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Race and Economic Outcomes: A Conference Recap

By Matthew Wells

How does monetary policy affect racial inequality and minority unemployment? What explains the difference in marriage rates between Black and White Americans? How do racial preferences in college admissions affect who gets in? Do historical discriminatory institutions have effects on current socioeconomic outcomes? These were among the questions addressed by economists during a recent Richmond Fed research conference.

Economists from the Richmond Fed, research universities and other institutions met in Richmond for a conference in November. Researchers presented papers on a variety of topics, including monetary policy and racial inequality, affirmative action, reparations, and the causes of Black-White wealth gaps.

Monetary Policy With Racial Inequality

The conventional view of monetary policy has been that it can smooth business cycles with rate adjustments and that structural issues such as income inequality across racial groups are beyond its domain. This view, however, may be evolving. For example, Federal Reserve Chair Jerome Powell stated in August 2020 that "maximum employment is a broad-based and inclusive goal," and the Fed has recently hosted several conferences examining the relationship between monetary policy and racial inequality.

Examining the ways that monetary policy in the U.S. impacts different racial and ethnic groups, Makoto Nakajima of the Federal Reserve Bank of Philadelphia presented the paper "Monetary Policy with Racial Inequality (PDF)."

Building off earlier findings that White workers benefit more than Black workers from surprise rate cuts, Nakajima develops a heterogenous-agent New Keynesian model with White, Black, Asian and Hispanic workers that incorporates two important facts regarding racial differences:
• Hispanic and Black workers experience a higher risk of unemployment, and this risk rises disproportionately during recessionary periods and declines disproportionately during expansionary periods.

• Hispanic and Black workers are generally poorer and more likely to live hand to mouth than White or Asian workers, meaning their wealth is comprised mainly of illiquid assets. Indeed, almost half of Hispanic and Black households live hand to mouth.

The model produces four main findings. First, there is extensive racial heterogeneity in welfare gains when interest rates drop one-quarter of a point. Black and Hispanic worker unemployment rates decline more than the unemployment rate of White workers, shrinking the Black-White and Hispanic-White unemployment gaps by over 30 percent. Second, consumption among Black workers is 50 percent more sensitive to positive income shocks compared to that of White workers, as Black workers are more likely to live hand to mouth, regardless of wealth. Third, all groups benefit from rate cuts, but Black and Hispanic workers' welfare gains are about 50 percent greater than those of White workers due to higher labor market risks and a higher fraction of those living hand to mouth. Finally, the effects of monetary expansion vary depending on wealth, as the gains that hand-to-mouth families experience decrease with increasing wealth, but losses from asset price valuation grow as wealth increases.

**Minority Unemployment, Inflation and Monetary Policy**

Research has found a persistent racial income volatility gap: Real income volatility is 39 percent higher for Black households than for White households. Congress has taken note, passing legislation in June 2022 calling on the Fed to take action "that fosters the elimination of disparities across racial and ethnic groups with respect to employment, income, wealth and access to affordable credit." Monetary policy has long been viewed as an instrument for smoothing income fluctuations, but little is known about whether it can reduce such racial disparities in income volatility.

To investigate whether monetary policy is an effective tool for reducing the racial income volatility gap, Claudia Macaluso of the Federal Reserve Bank of Richmond presented the paper "Minority Unemployment, Inflation and Monetary Policy," which was co-authored with Felipe Schwartzman, also of the Richmond Fed, and Munseob Lee of the University of California, San Diego.

The researchers use a framework where monetary policymakers face a trade-off between the unemployment effect and the prices effect. The unemployment effect of a monetary policy change is characterized by unemployment stabilization and reduced real income volatility, while the price effect is characterized by larger swings in prices than in wages as well as increased real income volatility. When examining this trade-off through the perspective of race, they find four empirical regularities:
• The unemployment rate for Black individuals is about twice as high as that of White individuals.
• Unemployment rates for Black and White individuals move closer over the business cycle.
• Labor income represents a larger portion of overall income for Black households than for White households.
• Black households experience higher price volatility than White households.

The authors find that the Fed prioritizing reducing Black unemployment would be equivalent to pursuing a more accommodative monetary policy with larger inflation fluctuations but smoother employment rates for all. When evaluating this trade-off, the authors find that such a policy would reduce disparities in real income volatility between Black and White households unless inflation expectations become unanchored, as real income gains would erode with increasing prices.

**Incarceration, Unemployment and the Racial Marriage Divide**

What accounts for the difference in marriage rates between Black and White Americans? Sixty-five percent of White women ages 25-54 are married, while 34 percent of Black women in the same age range are married. Understanding the roots of this variation is important, as family structure and parental resources have important effects on children and can shape their well-being as adults. One of the major theories explaining the racial marriage divide — the Wilson Hypothesis — suggests it arises from a lack of marriable Black men due to the combined effects of unemployment, incarceration and premature death.

Elizabeth Caucutt of the University of Western Ontario presented "Incarceration, Unemployment and the Racial Marriage Divide," which takes a new, dynamic look at the Wilson Hypothesis to understand these differences in "marriable" men. The paper was co-authored by Nezih Guner of the Universitat Autònoma de Barcelona and Christopher Rauh of the University of Cambridge.

