credible consensus.

Kaplan: I agree completely, Abbie. I think there are some simple, small steps that can be taken. The vast majority of Ph.D. economists, including economists at the Fed, never talk to a policymaker except when they're giving a briefing to somebody at the Fed. So they have no concept of what the questions are that active policymakers are grappling with. At the same time, policymakers have no sense of what questions are easy for economists to answer, that we know a lot about, and what are questions that are just like, wow, that's a great question, but to be honest, people will be thinking about that for all of human existence, and sorry, we're just not going to be able to give an answer on that one.

The other practical step is to collaborate with policymakers on research projects from the conception stage. Policymakers are more likely to pay attention to work when they have a vested interest in that work.

Research often proceeds by answering relatively narrow questions deeply, and this can be criticized as narrow or incremental progress. Of the ideas that you've discussed, how much might they move the needle to advance economic opportunity and inclusion? Is there an argument to be made that incremental change has value too? Should researchers and policymakers focus mainly on one or the other?

Wright: I think it's true that over the course of the history of economics, we've gone from talking about the biggest questions of all—Why are some countries rich and others not? Is capitalism the right way to organize society? What role for government is there?—and we've increasingly moved to narrower questions we can answer more accurately. But I think there is value in talking about the big questions, too.

But can you identify these things in advance? All research starts with a question. Sometimes it's a small question. The answer is almost inevitably going to be incremental. Sometimes it's a big question, and the answer is almost certainly going to be many steps away from practical application. I think you have to do a bit of both.

Darity: I definitely think we should ask ambitious questions. And I think we should recognize that there have been many policies that have been adopted in this country that were far from incremental in character, such as the Homestead Act of 1862, the G.I. Bill in the 20th century—these were not incremental policy changes at all. The New Deal itself was not an incremental policy change.

I think the tools that economists have customarily used have been best suited to trying to evaluate incremental changes. That means we have not been able to really assess the scope of nonincremental policy changes.

Kaplan: I think there is a role for thinking about these big-picture questions. For example, over the past 25 years we've learned a lot about fiscal policy, monetary policy, labor market policy, and competition policy through many smaller, incremental projects. What if we now got to design a policy environment or an institutional environment from scratch using this knowledge we have acquired? What would it look like? This "ideal" policy might not be attainable, but I think it's a useful exercise to explore—what have we learned about the big picture and where nonincremental change might lead us?

Wozniak: There seems to be a potential for policies that seem incremental to actually be relatively transformative. I'll give a very negative example. Imagine you were sitting in the room when someone suggested implementing redlining. Someone would say, we're going to lend, but just not to this one neighborhood over here. That might have sounded like an incremental policy to you.

And in fact, it was tremendously destructive and had generational impacts on American cities and on American communities. So I think we need to be cautious about thinking that what we are looking at is an incremental policy, when in fact, potentially the long-run impacts are really large.

Fortunately, there are positive examples too—better access to early nutrition for children as well as to Head Start and Medicaid. Some of these sound incremental, right? But it turns out that, for instance, early childhood nutrition over the course of a couple early years is transformative for those children, and it's not that expensive or hard to do.

This is a great thing economics does: It looks at long-run impacts. We can use our models in ways that suggest what those impacts might be. I think it can be a helpful role for us to push back on this idea that we have to choose between ripping everything out at the roots or just tinkering at the margins. ★

World-class research can be lengthy and complex. Here, we present key findings, methods, and policy implications from several studies by Opportunity & Inclusive Growth Institute scholars and their colleagues. These examples represent a fraction of the Institute's growing body of research. For our full library, visit minneapolisfed.org/institute/publications/working-papers.

ILLUSTRATIONS BY MICHAEL GLENWOOD

Choosing a school is hard. Tailored information can help.

Materials emphasizing high schools' graduation rates can shift students away from choosing low-graduation-rate schools

BY LISA CAMNER MCKAY

We live in an information-rich environment in which choices abound. What health care plan should I enroll in? What fund should I invest my retirement savings in? What school should I send my children to?

