

IN-DEPTH: Monetary policy in an era of new economic tools

RESEARCH: Labor market uncertainty and the racial wealth gap

> DATA DIVE: The geography of unemployment across America

THE MAGAZINE OF THE OPPORTUNITY & INCLUSIVE GROWTH INSTITUTE



2 UPDATE

Institute staff share insights from Income Distributions and Dynamics in America with academic, government, and community groups.

3 SCHOLAR SPOTLIGHTS

Institute scholars research how public policies influence decision-making around family formation and education, childhood poverty, and future life outcomes.

6 "A BROAD-BASED AND INCLUSIVE GOAL"

Burgeoning research and state-of-the-art models bring the Fed new insights into inequality.

14 FEDAMENTALS

Economist David Wilcox on lessons from our economic past to help shape a resilient future.

20 WHAT'S IN A NAME WHEN THE JOB'S THE SAME? MONEY Domestic outsourcing is on the rise. When Mexico banned the practice, workers benefited while firms faced some pressures.

23 THE GROWING INCOME GAP FOR BLACK WORKERS

The Black-White earnings gap widened at most percentiles of the earnings distribution between 2009 and 2019.

26 RISKY EMPLOYMENT, SAFE ASSETS, AND THE RACIAL WEALTH GAP

How labor market uncertainty faced by Black workers contributes to the racial wealth gap.

28 DATA DIVE

What does the geography of unemployment look like across America?

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For All

The magazine of the Opportunity & Inclusive Growth Institute

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FROM THE DIRECTOR

BY ABIGAIL WOZNIAK



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hose of us who spend our days combing through data to understand the economy are often advised to get out from behind our desks and talk to "real people." The idea is that numbers can only tell so much of the story. To really understand how Americans experience the economy, we should ask them.

Not only is this common sense, it is the right relationship between scholar and subject. To assume that knowledge can only flow from scholars to the public is, frankly, arrogant and wrong. These are good instincts, and I don't disagree with them. But, what do we do with the stories people share with us? It turns out this is a hard question, as my own experience illustrates.

In 2006, I had a new Ph.D. and my first research job, and I wanted to return to an old question about the labor market: Why were employment

rates for Black men so much lower than for White men?

Listen well

I thought that talking to people facing this difficult labor market could suggest new places to look for an explanation. I organized a series of focus groups with

Black men who were looking for work and asked them to discuss the barriers they faced. One factor came up over and over again: Job seekers said that drug testing was a barrier to employment. This seemed like the kind of idea such conversations were designed to identify—an explanation that economists had thus far overlooked.

I went to work tracking down data to test this hypothesis, hoping it might identify a new route for lifting employment rates. Instead, the data showed that employment rates for Black men *rose* when states passed statutes encouraging drug testing by employers. This was true in many different states and over a long period of time. Moreover, the opposite was also true: When states limited drug testing, employment rates for Black men fell.

This was not what the conversations suggested I would find. But after some reflection (and more analysis), it's clear what happened. The people I talked to had indeed experienced drug testing as a barrier. But people who had found work were not in my conversations. Even if they had been, it's unlikely they would have known which hiring practices affected their employment.

This experience convinced me that talking to real people can be an important starting point for understanding the economy, but it cannot be our ending point. This is not because people are wrong about their experiences. It's because their experiences are necessarily only a part of the picture. To get the whole picture, you need ... well, data.

The Institute strives to be a place where our work responds to what we hear when we engage beyond the research community. Sometimes that means looking harder and finding support for the experiences we hear about in the data. Other times, it means coming back with insights that shed new light on those experiences without discounting them. Either way, the result of listening well is a conversation, not a lecture. \star

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The IDDA road show

Institute staff showcase novel features and insights from Income Distributions and Dynamics in America to academic, government, and community groups BY LISA CAMNER MCKAY

n our last issue, we introduced Income Distributions and Dynamics in America (IDDA), a powerful resource for advancing our understanding of incomes across America. The statistics in IDDA summarize extensive data from restricted IRS and Census Bureau records, providing a novel level of fidelity to income statistics for groups of earners defined by state, age, race and ethnicity, gender, and U.S.- or foreign-born status.

Since IDDA's launch, Institute economists and research associates have taken to the road, giving presentations about how IDDA was constructed, what statistics it contains, and the questions it can help answer. These presentations span academic conferences, government agencies, community organizations, and media outlets.

Reliable and granular data on diverse aspects of the economy are critical for policy evaluation. Such information helps summarize how Americans are faring economically, while long-term data can help identify how outcomes change with new policies and institutions. A number of U.S. government agencies help collect, report, and summarize such data. Institute Director Abigail Wozniak, Senior Economist Illenin Kondo, and Research Associate Natalie Gubbay have spoken with groups of economists and other staff at the Bureau of Economic Analysis, the Congressional Research Service, the Congressional Budget Office, and the Fed's Board of Governors to describe technical details about how the IDDA statistics were constructed and how the statistics can enrich analyses of income growth, mobility, and inequality.

One of the projects associated with IDDA is a research paper that explores income inequality and mobility patterns for different racial and ethnic groups. Wozniak presented the paper's methods and findings at the annual meetings of the American Social Science Association and the Society of Labor Economists. In addition, Wozniak presented to the National Bureau of Economic Research's Conference on Research in Income



and Wealth, while Kondo presented at the National Economic Association's Freedom and Justice conference and the University of Minnesota's Data Science Initiative. These venues offered an opportunity to show how the IDDA statistics can help advance academic research as well as compare statistics in IDDA with other research and data sources on income inequality and mobility.

The statistics in IDDA are also a valuable resource for media and community organizations that want to better understand the income experiences of the communities they serve. In May, the Star Tribune used IDDA in their reporting for a series of six in-depth articles that looked at income mobility for different groups of Minnesotans. In addition, Wozniak presented an overview of IDDA to Project for Pride in Living, a Minneapolis-based nonprofit that helps lower-income individuals achieve housing stability and career readiness. And Kondo gave an overview of IDDA to fellows at the African American Leadership Forum, which uses social science data and research to develop solutions that promote racial equity. "When it comes to racial disparities, IDDA statistics can help better understand how trends in Minnesota or other states differ from nationwide patterns," Kondo said, highlighting how the granularity in IDDA can help identify where gaps are larger or smaller. ★

SCHOLAR SPOTLIGHTS

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

BRENDEN TIMPE

Assistant Professor of Economics, University of Nebraska-Lincoln
MAKING HEADWAY ON HEAD START

The federal government began the Head Start program nearly 60 years ago to give young children born into poverty the tools needed to break out of poverty as adults.

Ever since, economists have been investigating whether the program has succeeded.

That investigation inspired research by Brenden Timpe, an Institute visiting scholar, and his colleagues. Using a dataset 10,000 times larger than what was previously available, they sought to provide a more definitive answer.

"The ultimate question of course is, Did this decrease poverty?" Timpe said. "For girls who went to Head Start, we found a pretty sizable decrease in poverty rates in adulthood. For boys, poverty didn't

change, but they were, in adulthood, much less likely to be receiving public assistance."

These results are surprising because Timpe's analysis focused on Head Start's early years, when administrators were still working out a lot of the kinks, including difficulty hiring high-quality teachers. "Our work suggests that even a program that's scaled up very quickly, when there are concerns about quality, even that seems to deliver some really meaningful benefits," he said.

Being able to answer big policy questions in this way was one reason Timpe was drawn to economics. Of special interest to him are public policies affecting children and families, because childhood is a time when these policies can have significant and long-lasting impact.

More recently, Timpe has investigated the source of the widening pay gap between men and women when they become parents. His and his co-authors' analysis of another large dataset found that women tend to stop working after giving birth and, upon returning to the job market, tend to end up at firms that pay them less. They were also likely to take part-time jobs and gravitate toward firms with shorter commutes or remote work. Men, however, tend to remain in the same firm longer and earn more over time.

These findings can be helpful to policymakers interested in reducing the pay gap, Timpe said.

The datasets used in both of Timpe's recent research projects are large, and that means they may be able to answer more questions about Head Start and the gender pay gap. As an Institute visiting scholar, Timpe hopes to learn what makes a local Head Start program effective and if Head Start programs have continued to help children in more recent times.

-Tu-Uyen Tran

"Even a program that's scaled up very quickly... seems to deliver some really meaningful benefits."