The authors first establish that Black men are more likely to experience job loss and incarceration than White men and that there are more Black women than Black men. This leads to a skewed sex ratio not present in the White population.

The authors then develop an equilibrium search model of marriage, divorce and labor supply of women in which transitions between employment, unemployment and incarceration differ by race, education and gender. They estimate the model for both Black and White populations using marriage and labor market data from 2006 to determine how much of the racial marriage gap is due to preferences versus differences in sex ratios, employment transitions and prison transitions.
Rather than marriage preferences or the effects of welfare benefits, the model produces a series of counterfactuals showing that the racial marriage gap is largely driven by the conditions outlined in the Wilson Hypothesis. Specifically, the racial marriage gap closes by:

- 40 percent when Black men are given the same prison transitions as White men
- 12 percent when Black men are given the same employment transitions as White men
- 19 percent when the sex gap ratio in the Black community is closed
- 78 percent when all three occur simultaneously

**The Boss Is Watching: How Monitoring Decisions Hurt Blacks**

Many Americans (especially Black Americans) believe Black workers don't get second chances or that they experience additional scrutiny in the workplace. Others have sensed that Black workers must be twice as good to succeed professionally.

If it is true that Black workers are held to higher standards and experience added scrutiny, these workers may hold their jobs for shorter periods of time and be more likely to separate from them. Research has confirmed such conclusions, as Black workers do, indeed, experience shorter employment durations than apparently similar White workers.

To better understand why Black workers are employed for shorter periods of time, Kevin Lang presented the paper "The Boss Is Watching: How Monitoring Decisions Hurt Blacks," which was co-authored by Costas Cavounidis of Warwick University and Russell Weinstein of the University of Illinois, Urbana-Champaign.

Lang and his co-authors construct a theoretical model where employers scrutinize Black workers more closely than their White counterparts. As a result, a larger share of low-performing Black workers is let go and enters unemployment. Since productivity is correlated across jobs, the Black unemployment pool is "churned" and weaker than the White unemployment pool.

But because workers can hide their employment history to some extent, race serves as a proxy of a worker's productivity. Therefore, it is optimal for firms to monitor newly hired Black (but not White) workers. The model predicts Black workers will be fired at higher rates initially but that the patterns across Black and White workers will converge over time. This is because most workers who persist in their jobs will have passed monitoring and have been found to be good fits with the firm, regardless of race.

Using a Cox proportional hazard model on data from a longitudinal survey of workers conducted by the Bureau of Labor Statistics, the researchers find that — conditional on education levels, age and other factors — Black workers are 3.3 percent more likely than White workers to exit jobs and enter unemployment within the first week of employment. This hazard gap (that is, the difference in the chances of entering unemployment across the
two groups) becomes statistically significant at week seven, and it grows to 64.5 percent after roughly five years. The gap disappears over time, however, with no significant differences between racial groups after about 10 years on the job.

**What the Students for Fair Admissions Cases Reveal About Racial Preferences**

To understand how affirmative action for underrepresented minorities affects their college admissions, Peter Arcidiacono of Duke University presented the paper "What the Students for Fair Admissions Cases Reveal About Racial Preferences (PDF)." It was co-authored with Josh Kinsler of the University of Georgia and Tyler Ransom of the University of Oklahoma.

The researchers examine admissions data from three sets of applicants: Harvard University's classes from 2014 to 2019 and in-state and out-of-state classes from 2016 to 2021 at the University of North Carolina. By focusing on students in the standard admissions process (that is, no recruited athletes or children of donors), they compute the average marginal effect of race on admission in each of the applicant pools and conduct a counterfactual analysis where racial preferences were not considered.

The results show that the effect of racial preferences on admissions is powerful. First, admission rates for the typical Black applicant to Harvard are four times higher than if they had been White, while a typical Hispanic applicant is 2.4 times more likely to be admitted. About 15.5 percent of Black applicants were admitted, but in the absence of racial preferences, that rate would drop to 4.3 percent. For Hispanic applicants, those numbers are 15.8 percent and 7.8 percent.

Out-of-state Hispanic applicants to the University of North Carolina are over three times more likely to be admitted than if they had been White, while Black applicants are 11 times more likely to be admitted. Almost 13 percent of Hispanic applicants in this category were admitted, but the number drops to just over 5 percent in the absence of racial preferences. These same numbers are 11.2 percent and 1.5 percent for Black applicants.

For in-state applicants to the University of North Carolina, racial preferences lead to a 71 percent and 31 percent increase in Black and Hispanic admission rates, respectively. Nearly 9 percent of Black applicants were admitted, and less than 6 percent would be admitted without racial preferences. Admission rates for Hispanic applicants would drop from just over 5 percent to just over 4 percent.

**Beliefs and Affirmative Action in Employment**

Benjamin Grify of the University of Albany, SUNY, presented research examining whether temporary affirmative action policies can have long-lasting positive effects for Black workers by changing beliefs about employment prospects and fostering human capital investment.
His paper, "Beliefs and Affirmative Action in Employment (PDF)," was co-authored with Eric Young of the University of Virginia and the Federal Reserve Bank of Cleveland.