"Leaving decisions open-ended puts them in the hands of individuals or families to make decisions based on their own values and priorities. That is perhaps very empowering," said Institute visiting scholar Sarah Cohodes. "On the other hand … [that] might mean that people who don't have the resources, the time, the energy, or the ability to navigate the information are at a disadvantage."

This situation is occurring more frequently in the realm of education with the rise of school choice. In much of the United States, students are assigned by default to their neighborhood public school. However, a growing number of school districts, including Boston, New Orleans, and New York City, have moved away from this default in favor of a system in which all families submit their school preferences to the district, which then uses an algorithm to match students to schools.

School choice is often adopted to increase access to high-performing schools. But it introduces a complex information environment that takes time and resources to navigate well—and time and resources aren't distributed evenly across students and their families.

Across its five boroughs, New York City boasts more than 700 different high school programs that vary in the classes they offer and the criteria they use to prioritize students: geographic area; school attendance record; standardized test scores; grades; audi-

tions. The city's 75,000 eighth graders must submit a ranked list of up to 12 high school programs from among these 700.

Interviews by Cohodes and her co-authors revealed that students and their families frequently misunderstood important elements of the high school application process. For instance, many students applied to schools for which they did not meet the eligibility requirements, and many were unaware that some schools gave preference to students who attended a school fair or information session.

So the research team set out to study whether providing New York City eighth graders with customized information about high schools with high graduation rates would change students' choices and, ultimately, where they went to high school.

The impact was largest for English learners. Black students, Hispanic/Latino students, and low-income students also generally saw larger impacts than White students or students who are not low income, although this result depended on the specific intervention. These results suggest the design of informational interventions matters, and that they can be designed in a way to help historically disadvantaged groups.

Intervening with information

Previous research in economics and psychology provides strong evidence that "choice architecture"—*what* and *how* information about a choice is presented and structured—affects the decisions we make. This finding has opened the door to a rich literature that seeks to better understand informational interventions. What kinds of decisions can informational interventions affect? Do different interventions work better for different groups of people?

These are the questions Cohodes and her co-authors set out to answer in the context of high school choice because "where students go to high school matters for their longer-term trajectories," the researchers write in the Institute Working Paper "When Do Informational Interventions Work? Experimental Evidence from New York City High School Choice."

STUDY AUTHORS

SARAH COHODES, Teachers College, Columbia University; SEAN P. CORCORAN, Vanderbilt University; JENNIFER JENNINGS, Princeton University; CAROLYN SATTIN-BAJAJ, University of California, Santa Barbara

School choice introduces a complex information environment that takes time and resources to navigate well—and time and resources aren't distributed evenly across students and their families.

The team studied three different interventions that varied the *delivery mode* (paper or digital), the *type of information* (specific recommendations or general information), and the *level of customization* (to the middle school or to the student). The interventions—Fast Facts, the App, and School Finder—are described in the table below. All students at a middle school were assigned the same intervention. The research team mailed the paper interventions, instructions to access online interventions, and supporting materials (videos, sample curricula, practice applications) to middle school counselors, which is how NYC's Department of Education disseminates materials about the high school application process.

Limited but meaningful impact

In interviews and surveys, about 85 percent of school counselors said they shared the materials they received with students or parents. Because the study authors do not know with certainty whether or not students actually used the materials, what they can study is the impact of *assignment and access to* an intervention.

Cohodes and her co-authors examine the interventions' impact on several outcomes in the high school choice process—the graduation rate at students' top school choices, the likelihood they would be admitted to the high-graduation-rate schools they selected, and the graduation rate at the school where students end up enrolling. Across these outcomes, Fast Facts paper, the App, and School Finder had a limited but meaningful impact compared to the control group, while Fast Facts online had no effect. For instance, 38.9 percent of students in the control group enrolled at a high school with a graduation rate below 75 percent. For students in the Fast Facts paper and the App interventions, that falls by 6 percentage points; for students in School Finder, it falls by 5 percentage points.