-Brenden Timpe



FALL 2024 / FOR ALL

NA'AMA SHENHAV

Assistant Professor, University of California, Berkeley

EMPOWERED WOMEN, BETTER OUTCOMES FOR KIDS

Before we can make any decisions of our own, our families make them for us. Families, and the choices they make for their kids, sit at the center of economist Na'ama Shenhav's career.

A child of Israeli immigrants "who prioritized education over everything else," Shenhav was drawn to economics as an undergrad at Berkeley by coursework that



analyzed how spouses bargain with each other over what to do with family resources. Splurge? Save? Spend on the children? As a graduate student at the University of California, Davis, she was struck that from the 1970s to the 1990s, when women's earnings moved closer to men's, families also invested substantially more in their children's

education. Economists tended to study those two trends separately, but Shenhav asked herself a different question: "To what degree are women's changing positions in households contributing to greater investments in kids?"

She started by studying the ways that families form. Her Ph.D. thesis showed that when women can earn higher wages, they choose more highly educated spouses, or, when that is not possible, they delay or even forego marriage. More recently, Shenhav's work studies how policies shape families' choices. For example, the women's suffrage movement made elected officials accountable to women, who tended to support public schooling and public health investments. Shenhav's research shows that women's political enfranchisement also raised children's educational attainment. She has also shown how public education and families combine to help children learn. Head Start preschool programs, for example, have smaller effects on achievement for children from smaller families to whom parents can devote more resources. Traditional estimates of Head Start's effects, however, skew toward larger families, missing those differences and slightly overstating the program's average effect.

Shenhav, who served until recently as the Institute's System affiliate from the San Francisco Fed, continues the same line of inquiry that started her research career in higher education by studying how higher education affects families, mothers, and children. Attending college raises a mother's wages, keeps her attached to better jobs even after her kids are born, and, echoing a theme of Shenhav's work, benefits the mother's children.

-Andrew Goodman-Bacon

LAURA GEE

Associate Professor of Economics, Tufts University
GIVING MATH PURPOSE AND VOICE

Visiting scholar Laura Gee works to connect real-world practitioners with her insights about gender differences in the labor market using communication skills she has forged in the classroom, in the conference hall, and on the stage.

Gee first discovered her love of problem-solving and math in high school, and an economics prerequisite at Barnard College made her path clear. "It just spoke to me in a way that no other discipline ever had," said Gee. "I always liked math, but I felt like it could be very abstract, and this

really made it, like, math with purpose."



As a behavioral economist, she is drawn to the questions that pick up where basic economic models fail to predict human behavior. "Where does it feel like people are making bad decisions from a very basic perspective, but that if we better understood what was driving their decisions, we would see that they're actually making the right

decision in the context that they're living in?"

Gee first focused her research on why people give to public goods like charities, schools, or parks. But when she became a mother, she said her research shifted to understanding the different experiences of men and women that she saw all around her.

In recent research, Gee and her co-authors, Kristy Buzard and Olga Stoddard (both also visiting scholars), documented in an experiment what many parents have observed first-hand: When an educator needed to get in touch with a two-parent, heterosexual household, even when told the father was more available, mothers were still contacted 26 percent of the time. Her research found that communication signals could shift some, but not all, of the contact from mothers to fathers, giving educators and administrators new information to consider when crafting policy.

Gee has also taken the stage at TEDxCambridge to talk about her research on ways to increase workforce diversity. In a partnership with LinkedIn, Gee found that providing a single, simple piece of information, the number of applicants for a job posting, could help firms successfully attract more female applicants. That TEDx talk led to more speaking opportunities outside of academia, including human resources conferences.

"I really prioritize not just giving seminars and talking with other economics departments but also talking to practitioners," said Gee. "I want the findings from this work to percolate out and make changes in the real world."

-Danielle Cabot

JOSEPH MULLINS

Assistant Professor of Economics, University of Minnesota

PUTTING CHILDREN IN THE PICTURE

In the U.S., welfare programs meant to alleviate poverty often have a goal of getting those they help back to work quickly and off the welfare rolls. That's supposed to save taxpayers money and make more workers available for the economy.

But taxpayers and workers aren't the only players involved. There are often young children with an enormous stake in the outcome. Many welfare recipients are single

mothers, whose poverty limits their access to high-quality child care.

Economist Joseph Mullins, a visiting scholar at the Institute, wondered what would happen to the government's cost-benefit analysis if it were to include those children and the workers they would grow up to be.

As a graduate student, Mullins said he considered focusing on labor mar-

ket mismatches. That changed after he attended a speech by Nobel laureate James Heckman, an economist famous for research on early childhood education. If we want to reduce income inequality, Mullins heard, evidence shows that the best interventions are those aimed at young children. It's simply easier to change the course of a person's life when they're starting out.

"By the end of that, I just thought nothing I was doing matters compared to this," he said. "What I'm really drawn to is the sense of possibility we get from results in that field."

Mullins' research on how welfare policies affect children's labor outcomes was born of that conviction.

In a recent paper, he developed a model in which mothers who received smaller welfare payments worked more and spent less time with their children. The reverse was true for mothers receiving larger payments. He paired the model with a decades-long series of household surveys that included details such as how much time children spent with their mothers and the children's aptitude test results.

Mullins found that children who spent more time with their mothers had better-developed cognitive and behavioral skills that yielded higher earnings in later life.

One conclusion was that, for mothers in very low-wage jobs with no access to high-quality child care, the most productive use of their time was to care for their children. The welfare payments they needed to do that were less than the value of the additional wages those children could earn as adults.

Mullins said he plans to prepare the paper for publication in his time at the Institute. He also plans for future work in the same vein. "In terms of policies that can mediate inequality, this is where a lot of the action is going to be," Mullins said.

-Tu-Uyen Tran

To reduce income inequality, Mullins heard, evidence shows that the best interventions are those aimed at young children.

2024–25 Institute Visiting Scholars

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

Orazio Attanasio

Cowles Professor of Economics Yale University

Kristy Buzard

Associate Professor of Economics Syracuse University

Pauline Carry

Postdoctoral Fellow Princeton University

Taha Choukhmane

Assistant Professor of Finance Massachusetts Institute of Technology Sloan School of Management

Angela Crema

Postdoctoral Associate Broad Center at Yale School of Management

Eduardo Dávila

Assistant Professor of Economics Yale University

Laura Gee

Associate Professor of Economics Tufts University

Matthew Harvey

Assistant Professor of Economics University of Washington Tacoma

Chi Hyun Kim

Postdoctoral Researcher University of Bonn

Lucie Lebeau

Research Economist Federal Reserve Bank of Dallas

Gary Lyn

Senior Economist Board of Governors of the Federal Reserve System

Lukas Mann

Assistant Professor of Economics Arizona State University

Joseph Mullins

Assistant Professor of Economics University of Minnesota

Yewande Olapade

Economist in Supervision, Regulation, and Credit Federal Reserve Bank of Minneapolis

Vito Peragine

Professor of Economics University of Bari

Hugo Reichardt

Junior Researcher (Assistant Professor)
Centre de Recerca en Economia Internacional

Olga Stoddard

Associate Professor of Economics Brigham Young University

Fatou Thioune

Assistant Professor of Economics Dickinson College

Brenden Timpe

Assistant Professor of Economics University of Nebraska-Lincoln



KEILAN CRAWFORD PHOTO BY JEFF HORWICH ALL OTHERS ON PAGES 6-13: GETTY AND ISTOCK



Burgeoning research and state-of-the-art models bring the Fed new insights into inequality

By Jeff Horwich





Keilan Crawford is not the median American. But millions of Americans are like Keilan Crawford.

Crawford is 36 years old and a father of two from Robbins-dale, Minnesota. On the afternoon we met this spring, he'd woken as usual at 4:00 a.m. for the 90-minute bus ride to the most promising job he's ever had—earning \$25 an hour as a facility maintenance helper for the State of Minnesota.

"I knew there was more out there for me," Crawford said, over coffee, after a shift at his new job. "I just didn't know



the route for how to get there." His father was often absent during Crawford's childhood in Chicago. His mother battled addiction. He left home at 15 and later dropped out of high school. Crawford spent his 20s, in the aftermath of the Great Recession, working fast food and other short-term jobs.