The research team analyzed demographic data to understand whether the impact of the different interventions was consistent across all students. In general, the Fast Facts paper and School Finder interventions tended to benefit groups of students who have historically been underserved, including students of color and low-income students, while the App provided greater benefit to historically advantaged groups. The researchers found that all treatments (except the digital version of Fast Facts) were particularly effective for English learners, reducing the likelihood of enrolling in a high school with a low graduation rate by 11 to 12 percentage points, almost twice the average effect on all students.

Importantly, the evidence so far shows that students impacted by the interventions are not worse off for having been guided into a higher-performing school: They don't have worse grades and they haven't failed more classes than their peers. Cohodes and the study team are continuing to follow these students to evaluate the impact on their graduation rates.

INFORMATIONAL INTERVENTIONS

	Fast Facts	The App	School Finder
Delivery mode	Paper and online	Online	Online
Customization	Customized to middle school	Customized to student	Customized to student
Type of information	Specific recommendations	Specific recommendations	General information
Description	A list of 26 high schools with graduation rates above 75%, selected based on proximity, graduation rate, and if past students at that middle school had a history of being placed at the high school.	A "virtual guidance counselor" that provides a customized list of high schools with graduation rates above 75% based on preferences inputted by the student.	A digital search tool of all NYC high schools, sortable only by distance and school name.

Engagement, trust, and systemic change

The analysis points to several insights for administrators of districts with school choice. First, informational interventions will do little if they don't generate engagement with the material. The one intervention that seemed to be used the least, the digital version of Fact Facts, also had little to no impact on student choices. "The point is maybe not so much exactly which schools we recommended, but rather that we got school counselors and students to engage with the process," Cohodes reflected.

Trust in the system is also important—and currently, it's lacking. Qualitative work by the research team showed a widespread belief among both students and guidance counselors that the matching algorithm used by NYC's Department of Education was not fair, which turns it into "an opaque, nefarious thing in the background," Cohodes said. This lack of trust can have consequences if students feel they shouldn't bother applying to more selective schools because they have zero chance of getting in.

Finally, information is not the only barrier in education. Reducing administrative burdens and investing sufficient resources in all schools would benefit all students. "My takeaway is that systems that involve administrative barriers are always going to be hard to navigate," Cohodes said. "Rather than teaching people how to navigate them, maybe we would be better off reducing the barriers themselves." ★

TAKEAWAYS ↗↗

- Providing customized information to middle school counselors increased the share of students who applied to high-graduation-rate schools
- Informational interventions had the biggest impact on English learners
- How information is delivered affects which students benefit most

Seeking maximum employment

New strategies to monitor unemployment and labor force participation **BY ANDREW GOODMAN-BACON**

Congress gave the Fed a dual mandate: maintain stable prices and pursue maximum employment. Congress did not, however, specify how to track these goals. For price stability, the Fed has adopted a target of 2 percent inflation, a specific and measurable statistic. Determining if maximum employment has been achieved is much harder.

The key numbers used to judge where we stand relative to the Fed's "maximum employment" mandate are the labor force participation rate—how many people want to work—and the unemployment rate—how many of those people cannot find work. Both numbers matter. Low unemployment does not equal maximum employment if relatively few people are searching for jobs. So in the course of making monetary policy, the Fed has a keen interest in where unemployment *and* labor force participation are heading.

STUDY AUTHORS

BART HOBIJN, Federal Reserve Bank of Chicago; AYŞEGÜL ŞAHIN, University of Texas, Austin

A lot is at stake in these decisions. If the Fed mistakenly thinks that participation has hit its ceiling, it may start addressing inflation too early, raising interest rates and cooling the labor market as costs rise for businesses making investments and consumers financing large purchases. This dynamic gives up important earnings opportunities, especially for lower-income families. Waiting for participation gains that do not materialize, though, risks allowing inflation to eat away at everyone's purchasing power, especially that of low-income households. To get it right, the Fed must be able to gauge how far we are from maximum employment at any given time.