"I think, honestly, I did fall into a little, slight depression—you know, with how life was taking me at the time." Crawford is grateful today for good choices that avoided a criminal record, which makes things even more difficult for many men he knows. "But it's still hard to find a job—a decent-paying job, you know—

with no background, with no kind of education." The births of his children inspired him to finally forge a long-term plan, and he committed to a building maintenance training program run by a local nonprofit, Project for Pride in Living.

Crawford embodies the complex ways that monetary policy affects the lives of different people differently. On a relatively low income, he struggles with higher prices. But he says lower interest rates—and a raise in pay—could help him buy a car and transform his exhausting daily routine. "I have a parttime job bringing in extra money," Crawford said. "But that's still not nearly enough, I feel like, to get a car loan."

Monetary policymaking rests fundamentally on aggregates and averages. For most of the Fed's history, it could hardly have been otherwise, given the data and the economic tools available. In recent years, however, modern computing power, a critical mass of reliable data on diverse households, and state-of-the-art models increasingly empower economists to understand how monetary decisions transmit across our varied economy.

Fed policymakers can increasingly ask and understand how the core act of raising or lowering a policy interest rate will ripple out not just to the median worker or consumer, but to an American like Keilan Crawford. Asking the question, of course, is just the first stage in reaching an answer. Like much in economics, answers will come gradually with data, deliberation, and a healthy debate.

New insights in the age of HANK

The technology and the philosophy of central banking are evolving together. The new tools are coming into their own as officials implement the notion of maximum employment as a "broad-based and inclusive goal," the language adopted in the 2020 monetary policy framework. At the same time, the recent episode of inflation—the other half of the Fed's "dual

mandate"—has launched a wave of research into how different groups of Americans experience changing prices.

Since at least the 1970s, macroeconomists have concerned themselves with "optimal" monetary policy. Until recent years, that generally meant optimal for a "representative agent." The limits of mathematical models and computing power typically meant policy was assessed for its impact on a hypothetical amalgam of everyone in the economy. So-called "representative agent new Keynesian" (RANK) models explored how policy changes propagate through an economy with imperfections (that's the "new Keynesian" part), but where household and worker differences were ignored.

In recent years, economists have worked to technically incorporate an obvious point that proved thorny in practice: People are different—"heterogeneous," in the language of the social sciences. "It has taken many years to make progress on this," said Eduardo Dávila, a Yale economist and current Institute visiting scholar. "There was earlier work on heterogeneity and there was earlier new Keynesian work. The last 10 or 15 years have been about trying to put both together." The result is today's era of "heterogeneous agent new Keynesian" (HANK) models.

Economists still need to make choices about which and how many forms of variation to include. "These models become complicated because you have this whole cross-section of people—you have to keep track of everybody in the economy," Dávila said. But "when you look at who is better off, who is worse off, how policy impacts different people, absolutely there is no comparison" to previous methods. "Predictions are completely different once you start to put in heterogeneity."

Dávila says something notable happens to central banks when economists introduce agents with a range of incomes or wealth into a typical HANK model: Those hypothetical monetary policymakers in the model are naturally and rationally inclined to give more weight to poor people than rich ones.



The reason is rooted in the diminishing "marginal utility of consumption." In plain English: People value economic improvement (or feel economic pain) more when they have fewer resources to begin with. Relatedly, people with fewer resources are more likely to spend back into the economy a larger share of the economic gains they experience (in economic terms, a higher "marginal propensity to consume"). Under a typical "utilitarian" assumption—that policymakers should seek the greatest good for the most people—Dávila says a central banker in a HANK model "is going to have a desire to redistribute."

In Dávila's recent research, however, this desire is the central bank's undoing. Dávila finds (with Andreas Schaab of the University of California, Berkeley) that as the central bank leans toward lower interest rates to help low-income, higher-debt households, all actors in the economy adjust their expectations of future inflation. In the long run, this undermines price stability.

"Even if we acknowledge that we want to help the poor, the worst thing that can happen in our model is to have this massive inflation," Dávila said. "That's what's going to happen in the end."

In their model, the best solution is for a central bank to avoid such short-run discretion by tying its hands in some fashion—such as by committing to an economy-wide target. "The current [Federal Reserve] mandates based on aggregates seem to have desirable properties, in the sense that they do not introduce other motives, these distributional motives, which can distort inflation." Dávila said.

But Dávila cautions that it is early days for HANK models, and his insights could change. "This is really a topic that deserves much, much more exploration," he said. "This is like a complete frontier area."

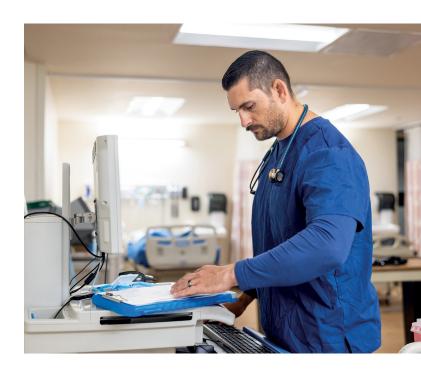
Exploring different targets

Within the Federal Reserve System, Makoto Nakajima is among the HANK-fluent economists working most heavily along that frontier. After joining the Philadelphia Fed in 2008, Nakajima sharpened his modeling skills as he observed the growing interest in inclusive growth.

"I thought that one way I can contribute to the policy discussion at the Fed is to think about how monetary policy affects especially those less privileged, or people facing economic hardship," said Nakajima, a member of the Institute's System Affiliates Board and now head of the Philadelphia Fed's monetary and macroeconomics section. "They might be affected dif-

The limits of mathematical models and computing power typically meant policy was assessed for its impact on a hypothetical amalgam of everyone in the economy. In recent years, economists have worked to incorporate an obvious point that proved thorny in

practice: **PEOPLE ARE DIFFERENT**.





"When you look at WHO IS BETTER OFF, WHO IS WORSE OFF,

how policy impacts different people.... Predictions are completely different once you start to put in heterogeneity."

Eduardo Dávila, Yale University

ferently than the average household, which is what traditional macroeconomic and monetary theory mainly captures."

Nakajima has written on how the effects of monetary policy differ by age, income, wealth, and homeownership. And in a 2023 Institute working paper, he uses HANK modeling to explore the outcomes if monetary policymakers targeted the Black unemployment rate in the U.S. rather than the aggregate. "The Black unemployment rate tends to be twice as high as the White unemployment rate, and that ratio kind of stays the same over the business cycle," said Nakajima. Black-led households face higher risk of job loss and are more likely to live hand-to-mouth. "When they lose a job, they are less likely to be able to rely on their bank account or savings to temporarily use to support expenditures to sustain their standard of living."

The idea of focusing on the Black unemployment rate was a passionate topic for William Spriggs, the Howard University and AFL-CIO economist and advisor to the Institute who died in 2023. Spriggs emphasized that Black employment recovers more slowly in expansions and suffers more in contractions. In this view, monetary policy reacting to median or aggregate data could consistently leave Black Americans on the wrong side of the cycle.

In Nakajima's research, he finds that if monetary policy-makers wanted to prioritize labor market outcomes of Black workers, those policymakers would respond 80 percent more strongly to changes in the average unemployment rate than what they have been doing. Reducing the Black-White employment gap comes at the potential price of modestly higher inflation, but in Nakajima's model the trade-off can be worthwhile if the goal is to smooth out fluctuations of Black workers' earnings.

Recent empirical research by economists at the New York Fed explores the flip side: How do rate *increases* by the Fed play out in financially distressed communities? Looking first at consumer credit, economists Rajashri Chakrabarti and Maxim Pinkovskiy find that rate hikes bite more severely in U.S. counties with higher debt-to-income ratios. Increases in the federal funds rate since the year 2000 are followed in these places by lower auto loan and mortgage originations, higher credit card balances, and higher shares of delinquency, bankruptcy, and foreclosure.

The economists further find that heavily Black counties experienced even higher rates of these adverse consequences. Black communities especially experienced statistically significant differences in credit delinquencies and lower credit scores for years after the Fed raised its policy rate. In the labor market, the economists find Black, Hispanic, and female workers experienced greater and more persistent declines in employment in the months following an interest rate increase.

These credit and labor market impacts are not purely a result of Fed actions, of course. They are, said Chakrabarti at a recent Fed conference, "an interaction with pre-existing frictions [and] inequities."

Beware unintended consequences

What if monetary action helps struggling households, but only at the cost of wider inequality? This is the cautionary implication of research from Alina Bartscher, Moritz Kuhn, Moritz Schularick, and Paul Wachtel, published as an Institute working paper and later in final form by Brookings. The economists undertake a statistical analysis to isolate the effects of easing monetary policy (lowering interest rates) on households headed by individuals of different races.

They find that lower rates lead to a positive, although modest, increase in employment outcomes for Black-led households. However, they also find a much larger gain for White-led households through a different channel, as looser policy boosts the value of housing and financial assets (which White households hold more of). While the average Black household sees a \$3,300 increase in wealth five years after a 1 percentage point decrease in interest rates, the average White household gains almost \$19,000. The conundrum, they write: "Monetary accommodation widens racial wealth inequality as it reduces income inequality."

This finding invites questions. Duke economist and Institute advisor Willian "Sandy" Darity Jr., in a formal response to the paper, pointed out that while the researchers study incrementally lowering interest rates in a calm economic environment, the effect might be far different under other circumstances and from starker Fed actions. "When you look at restrictive monetary policy, particularly when you have massive increases in interest rates produced by Fed policy, then I think you are really hard-pressed to say that the

employment effects are minor in comparison with the asset effects," Darity reiterated in an interview for this article.

Another point: The change in value of a stock portfolio cannot necessarily be compared dollar-for-dollar with the effect of gaining, keeping, or losing a job for a low-income family. "If lower-income households lose, let's say, 10 percent of their income, that's relatively small from the macroeconomic perspective, because their income is lower from the beginning," said Nakajima of the Philadelphia Fed. "But if you don't have any savings, losing 10 percent of your income could have a very significant effect. ... The pain that this household is suffering is, I think, in a sense much bigger than a dollar amount that you can easily compute."

Other research cautions against reducing the effects of monetary policy to a binary trade-off between poor and rich households. Research economists from the central bank of Sweden, for example, propose that effects of monetary policy are "U-shaped": Monetary easing boosts outcomes for those at the extremes—albeit through different forces—while doing less for households in the middle. Recent research from New York Fed economists finds a similar pattern for monetary contraction, with the hardest effects felt on the extremes.

The Philadelphia Fed's Makoto Nakajima has written on how THE EFFECTS OF MONETARY POLICY DIFFER BY AGE, INCOME, WEALTH, AND HOMEOWNERSHIP. And in a 2023 Institute working paper, he explores the outcomes if the central bank targeted the Black unemployment rate.





While the average Black household sees a \$3,300 increase in wealth five years after a 1 percentage point decrease in interest rates, the economists find the average White household gains almost \$19,000.

THE CONUNDRUM: "Monetary accommodation widens racial wealth inequality as it reduces income inequality."

Evolving models, evolving debate

It is possible that state-of-the-art HANK models lead right back to the same actions policymakers would take without them. "Roughly speaking, low-income households benefit from a tighter labor market, middle-class households benefit from lower mortgage rates, and wealthy households benefit from capital gains on assets" when monetary policy is loosened, write Minneapolis Fed Senior Research Economist Alisdair McKay and MIT economist Christian Wolf in the *Journal of Economic Perspectives*. They review recent findings and conduct their own analysis of consumption responses to monetary easing. Although the channels of impact are different, they find that the net change in consumption is similar across households of all wealth levels.

Even for a central bank that takes account of income and wealth redistribution, "appropriate policy is unlikely to differ too much from the optimal policy of a central bank that is solely focused on macroeconomic goals," they write. They estimate the scale of monetary policy actions to meaningfully reduce inequality would need to be extremely large. "Such large changes would likely be costly in terms of other policy goals (notably aggregate output and inflation stabilization)."

Economists Greg Kaplan, Benjamin Moll, and Giovanni Violante are credited with coining the HANK acronym in a 2018 paper. Not surprisingly, they take an ongoing interest in how heterogeneous models might alter the practice of central banking. "Studies of optimal monetary and fiscal policy in HANK models agree that the benefits of aggregate stabilization are dwarfed by the gains from directly alleviating hardship," they wrote recently for the International Monetary Fund.

"Optimal policies in HANK models almost always favor redistributing toward hand-to-mouth households in down-turns," they continued. "One may be tempted to read this as endorsement of using monetary policy to share prosperity and mitigate adversities. But monetary policy is a blunt tool for redistribution or insurance. HANK models tell us that fiscal

Monetary policy needs to act "with the understanding of all these effects that monetary policy has, and all these heterogeneous impacts.... THOSE EFFECTS ARE THERE."

Adrien Auclert, Stanford University

policy is likely better suited for this task because it can be targeted more precisely to those in need of support."

For others, this is a less-than-satisfying place to land. The Fed's mandate "was set at a time when we didn't really realize all these collateral effects of monetary policy—that it has all these redistributive effects," said Stanford economist Adrien Auclert, a HANK modeler whose research has explained the channels through which monetary actions play out across varied households.

Monetary policy needs to act "with the understanding of all these effects that monetary policy has, and all these heterogeneous impacts," said Auclert, a former Institute visiting scholar. "You cannot claim that those things don't exist—or you can no longer claim that. Those effects are there. You can have a debate over the extent to which it matters for the aggregate effects of policy."

Auclert's perception is that HANK models are just now reaching a stage where policymakers can use them routinely. "It's amazing just how much those models have been making progress," Auclert said. "I think over time as the modelers refine the tools, they could become of more direct use in policy decisions."

Deeper data, challenging choices

With the required five-year lag, we can see the official "Tealbook" briefings that Fed policymakers receive before each meeting of the Federal Open Market Committee (FOMC). The latest available, from December 2018, includes more than 200 figures and tables. Two of them, at the bottom of page 33, show unemployment and labor force participation for Asian, Black, Hispanic, and White workers. Across 168 pages, they were the only evident nod to "heterogeneity."

Today's Tealbook briefings will become public in 2029. But like the wider world over the past five years, it seems likely the briefings and the conversation around the FOMC table have changed. For example, the Fed's latest biannual *Monetary Policy Report* to Congress now dissects the labor market by race and ethnicity, gender, education, age, and income.

Back in St. Paul, Keilan Crawford is focused on keeping what he's achieved, affording daily life, and getting ahead. Our coffee break is a short pause from his packed routine: Long, physical days of building maintenance followed by night school, working toward an HVAC degree. When we met, Crawford had just applied for a full-time building engineer

position, with a potential raise. It might be enough, he thinks, to consider a cheap used car.

Since monetary policymakers have been thinking more about workers like him, I invited him to think for a moment about them. How might he weigh things from the policy seat? Maintaining higher interest rates can help keep prices in check, but maybe slow the job market. Or do we drop interest rates—putting a car loan in reach but risking higher inflation?

He thinks hard about what he'd prefer. Ultimately, Crawford laughs and shakes his head. "Honestly, like, the working man is going to suffer no matter which way you go with that."

Inside and outside of the Fed, the conversation is underway—and the tools are coming into their own—to see if policymakers can find a more satisfying answer. *









Between 2001 and 2018, Wilcox regularly attended Federal Open Market Committee meetings. His role at many of these meetings was to brief the Committee on domestic economic conditions.

BOARD OF GOVERNORS

But neither the intimidating mail nor the intimidating state of the U.S. economy deterred Wilcox. Rather, the intensity of the moment stoked his interest to learn more. After earning his Ph.D. in economics from MIT, he chose to return to the Board, his professional home for the next 30 years. He retired from the Board in 2018 as director of the Division of Research and Statistics. Wilcox's time at the Board, followed by affiliations with Bloomberg Economics and the Peterson Institute for International Economics, have given him a close-up view of the economic ups and downs the United States has experienced. From this vantage, Wilcox has synthesized keen observations about the role of the Fed and which lessons from the past will help promote a prosperous future.

Wilcox served as an inaugural member of the Institute's advisory board, stepping down at the end of 2023 after six years of service. We spoke with him recently about the unusual economic events of the past four years, how labor market conditions affect different groups of workers, and why the stakes of increasing diversity of representation and thought in the economics profession are high.

INFLATION DRAGONS

What was it about your experience as a research assistant at the Board that made you decide to pursue a Ph.D. in economics?

By chance, I served as an RA at the Board during the height of Paul Volcker's battle against inflation. The economy was really buckling under the weight of punishingly high interest rates, and the concern among the wise people that I had the privilege to work with was palpable. Their ded-

ication and brilliance, combined with the importance of the issues they were wrestling with, convinced me that a career in economics would be an excellent choice for me.