The Federal Reserve System working paper "Maximum Employment and the Participation Cycle," by Bart Hobijn and Ayşegül Şahin, provides exactly this guidance, uncovering the reasons why participation rates fall during recessions and showing how and when they tend to recover.

The participation cycle

In the early 1970s, just before the Fed first gained its legal mandate to pursue maximum employment, the economists Arthur Okun and George Perry both observed that many more people started looking for jobs when unemployment was low than when it was high. This meant that just focusing on workers who were unemployed at the worst point in a recession understated the benefits of recovery because it missed all the workers who enter an improving labor market. The fact that labor force participation rose when unemployment fell, Okun and Perry argued, meant that policymakers should actively pursue lower unemployment.

But how low? As Perry noted, "The precise forces governing participation rates are complex." This made it hard to know how long to run a "high-pressure" economy in order to reap the labor market benefits without incurring burdensome price increases.

Hobijn and Şahin describe the forces that shape participation by analyzing labor market flows. Labor flows detail how the labor market is changing. The unemployment rate—a stock measure—is the share of the labor force that is unemployed in any given month. But the unemployment-to-nonparticipation *flow* is the share of unemployed workers who leave the labor force between two months. Analyzing flows is helpful because different economic forces determine whether people find and lose jobs or whether they leave or enter the labor force.

The insight of Hobijn and Şahin's paper is that one of the most important factors driving participation over the business cycle is the unemployment rate itself. At first this seems puzzling as an explanation for changing labor force participation because it does not involve changes in how workers actually decide to enter or leave the labor force. But while changing participation decisions matter for long-run trends—like the decades-long decline in participation for men or the rapid rise of participation for women in the 1960s, '70s, and '80s—they do relatively little to explain why participation varies over the business cycle.

Unemployment matters because it is so often a stopping point for people who eventually give up searching for a job and leave the labor force. About 25 percent of unemployed people leave the labor force each month while only 3 percent of employed people do. The rates at which these two groups exit the labor force do not vary much during recessions and recoveries, but the share of people who are unemployed and who thus are more likely to leave the labor force varies widely over the business cycle. "Today if somebody moves between employment and unemployment, nothing happens to the labor force," Şahin said, "but since an unemployed individual is eight times more likely to leave the labor force than an employed person, going forward, this is going to have an effect on the participation rate."

The way that participation, driven by unemployment, affects the share of the population that is employed—a common measure of maximum employment—is labelled the "participation cycle." Recessions begin with a spike in unemployment. Then participation falls as workers in the newly enlarged unemployment group exit the labor force, which further pushes down employment. When unemployment rates recover, the flow of workers out of the labor force slows down, but it still takes time for nonparticipants to rejoin.

A new roadmap

By pinpointing the role of unemployment in labor force participation, the authors provide policymakers with better ways to judge how far we are from maximum employment. Central bankers managing a recovery can take several lessons from this analysis.

The first is that they are right to ascribe a big role to participation. The participation cycle has almost as large an effect on the share of people employed as changes in the unemployment rate itself. A proper measurement of maximum employment should account for it.