One idea that drove Paul Volcker was the conviction that central banks actually have the means to control inflation. That idea was not by any means universally shared. Volcker's predecessor by two as Chair of the Federal Reserve was a widely regarded, esteemed economist named Arthur Burns. Burns convinced himself that a central bank operating in a democratic society lacked the means to bring inflation under control, that the corrective measures would be so painful that society would rebel and bring an end to the independent central bank as an institution. Burns was convinced that he was powerless as Chair of the Federal Reserve to end the inflation. In other words, it wasn't his fault.

Volcker didn't believe that for a moment. And as we now know, he was right: By raising interest rates, the Fed was able to bring inflation down. While the remedy was tremendously painful, Volcker deeply believed that the economy functioned better when inflation wasn't a major consideration for households or businesses, and he believed the pain that would be required to bring it down would be a cost worth paying, because it would pay dividends many years into the future.

The way you describe the public's reaction to what was happening in the 1980s brings to mind news stories of the past year, which have reported that people are angry both at high prices and at high borrowing costs. Do you see parallels between the situation in the 1980s and the situation today?

The anger at the Fed today is real and it's understandable. People experience price increases as money that has been taken away from them. Moreover, most people don't connect the inflation that they're experiencing at the grocery store or the gas pump to the fact that they may have gotten a bigger pay increase in the past couple of years than they would have in the absence of the inflation.

Without minimizing the anger or the pain today, I would assert that it was so much worse in the early 1980s. Today a remarkable fact of the economic situation is that the labor market remains very strong, and that simply was not the case 40 years ago when Volcker and his colleagues on the FOMC [Federal Open Market Committee] were bringing inflation down.

The lesson I think we'll all take away from the past 40 years—including the COVID era—is that it's extremely important to keep inflation low and stable. We see time and again how bitterly angry the American public becomes when inflation gets out of control—and they're not wrong to be angry. Job one for the Federal Reserve System right now is to slay the inflation dragon and do it decisively, well and truly.

ECONOMIC DERANGEMENT

The past four years have been particularly unusual for the U.S. economy. What other lessons do you feel you have learned about the economy, and are there other lessons the Fed should be learning?

A lesson that strikes me as most important about the past four years is that the economy sometimes departs from its normal behavior and goes into a mode of economic derangement. It doesn't operate according to the normal patterns of behavior that we grow used to in the much more frequent and long-lived periods of relative tranquility.

Let me give an example of that. In normal times, if you want to bring inflation down, you'll almost surely have to push unemployment way up, just like Volcker did. You need to weaken the pricing power of companies, so they don't have the ability to push price increases onto their customers. You also need to erode the bargaining power of workers, reducing

"In a hot labor market, employers suddenly find it much more costly to indulge a predilection they might have for discriminating by gender, race or ethnicity, or other characteristics unrelated to a person's ability to do the job."

their ability to demand wage increases, which would probably be passed on into further price increases.

But think about what we've seen since roughly the middle of 2022. We've seen a dramatic reduction in inflation, and the labor market has remained strong. The unemployment rate has edged up only a little, and it remains low by historical standards.

What I draw from this is that everybody who cares about understanding the American economy at a deep level needs to be on the lookout for periods when the economy stops behaving normally and the conventional models that usually have decent predictive accuracy need to be set aside. They don't need to be junked. They just need to be set aside because there will come a time when it's appropriate to reach for those models, bring them back off the shelf and ask, Gee, are we back in normal times?

One of the next key challenges for the Federal Reserve and lots of other people will be to have a keen eye out for when the economy has resumed behaving in a more normal manner. But this basic phenomenon that economies can "phase shift" from normal mode to abnormal mode—that's one of my key takeaways.

You pointed out that the U.S. has had a strong labor market following the post-COVID recession. You've studied how different groups of workers are affected when labor markets are particularly strong versus weak. What does that research show?

Research on the benefits of a tight labor market dates back at least to the work of economist Arthur Okun. The main reason why tight labor markets are so beneficial is that they improve the bargaining power of workers, and workers in the United States are in a pretty weak position. We don't have strong collective bargaining. The role of unions has declined a lot. In weak labor markets, employers are really in the driver's seat.

In a hot labor market, all of a sudden it turns out that employers need to compete for workers on the basis of better wages, more expansive benefits, maybe better hours, more predictable hours. In a hot labor market, employers suddenly find it much more costly to indulge a predilection they might have for discriminating by gender, race or ethnicity, or other characteristics unrelated to a person's ability to do the job. Suddenly in a hot labor market, many employers say to themselves "I need qualified workers. I don't care if they look like me. I care that they're capable of performing the job responsibilities and doing them well." Workers suddenly can become choosers among various different opportunities. A hot labor market of course is beneficial to people up the income ladder, but it's disproportionately beneficial to people further down the economic ladder.

The sad fact of the story, however, is that when labor markets weaken again, many of those benefits that briefly accrued to these disadvantaged groups, those benefits erode. It's not permanent. What is best for workers is a sustained period of strong labor markets. That's the main mechanism.

THE TYRANNY OF COMPOUND ARITHMETIC

Earlier this year, you wrote an article for Bloomberg about the trajectory of U.S. government debt. In the article, you expressed concern that the Congressional Budget Office's projections, which aren't exactly rosy, may actually be too optimistic, and that government debt may reach 120 percent of GDP within the next 10 years. What is the risk to the U.S. economy if government debt continues its climb?

Well, the risk is that we'll be pumping too much federal debt into financial markets and that at some point, investors will conclude the U.S. Treasury may not be good for its promises to repay in full. Until now, the credit worthiness of the U.S. Treasury has been essentially unquestioned, and that's likely to remain the case in the near future. There is an issue on the horizon, however, or really, an aggregation of issues. With an aging population, we'll have a larger percentage of our population receiving Social Security and Medicare benefits. With a more hostile geopolitical environment, we're likely to spend more on defense rather than less. With a divided government and an environment in which taxes are never popular, Congress is especially gridlocked in enacting any new revenues. With all that, the risk is that the gap between spending and revenues will remain wide and may grow even wider.

That risk is made much worse by the possibility that we may not return to the environment of low interest rates that prevailed before COVID. Interest rates are incredibly important in this space because interest rates are the price of borrowing, so when rates are low, borrowing is cheap. When rates are high"Economic analysis is deeply enriched when we have people coming at difficult problems from many different perspectives, ideally from all the different perspectives that are represented in society as a whole."

er, borrowing is no longer on sale. The tyranny of compound arithmetic is such that higher rates today become like a snowball rolling down a hill, and eventually it creates an avalanche.

The fear is that at some point financial markets will look at this combination of circumstances and conclude this situation simply cannot be sustained, and 10 years from now, there is going to be too much U.S. Treasury debt on the market and investors will have a rebellion. But the forward-looking nature of financial markets is such that if they conclude there will be a rebellion 10 years from now, the chances are very high there will be a rebellion today. That's a recipe for a government debt crisis.

The way out is that policymakers need to recognize that the situation is very serious. In this case, hope is not a strategy. The probability of the U.S. fiscal situation ending up on a sustainable trajectory just by waiting for enough good luck to occur is a very implausible strategy.

You've described this in a very measured way, but at the same time this feels very serious. Is this something that keeps you up at night?

Do I lose sleep over this? The answer is no. Historically, the country has always risen to meet difficult challenges and there's no reason why this challenge can't be met. So I don't think it's a reason for unbounded concern today. I do think it's a reason for focus. It's a reason for politicians to grit their teeth and recognize that the situation is a serious one. As out of style as it may be in today's day and age, there's going to have to



During his tenure as an Institute advisor, Wilcox brought expertise and mentorship to many Institute events, including the 2023 Institute Research Conference pictured here.

CAROLINE YANG FOR THE MINNEAPOLIS FED

be some give from both sides. The overwhelming likelihood is that revenues are going to have to be raised.

On the other hand, it's also the case that we're demanding too much from our government at the moment, and so there's going to have to be some give on the spending side as well, and there simply isn't enough spending of the kind that most people think they could do without, like national parks or foreign aid, that would come close to solving this problem. The actions that would realistically solve this problem are painful, but they'll only become more so the longer we wait to address the situation.

OPENING THE DOORS TO THE ECONOMICS PROFESSION

You've been an economist for 35 years. How has the economics profession evolved in that time—or failed to evolve?