Second, the participation cycle lags cyclical changes in unemployment and takes longer to resolve. "That's why you need to know what happened to these margins in the past," said Şahin, "to be able to say something about participa-

TAKEAWAYS ↗↗

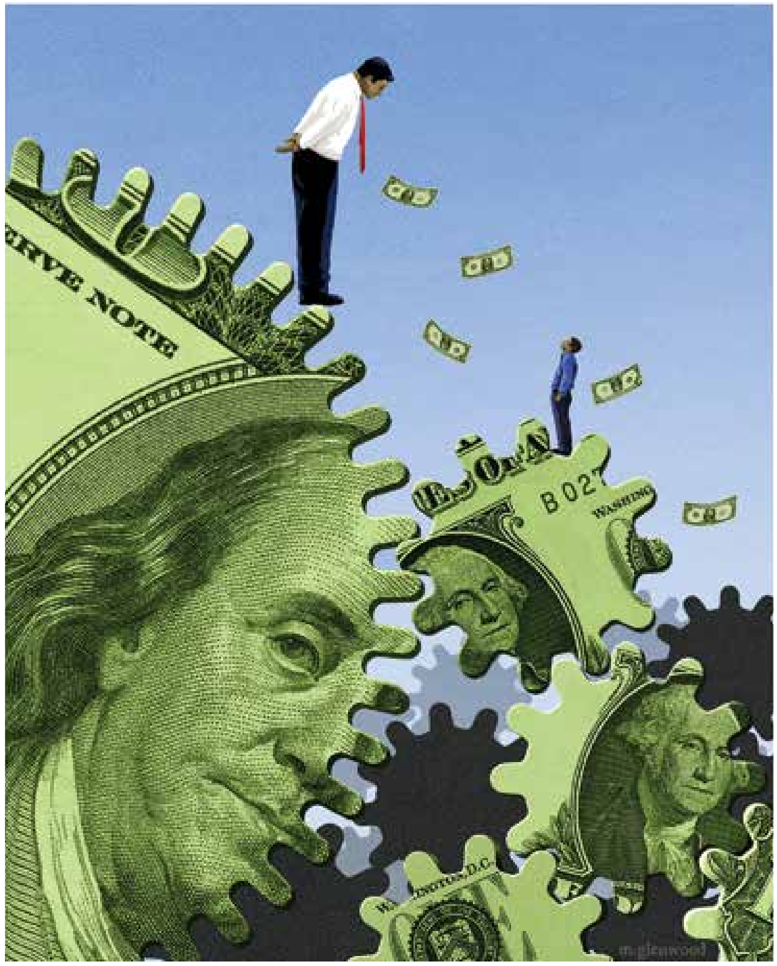
- Unemployed workers leave the labor force much more than employed workers
- Unemployment rates therefore shape cyclical variation in labor force participation
- Central banks can use this relationship to better assess how labor markets are doing

tion today." This pattern motivated Minneapolis Fed President Neel Kashkari to comment in a 2020 essay that "we have repeatedly believed we were at or beyond maximum employment only to be surprised when many more Americans reentered the labor market or chose not to leave, increasing the productive capacity of the economy without causing high inflation." The participation cycle shows how the relationship between unemployment and participation creates this exact dynamic pattern.

The third lesson is that inclusive recoveries all hinge on the same cyclical patterns in unemployment. The updated Fed monetary policy guidance in 2020 defines maximum employment as "a broad-based and inclusive goal that is not directly measurable and changes over time owing largely to nonmonetary factors that affect the structure and dynamics of the labor market." Hobijn and Şahin's analysis shows that while the size of the participation cycle differs across groups, its general shape does not. Black workers, for example, have much higher spikes in unemployment than White workers during recessions, and their participation rates fall more as well. The labor flows that underlie these differences, however, work the same way. Keeping unemployment low maintains job stability for all groups and keeps the participation cycle at bay.

Equipping policymakers

Central bankers from around the world heard Şahin discuss these issues at the 2021 Jackson Hole Economic Policy Symposium. Their policymaking counterparts in the 1970s faced the same relationships that Okun and Perry noticed and that Hobijn and Şahin dissect: Longer expansions promote employment stability, allow the participation cycle to resolve, and move us closer to maximum employment. With the insights of modern economic research, however, economic policymakers today can manage recoveries with a more nuanced understanding of where the labor market stands and where it is heading. ★



Can the minimum wage combat employers' labor market power?

There are reasons we might want a higher minimum wage. New research finds labor market efficiency isn't one of them. **BY JEFF HORWICH**

One argument for a higher minimum wage centers on fairness. This can include a desire to redistribute income or a basic belief that no one's wage should be so low they cannot afford the necessities of life.

A second major argument is that today's labor market is economically inefficient: Employers have market power, allowing them to hire fewer people and pay workers less than they are worth. If raising the minimum wage made the labor market more competitive, the argument goes, business owners would sacrifice some profit but wages, output, and employment would go up. Society overall would be better off.

STUDY AUTHORS

DAVID BERGER, Duke University; KYLE HERKENHOFF, University of Minnesota; SIMON MONGEY, Federal Reserve Bank of Minneapolis

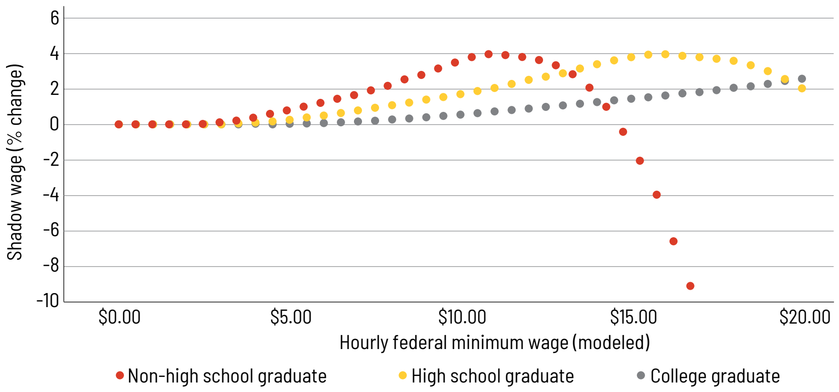
There are reasons to believe the deck is stacked in favor of employers. Workers lack complete information about the jobs potentially available to them and what similar workers in the economy earn. It takes time and money to search for a job. In any given city or field, the market for certain skills could be dominated by a few large companies that share wage information. In research shared in the fall 2021 issue of *For All*, economists David Berger, Kyle Herkenhoff, and Simon Mongey found that this power imbalance costs the average American worker 25 percent of their potential earnings (see article “Many jobs, few employers”).

Having made this case, the economists turned their attention to a natural policy question: Could we address this imbalance in labor market power by raising the minimum wage? Their analysis, outlined in a recent Institute Working Paper, “Minimum Wages, Efficiency and Welfare,” suggests the answer is: not really.

They find that raising the minimum wage appears to make only a small dent in the labor market power of employers. To the extent that a minimum wage increases societal welfare, the benefit comes almost entirely from how a minimum wage redistributes income.

“Once we strip these redistributive effects out, the efficiency gains are small,” said Mongey. “Efficiency arguments alone don’t seem to argue for substantially higher minimum wages above the current federal minimum wage.”

HOW MINIMUM WAGE AFFECTS WORKERS, BY LEVEL OF EDUCATION



Changes to the minimum wage affect wages and employment. The economists generate a “shadow wage” measure that reflects the balance of these forces. When calibrated to recent U.S. data, their model finds that the benefit begins to decline for lower-educated workers as the minimum wage reaches $10 to $15 and causes job losses, starting with lower-productivity firms. As the minimum wage continues to grow, its benefits accrue primarily to the college-educated workers who face less risk of unemployment.

Source: Berger, Herkenhoff, and Mongey’s model using data from U.S. Census Bureau Longitudinal Business Database, BLS Current Population Survey, and Survey of Consumer Finances in “Minimum Wages, Efficiency and Welfare.”

An old idea, but not necessarily a correct one

This finding goes to the heart of a March 2022 U.S. Treasury Department report on *The State of Labor Market Competition*.