For too long, since I've been involved in economics and for a long time before that, there's been a profound misunder-standing about what economics is and who is supposed to be an economist. Too many people think that economics is only about investing in stocks or bonds, that sort of thing. A much more accurate view is that economics is about the equitable and efficient distribution of health care. It's about facilitating the transition away from carbon fuels to renewable energy in an efficient and sufficiently timely manner that we prevent the global environment from imploding. Economics is about understanding what makes certain cities and certain neighborhoods vibrant places to live, recreate, and work, and what

makes some cities and neighborhoods, unfortunately, models of failure. Economics is about tough choices between generations and how much we should spend to support the elderly versus how much we should spend to invest in the well-being and creative potential of the youngest generations. Economics is about the factors that influence our daily well-being and the well-being of every member of society, and therefore it's vastly too important to be left only to people who look like me: a White male from a privileged background. Economic analysis is deeply enriched when we have people coming at difficult problems from many different perspectives, ideally from all the different perspectives that are represented in society as a whole.

An interesting aspect of economics is that it's different from particle physics, it's different from algebra or geometry, in that I really don't think there is a *male* version of algebra or geometry or a *female* version of algebra or geometry. Regardless of your personal characteristics, the theorems are the same and the basic approach to proving those theorems is the same.

Economics is not like that. The problems that we choose to study, the papers that we publish in our journals, the professors that we choose to promote to the rank of associate professor and full professor and department chair—all of those choices depend critically on our assessment of what the most important problems are.

The sad fact of the matter is that we've made much too little progress in opening wide the doors of economics. The stakes are high because the functioning of society depends on getting this right, and we're still a long way from getting it right. ★

RESEARCH DIGESTS

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

What's in a name when the job's the same? Money

Domestic outsourcing is on the rise. When Mexico banned the practice, workers benefited while firms faced some pressures.

BY LISA CAMNER MCKAY

oes the company name on your paycheck matter? Most of us probably think that how much we make is a function of the *type* of work we do: Teacher or doctor, bus driver or airline pilot. And that certainly matters. But economic research shows that the firm you work for matters too.

The rise of domestic outsourcing—that is, when a company obtains employees through a subcontracting firm rather than hiring the workers directly—is a defining feature of many economies over the past 20 years, including the United States. No single authoritative source tracks outsourced workers, but one careful study found that the share of outsourced workers in cleaning, logistics, and security in the U.S. more than doubled between 1950 and 2015.

Outsourcing is prevalent in high- and low-paying jobs, for support functions as well as companies' core activities. For instance, Google garnered bad press in 2021 for its "two-tier work force of generously compensated full-time employees and less expensive temps and contractors," while health care workers employed by Kaiser Permanente went on strike in 2023 in part due to the health care giant's outsourcing of critical health care duties.

"Understanding labor arrangements like gig work and domestic outsourcing can yield important cues about the future of work and how regulations might affect workers' compensation and

ILLUSTRATIONS BY



rights," said Institute Senior Economist Illenin Kondo, who studies outsourcing policy in a new Institute working paper.

Same job, less pay

As domestic outsourcing has increased in prevalence, so too have the economic studies about the practice. Research analyzing the effect of outsourcing on wages in three different countries—the United States, France, Germany—all concluded that outsourced workers earn less than workers doing the same jobs but who have not been outsourced.

One reason companies use domestic outsourcing, then, is as a strategy to

minimize labor costs and maximize profits. This motivation seems particularly strong in Mexico. Kondo and his co-authors focus specifically on Mexico's manufacturing sector, which made up almost one-quarter of the country's GDP in 2023. The share of outsourced labor in manufacturing ballooned from 5 to 20 percent between 2000 and 2020.

As in the United States, Mexican firms owe payroll taxes on their employees, which are set as a percent of the employee's wages. Unlike in the United States, firms are also required by law to share 10 percent of their profits with their employees. Add in the right to unionize

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After Mexico banned outsourcing, the average wage for manufacturing workers increased by 35 percent.

and the required three months' severance, and the bottom line is: In Mexico, employees are expensive.

In April 2021, the Mexican government passed a law requiring companies to directly hire all employees engaged in a company's core business operations, with heavy penalties for violators. The new law quickly had its intended effect. From its high above 20 percent in 2019, the share of the manufacturing workforce that was outsourced dropped to around 2.1 percent in 2023.

Labor moves in, wages go up

Moving from staffing agency to manufacturing firm would not be much of a victory for workers in Mexico's manufacturing sector if wages stagnated or many workers lost their jobs. Happily for workers, the economists find that wages went up after the new law—by a lot. The average wage for manufacturing workers increased by about 35 percent relative to average wages before the new law. Firms' social security payments, benefits payments, and profit-sharing payments all went up, too. The reform appears to have brought more people into a higher-paying part of the economy.

In addition, the economists find that neither employment levels nor other inputs to the production process, such as purchases of raw materials or energy, declined after workers were "insourced." With these inputs holding steady, so too did manufacturing firms' output.

The ban did lead to a few negative outcomes for firms. After the reform, the probability that a firm would close shop increased by 1 percentage point. In addition, firms' capital expenditures dropped

2.8 percent. These impacts appear fairly small relative to the impact on wages. However, the reform is still relatively new, and it will be worth studying how the economic outcomes evolve over time.

Domestic outsourcing and the changing American workplace

While the economic environments of Mexico and the United States differ, there are indications that labor is on the back foot in both countries. For instance, in the U.S. the share of economic output that goes to workers in the form of wages has been falling since the 1980s, while the share that goes to owners of capital has increased. According to one estimate, in 2022, labor's share of income in the U.S. hit its lowest level since the Great Depression.

Another workplace trend that economists have observed is that workers are being "sorted" by wages: More and more, higher-wage and lower-wage workers are employed at different companies. This trend affects what workers are paid because some firms are simply more prestigious and productive than others, and these profits are shared with employees. "When janitors work at Goldman Sachs as Goldman Sachs employees, they tend to share in the firm's huge productivity benefits," former Institute advisor Lawrence Katz said in a 2017 interview. "But if they work for Joe's Janitorial Services, they no longer share in those rents."

Union-negotiated wages and benefit packages may also help explain why some workers are paid more for the same job. This was part of the story behind wage disputes at Harvard in the early 2000s, where Katz has been a professor of eco-

nomics since 1986. "The driving force was that Harvard had been contracting out a lot of janitorial work, security guards, food services. Part of that was to undercut the union wage and to get out of paying the same benefits that were really expensive," Katz said in the 2017 interview.

All these factors affect the balance of power between workers and their employers. "To me, all this points ultimately to which workers are included and which workers are not included," Kondo said about the role of outsourcing. "Does this boundary between staff and nonstaff, between insourced and outsourced, does it potentially change the bargaining position of the worker vis-a-vis the firm?"

While outsourcing appears to have some harmful effects for workers, it is not wholly black and white. According to Katz, many temporary help agency and contract company workers appreciate the flexibility to choose their work and their schedule. Some may even see their wages increase. On the firm side, outsourcing may allow firms to respond more quickly and flexibly to changes in demand for their products or services, which could help the economy recover following recessions, a benefit for workers too.

Understanding the various factors that lead to outsourcing as well as the diverse effects on employees will help inform policies that promote a strong, inclusive labor market for firms and workers. ★

TAKEAWAYS 77

- Research finds outsourced workers earn less than nonoutsourced workers doing same jobs
- Ban on domestic outsourcing in Mexico increased wages without decreasing employment or output
- Domestic outsourcing may influence bargaining power between firms and workers

The growing income gap for Black workers

The Black-White earnings gap widened at most percentiles of the earnings distribution between 2009 and 2019

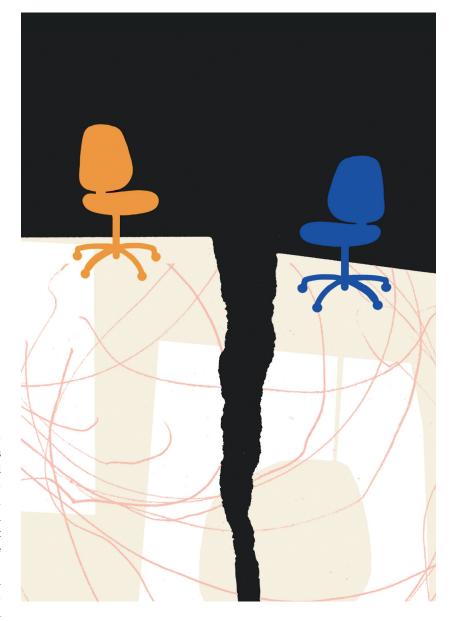
BY NATALIE GUBBAY AND LISA CAMNER MCKAY

ince the 1980s, income inequality in America has increased. This overarching trend has been well established, using different measures of income and inequality. Even the "inequality wars" that have erupted between groups of economists concur that inequality has increased, though they disagree over how much.

But until recently, we have lacked a solid understanding of whether the broad patterns of inequality that have played out in the country as a whole hold for subgroups of Americans. The problem was one of data: Most income inequality research uses survey data, which often do not have enough respondents to accurately describe some racial and ethnic groups, particularly at the top of the earnings distribution—a group whose fortunes are key to understanding income inequality.

Income Distributions and Dynamics in America (IDDA) offers detailed data that can be used to assess income distributions and income mobility for groups of Americans defined by state, age bracket, gender, race and ethnicity, and U.S.-born status, as well as for intersections of these demographic characteristics.

Using the statistics in IDDA, an Institute working paper from Institute economists Abi-



gail Wozniak, Illenin Kondo, and Natalie Gubbay, with co-authors Brandon Hawkins, Kevin Rinz, and John Voorheis, takes a new look at the income experiences of Black workers between 2005 and 2019, the period covered in IDDA. Black Americans have long faced obstacles to opportunity and inclusion in the labor force. When applying for jobs, they are less likely than White applicants with identical resumes to be called for a job interview. Their unemployment rate has exceeded the White unemployment rate every month since the U.S. first collected such data, in 1972. They are often the first fired when the economy starts to weaken.

Given these facts, how have earnings for Black Americans fared in the last decade and a half?

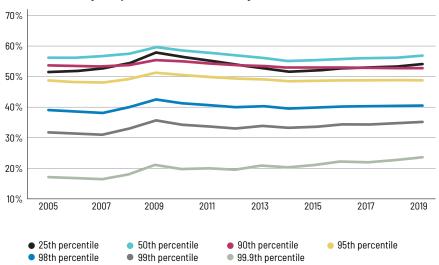
STUDY AUTHORS

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1: THE BLACK-WHITE EARNINGS GAP, 2005-2019

Black male earnings compared with White male earnings 70% 60% 40% 30% 2005 2007 2009 2011 2013 2015 2017 2019

Black female earnings compared with White male earnings



Charts are based on W-2 earnings for individuals aged 25 to 54 years old who earned at least the federal minimum wage for 20 hours a week for 13 weeks a year.

Source: Federal Reserve Bank of Minneapolis, Income Distributions and Dynamics in America.

Earnings relative to White workers grew—except for Black workers

The statistics in IDDA confirm that the Black-White earnings gap remains large. At the median, annual W-2 earnings for Black men was 62 percent of annual W-2 earnings for White men in 2019. For Black women, the share was even lower, just 57 percent. These values decline the higher one moves in the earnings distribution.

Moreover, the Black-White earnings gap actually widened at most percentiles of the earnings distribution between 2009 and 2019. Figure 1 shows how the earnings of Black men and Black women compare with those of White men over time. Black male and female earners made small gains relative to White male earners between 2005 and 2009 (the lines in the charts rise). These gains then eroded

across most of the earnings distribution (the lines fall), except for the very highest earners. The result is that for Black women, the gaps are wider in 2019 than they were in 2009. For many Black men, earnings eroded more—the gaps in 2019 are wider than they were in 2005.

Compared with the experiences of other racial and ethnic groups, the evolution of the Black-White earnings gap stands out following the Great Recession: Black men are the only group of men whose earnings declined relative to the earnings of White men in this time frame. In fact, the earnings for men of the other racial and ethnic groups in IDDA all increased relative to the earnings of White men. Among women, there are a few groups that made modest gains or reversals relative to White men, but the loss in relative earnings experienced by Black women was the largest (Figure 2).

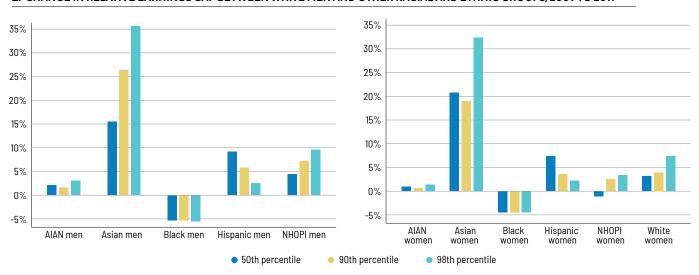
Earnings gaps grow when earnings growth falters

Researchers studying the Black-White earnings gap often group potential explanations in two categories. One category includes factors that directly shape the wages paid to Black and White workers, such as educational attainment or labor market discrimination, which shift Black earnings relative to White earnings.

Research has established the large effect that a college degree has on earnings, for instance. If the college attainment gap were growing, that could be a piece of the explanation for why the Black-White earnings gap is, too. But in fact, the opposite is true: According to analysis in the working paper of data from the American Community Survey, the Black-White gap in bachelor's degree attainment closed slightly between 2005 and 2019.

The second category of explanations points to the overall trend in rising earnings inequality. When the distribution of earnings widens—top earners see their incomes grow by more than lower earners—groups that are overrepresented at the bottom of the earnings distribution, including Black earners, will tend to fall

2: CHANGE IN RELATIVE EARNINGS GAP BETWEEN WHITE MEN AND OTHER RACIAL AND ETHNIC GROUPS, 2009 TO 2019



These charts plot the percent change in relative earnings for the indicated group compared with White men. Positive numbers show the relative earnings of the indicated group increased over time compared with White men, while negative numbers show relative earnings declined.

AIAN: American Indian or Alaska Native. NHOPI: Native Hawaiian or Other Pacific Islander.

Source: Federal Reserve Bank of Minneapolis, Income Distributions and Dynamics in America.

further behind. In an influential 2018 article on Black-White earnings inequality, economists Patrick Bayer and Kerwin Kofi Charles identified that these distributional factors were especially important as earnings inequality swelled from 1980 to the early 2000s. Interestingly, though, IDDA statistics show that the earnings distribution narrowed slightly between 2009 and 2019, the period in which the Black-White earnings gap widens.

To take a closer look at what was going on, Wozniak, Kondo, and team looked at IDDA's income growth statistics, which track the same individuals over time. This tracking matters because looking just at Black or White earnings in different years could be capturing how the workforce is changing-more young workers entering the workforce could be Black than White, for instance, which would affect the distribution of Black earnings. But calculating the income growth for the same individuals over time holds constant the characteristics of the workers. It also allows researchers to compare workers with similar initial earnings, helping to

identify whether Black and White workers have different experiences moving up or down the career ladder even when they start on a similar "rung."

The IDDA data show that earnings grew more slowly for Black workers than for White workers in each five-year window from 2005 to 2019. This was true for all initial income levels, but it was especially stark for high earners. For example, from 2014 to 2019, median earnings growth of White workers in the top 10 percent of the distribution was 34 percent higher than for Black workers (\$24,900 versus \$18,530 over the five years). Previous research has shown that the persistence of high earnings matters in improving representation at the top of the income distribution, sometimes even more than mobility into the highest-earning percentiles.

Among the bottom 25 percent of earners, median earnings growth for White workers was 10 percent higher than for Black workers. For low earners especially, obstacles to job security could be part of the story: Black workers are overrep-

resented in sectors with unpredictable hours or schedules and tend to experience longer unemployment spells than White workers. These types of disruptions can influence workers' longer-term prospects in the labor market.

The researchers conclude that slower earnings growth for Black workers may have contributed to the widening earnings gap seen in the data. The fact that earnings grew more slowly for Black workers than White workers with similar initial incomes also suggests there is more to Black workers' unique experience than broadening wage inequality overall. *

TAKEAWAYS 77

- Black men and women earn considerably less than White men
- Black men are only group of men whose earnings declined relative to earnings of White men
- Earnings grew more slowly for Black workers than White workers who started in same income bin



Risky employment, safe assets, and the racial wealth gap

How labor market uncertainty faced by Black workers contributes to the racial wealth gap BYANDREW GOODMAN-BACON

n America, Black people hold less than one-sixth as much wealth as White people do. That means they miss opportunities to pass wealth to their children. They lack a financial cushion to get through hard times. And because Black families typically hold their wealth in housing rather than financial assets, the explosive stock market returns of the last 40 years have largely passed them by.