Citing the work of Berger, Herkenhoff, and Mongey, among others, the report concludes that American workers contend with the outcome of a “monopsony.” This is the condition when a consumer with market power—in this case a firm, a consumer of labor—profits from a noncompetitive outcome that harms society at large. Raising the minimum wage, the report states, “is a straightforward approach to addressing lower wages under monopsony and can help increase employment.”

This is a classic “Microeconomics 101” idea with understandable appeal, said Mongey. However, when the economists subject this theory to scrutiny, it fails to deliver.

They put it to the test using a complex model with firms of varying productivity (an “oligopsony” of multiple employers, rather than a literal monopsony), calibrated with extensive U.S. Census data. The economists find that raising the minimum wage can bring small efficiency gains, up to a point. But this point is around a minimum wage of $8 an hour, not much more than the current federal minimum wage of $7.25. What’s more, they write, the gains in efficiency “shift the economy only 2 percent of the way toward an economy with no labor market power.”

The optimal minimum wage would be a little higher in high-income regions—up to $10 an hour. Beyond this threshold, welfare gains from efficiency turn into losses as the higher wage reverses any initial gains in employment and job losses mount for less-educated workers (see figure).

Pressuring the little guy

Given the economists' prior finding that employers have substantial market power, why doesn't the minimum wage play out like the basic monopsony model would predict?

Mongey says the primary reason is that actual firms vary greatly in their productivity. Less productive firms tend to be smaller, and their lower productivity means they pay employees less. "The first firms that get hit as you raise the minimum wage are the small guys in a market," Mongey said. "Because they're small, they're competing tooth and nail for workers anyway. They don't have a lot of market power that really needs correcting with a minimum wage."

The firms with the most labor market power are—with some irony—the more productive firms, which already pay workers more. A minimum wage will tend not to affect these firms until it has reached such a high level that it begins to cause more harm than good. In the meantime, the minimum wage increases costs on many smaller businesses that don't employ that many people, driving some out of business.

"A minimum wage goes from the bottom of the ladder, up," said Mongey. "Really what you want from a policy to address market power in the labor market is something that is top-down."

As a top-down example, consider recent decisions by "big guys" like Amazon and Target to pay all employees at least $15 an hour. While they might seem similar to a minimum wage hike, these corporate decisions—whether inspired by corporate altruism or public relations pressure—ripple out much differently than a minimum wage law that affects every workplace down to the mom-and-pop corner store.

Bringing fairness into focus

In deflating the market-efficiency argument, the economists do not intend to write off raising the minimum wage as a policy option.

"There are solid arguments for having minimum wages that are $12, $15, or $16 an hour," Mongey said. "But when we're arguing for those minimum wages, we have got to face the fact that we are making that argument on the basis of redistribution."

> "When we're arguing for [higher] minimum wages, we have got to face the fact that we are making that argument on the basis of redistribution."

There is no objectively "best" outcome for distributing income; this is a matter of ethics, values, and politics. As an example, however, the economists run their model with "utilitarian social weights"—a sophisticated way of saying that society seeks to achieve the greatest aggregate benefit, with each person weighted equally. The utilitarian experiment yields an optimal federal minimum wage of $15.12, uncannily close to the $15 wage that anchors many recent minimum wage campaigns and local laws.

This degree of redistribution would be a dramatic change from the United States status quo. A higher minimum wage might get us there if we make that policy choice. But a minimum wage also alters incentives on hiring and capital investment, and this new research shows just how carefully it must be calibrated to avoid tipping over into economic damage. "Once you understand that the gains from efficiency are small," Mongey said, "then the argument should turn to: What is the best way to do redistribution?"

Likewise, a separate conversation involves the best policies to address the wage-setting power of U.S. firms, which harms working households and represents a substantial welfare loss to the national economy. The recent U.S. Treasury report features other policy options to increase competition in the U.S. labor market. These include vigorous enforcement of antitrust and collective bargaining laws, restricting the use of non-compete agreements, and reducing occupational licensing requirements. ★

TAKEAWAYS ↗↗

- Raising minimum wage appears to make only small dent in "monopsony" or "oligopsony" power of employers to depress market wages
- Researchers calculate optimal federal minimum wage around $8, close to current level
- Higher minimum wage remains one among many policy options for redistributing income

A RICH BARGAIN

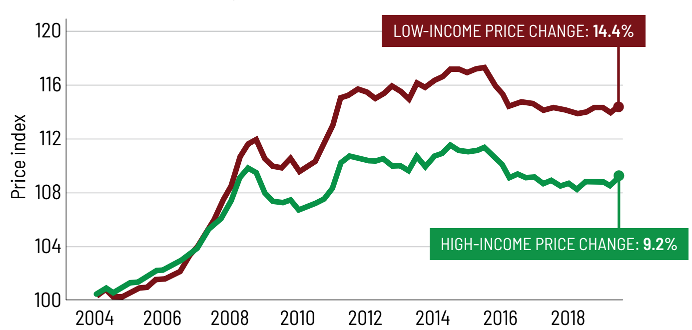
Instant, drip, French press, espresso—many of us can't get started without that first cup of joe. Would you change your cup, however, if your coffee fix got more expensive?

Higher-income households have more options than lower-income households when prices rise: Clip coupons, buy cheaper beans, cut back on those $6 mochas. Low-income households are likely minimizing costs already, leaving them with fewer strategies to avoid the pain of rising prices. Here's how actual 2022 coffee inflation might play out for two households shopping for 5 pounds of coffee when one can adapt—even a little—and the other cannot without cutting back.

LOWER INCOME, HIGHER COST OF LIVING

New research by former visiting scholar David Argente and Munseob Lee presented at the Institute's spring conference confirms that higher-income households can respond more to price increases than lower-income households. As a result, since 2008, lower-income households have experienced faster cost-of-living increases than higher-income households. Argente and Lee's data on consumer goods show that about half of this effect is due to differences in shopping behaviors. The rest comes from higher inflation on items that are necessities, which make up a larger share of low-income households' spending. This price level gap appeared during the Great Recession, when everyone was tightening their belts, and was still present as of 2019.

Price levels for high- and low-income households, 2004-2019



This figure shows how a price index for consumer goods (approximately 40% of household spending) has changed over time compared to the first quarter of 2004. Low-income households have income less than $25,000/year. High-income households have income above $100,000/year.

Sources: Roasted beans and instant coffee annual inflation rates from the July 2022 release of the Consumer Price Index, Bureau of Labor Statistics. Price levels for high- and low-income households from Argente and Lee, "Cost of Living Inequality During the Great Recession," Kilts Center for Marketing at Chicago Booth, Nielsen Dataset Paper Series 1-032. Coffee prices from 2021 are authors' estimates.

DATA VISUALIZATION BY ANDREW GOODMAN-BACON , LISA CAMNER MCKAY, AND NINA LEO

FEDERAL RESERVE BANK OF MINNEAPOLIS

The Federal Reserve Bank of Minneapolis is home to the Opportunity & Inclusive Growth Institute and *For All* magazine. The Minneapolis Fed has a long history of research designed to inform policymakers. Some of the hallmark policy initiatives driven by pioneering research are studies around banks that are too big to fail and the powerful return on public investment in early childhood education. One of 12 Federal Reserve Banks, the Minneapolis Fed monitors the Federal Reserve's Ninth District economy to help determine the nation's monetary policy and strives to promote economic well-being.

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FINAL THOUGHT

“Living in a manufacturing hub during the financial crisis has underscored the effect that deep recessions have on everyday lives. And that is one reason I have dedicated much of my career to preventing the next financial crisis.”

Lisa D. Cook served as a member of the Institute Advisory Board until her confirmation to the Board of Governors of the Federal Reserve System in May 2022.

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