Reasons to close the racial wealth gap abound, but to do so effectively we need to know where the gap comes from. New research by Institute visitors Ellora Derenoncourt and Chi Hyun Kim, along with Moritz Kuhn and Moritz Schularick, suggests that the differences in stock mar-

ket wealth may actually stem from the striking gap in labor market uncertainty.

A simple equation

Building wealth requires one to buy assets, earn a financial return on them, and hold them long enough to see those returns accumulate. Easier said than done, though. And easier done for some Americans than for others, particularly for Black Americans.

The first step, buying assets like homes, stocks, or bonds, requires cash. Black workers earn less on average than White workers, so they have less cash with which to purchase financial assets in the first place.

The last step, holding assets, requires

stable enough cash flow to weather hard times without needing to draw on those very assets to get by. Black homeowners, for example, earn less than White homeowners when they sell their homes largely because they more often do so in a short-sale or foreclosure situation, losing money in the process.

But neither of these forces speaks to one of the most important drivers of wealth in the last four decades: stock market returns.

STUDY AUTHORS

ELLORA DERENONCOURT, Princeton University; CHI HYUN KIM, University of Bonn; MORITZ KUHN, University of Mannheim; MORITZ SCHULARICK, Kiel Institute for the World Economy In real terms, a dollar of housing in 1980 would be worth about \$1.50 today, but a dollar's worth of stock would be worth \$6. Black households with wealth hold less of it in stocks than White households do, which is one reason why they earn a lower overall return on their wealth.

A complicated calculation

So why do Black and White wealth portfolios differ like this? Are Black families making a mistake about how to invest?

According to the research, they are not. The economists build an economic model that describes the kinds of assets that a worker would invest in given what they know about their likelihood of becoming unemployed and staying unemployed—in economic terms, their labor market risk. Higher risks, it turns out, create an incentive to invest in safe assets like bonds instead of assets that are volatile but potentially more lucrative, like stocks. Because Black workers have significantly riskier work lives, the model suggests that they will make different investment decisions.

For example, recessions tend to push a higher share of Black workers than White workers into unemployment. Data from the Bureau of Labor Statistics show that that since 1980, the difference between Black and White unemployment rates widened noticeably during recessions. Black workers also remain unemployed longer than White workers. The authors report that about 33 percent of unemployed Black household heads report having been out of work for a full year, compared with just 17 percent of unemployed White household heads. During these periods, however, Black workers receive lower unemployment compensation than comparable White workers do. All of this amounts to deeper and longer income losses for Black workers, and related evidence shows that their monthly consumption is thus twice as sensitive to changes in income as it is for White-headed households.

These labor market realities affect wealth portfolios because, in a down-

In a downturn, stock prices typically fall too. Investing heavily in stocks would mean that Black workers' assets would lose value exactly at the time their earnings fall the most.

turn, stock prices typically fall too. Investing heavily in stocks would mean that Black workers' assets would lose value exactly at the time their earnings fall the most. Better to buy bonds whose value holds even during recessions.

The simple fact that workers know the risks they will face in the labor market shapes their choices about their wealth in a different way than their lived experience does. A worker who actually *has* low earnings cannot save and invest very much, and one who actually *becomes* unemployed may need to draw down wealth to get by. Regardless of what will happen to a worker, though, the mere prospect of those ups and downs shapes the kind of wealth they want to hold. That factor, the authors say, could explain the different portfolio choices of Black and White households.

A possible explanation

When the authors feed data on unemployment by race into their model, they find that the theoretical link between labor market risk and optimal portfolio composition is in fact strong enough to explain much of the gap in the share of wealth held in equities. Among workers with any wealth, White workers hold about 36 percent of their wealth in the form of stocks compared with 28 percent for Black workers. The model implies that had Black households faced the same labor market risk as that of White households, the gap in equities would have been just one percentage point, showing that labor market risk is a plausible explanation for different investment choices.

The model, however, cannot explain all of the patterns in portfolio composi-

tion. For instance, it predicts that about the same share of White and Black households invest in stocks, but that Black stockholders invest less money. In fact, there is a huge gap—23 percentage points—in the share of Black and White households with any stock market wealth. Why this pattern occurs is still unclear.

Finally, the model shows that even though labor market risk could explain different portfolio choices, investment strategies themselves account for just 11 percent of the racial wealth gap. The lion's share of racial wealth disparities, in other words, come from other factors, including actual labor market outcomes and structural, historically based barriers to wealth accumulation.

The biggest lesson from these findings is that they demonstrate the complex ways that economic realities can shape wealth. "Unless labor market conditions improve for Black Americans," the authors conclude, it will not make sense for them to invest in high-risk, high-return financial assets. In that context, booming stock prices lead to wider racial wealth gaps. ★

TAKEAWAYS 77

- Black households own less wealth in higher-return financial equities than White households do
- Black workers' more volatile labor market conditions could explain more conservative investment strategies
- Equalizing labor market risk would align Black-White investment choices and reduce racial wealth gap by 11 percent

THE GEOGRAPHY OF UNEMPLOYMENT IN AMERICA

In June, the U.S. unemployment rate was 4.1 percent. But that rate isn't constant across every local job market—in Bakersfield, California, the rate was twice as high. In Portsmouth, New Hampshire, it was half.

If workers and employers were perfectly mobile, always willing to relocate to where the open jobs or available workers were, we might expect such differences in unemployment rates to even out over time. But in a recent Institute working paper, economists Moritz Kuhn, Iourii Manovskii, and Xincheng Qiu show that not only is there wide variation, this variation is strikingly persistent. This persistence is illustrated in the chart below, which plots the unemployment rates in the years 2000 and 2019 for 690 local labor markets, or "commuting zones," covering the United States.

Each dot is a community with a story to tell—some of persistence, others of change.

CASPER, WYOMING, the state's second largest city, mirrored the national unemployment rate in both 2000 and 2019. The area's economy relies on ranching and fossil fuels, although Casper also hosts two college campuses and a sizable medical industry. MISSISSIPPI DELTA 8% ROSEBUD SIOUX AND PINE RIDGE RESERVATIONS. SOUTH DAKOTA, unlike most of the U.S., stand out for notably higher unemployment in 2019 than in 2000. Jobless rates for FRESNO, CALIFORNIA, and surrounding counties lead the American Indians across the U.S. rose more and stayed higher nation in food production but trail on measures of well-being. after the Great Recession. These reservations cover almost 2.5 During this period, the local labor force grew more rapidly 7% million acres with few amenities, far from economic hubs. than in the rest of California, with low levels of college graduates. The data are also shaped by a high rate of turnover in agriculture: County economic development officials regard 8% unemployment as a "fully employed workforce." 2019 UNEMPLOYMENT RATE MINNEAPOLIS, MINNESOTA NANTUCKET, MASSACHUSETTS UVALDE AND EAGLE PASS, TEXAS, had the nation's second-highest unemployment rate in 2000. But like other communities along the Texas-Mexico border, these areas experienced significant economic improvement in the years following. They successfully adapted to support the booming 3% Mexican manufacturing economies across the border. NORTHWEST IOWA is known for corn and poultry. While they are 2% critical, economic development officials tout manufacturing's 15% share of local employment—more than twice the national average. The region sits at the junction of major railroad networks, supporting jobs in logistics and distribution. BAKKEN OIL FIELD, NORTH DAKOTA 1% 6% 11% 2000 UNEMPLOYMENT RATE Dark blue dots indicate commuting zones covering the United States. Gray dots indicate the commuting zones of America's 12 largest metropolitan areas.

Source: "The Geography of Job Creation and Destruction," by Kuhn, Manovskii, and Qiu (2024). For sources on the regional economic summaries above, see the online version of this article.



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Economic Policy Advisor and Senior Economist, Federal Reserve Bank of Dallas Way the Census Bureau collects data on race and ethnicity, allowing respondents to more easily report their full racial and ethnic identities when responding to the 2030 census and other surveys. These new data will provide a more accurate representation of the U.S. population's racial and ethnic diversity.



Nicholas A. Jones, Director and Senior Advisor of Race and Ethnic Research and Outreach, Population Division, U.S. Census Bureau, describing the impact of the Office of Management and Budget's Statistical Policy Directive No. 15 at a research summit at the Minneapolis Fed

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