Griffy and Young develop a theoretical model with two-sided beliefs and learning. In the absence of affirmative action, underrepresentation leads Black workers to believe in statistical discrimination and that many employers practice 'taste-based' discrimination in the labor market. As a result, they become pessimistic in their employment prospects (particularly in high prestige occupations), and they underinvest in human capital. At the same time, firms have beliefs and preferences about worker quality stemming from this underrepresentation, and they are hesitant to hire. This leads to the existing poor employment outcomes that reinforce existing beliefs about differences in worker quality.

The authors then introduce affirmative action policies to the model to identify their effects on employment outcomes and human capital investment over time. They find that enacting affirmative action policies for a single generation can close the racial income gap by 14 percentage points and reduce the employment gap in high prestige occupations by 39 percentage points. These shifts occur because the generation following the period of affirmative action reduces its beliefs about the extent of discrimination practiced by firms by 68 percentage points. As a result, this new cohort of Black workers increases their human capital investments by 41.5 percent.

When looking at firm beliefs, the model shows that affirmative action negatively affects employers' short-term perceptions about potential Black employees, as they hire less-qualified Black workers who have not made human capital investments. However, as more Black workers get hired, subsequent worker cohorts change their beliefs about discrimination and begin to invest in human capital, and these long-run benefits come to outweigh the short-term costs.

**The Historical Roots of Lending Discrimination**

What accounts for the persistent differences across races in terms of individual outcomes such as income, social mobility and education? Research has found that neighborhood levels of poverty, violence and school quality play a significant role. Also, because housing is generally the largest asset for households, economic opportunity has also been tied to access to mortgage lending, where minority groups historically have also faced significant discrimination.

Horacio Sapriza of the Federal Reserve Bank of Richmond presented the paper "The Historical Roots of Lending Discrimination," which aims to better understand how discrimination in mortgage markets affects inequality. The paper was co-authored with David Marques-Ibanez of the European Central Bank and Alex Sclip of the University of Verona.
To explore the role of geography and history in perpetuating inequality today, the researchers explore whether the historical institution of redlining — where residents in and near predominantly Black neighborhoods were denied mortgages — contributes to discrimination in today's mortgage market. Maps created by the Home Owners' Loan Corporation in 1933 graded the credit risk of neighborhoods across the country based primarily on their racial and ethnic makeup, with the lowest grades generally going to those with larger shares of Black residents. (The practice was eventually made illegal with the 1968 Fair Housing Act.)

Using census tract data matched to the original redlining maps, recent home mortgage data, and maps and housing information from Zillow, the authors examine whether lending discrimination is still concentrated in the same geographic areas originally designated as high risk. They find that minorities in these previously lower-graded neighborhoods still pay higher interest rates and total costs, supporting the idea that historical biases linked to policies encouraging discrimination in the past continue in the present. These results hold even after accounting for individual borrower risk, housing prices and school quality. Sapriza and his colleagues find that this connection between past discrimination and the present is strongest in southern states and cities with higher concentrations of minorities in specific geographic areas.

**Long Shadow of Racial Discrimination: Evidence From Housing Covenants**

Racial covenants were clauses inserted in property deeds that prohibited the sale or rental of those properties to racial, ethnic or religious minorities. Beginning in 1899, they were common throughout many cities in the U.S. and Canada, including Seattle, San Francisco, Chicago, Minneapolis, Toronto and Vancouver. They remained a method of racial segregation until 1948, when the U.S. Supreme Court ruled them unenforceable.

Examining the effect of these covenants on present-day socioeconomic outcomes such as home prices and racial segregation, Aradhya Sood presented the paper "Long Shadow of Racial Discrimination: Evidence from Housing Covenants (PDF)," co-authored with Kevin Ehrman-Solberg of the Mapping Prejudice Project.

To capture the causal impact of covenants on socioeconomic outcomes, the researchers focus their attention on Minneapolis. Their model has three dependent variables that capture those outcomes:

- Home prices at the individual lot level and census block level
- Neighborhood racial composition
- Homeownership by race
Their key variables of interest are whether a lot was covenanted prior to the 1948 Supreme Court decision that made them unenforceable and the share of a census block with covenanted lots. Using a fuzzy regression discontinuity model, they compare houses built right before and after the ruling, as houses built prior to the ruling had a positive probability of a covenant, while those built after had no probability of enforced covenants.

After controlling for other factors that might determine home prices and racial segregation, the authors find that racial covenants have had time-persistent effects on recent housing prices and the racial composition of neighborhoods today. In 2018, prices for covenanted houses were 2.9 percent to 3.4 percent higher than similar non-covenanted houses in the same neighborhood. This effect is down from a 21.9 percent difference during the 1950s, and the authors attribute these persistent differences to variation in public amenities and population sorting.

Also, they find that census blocks with larger shares of covenanted lots have smaller Black populations, as a 1 percent increase in a census block's covenanted houses results in an 11 percent reduction in the number of Black residents in that neighborhood. The authors found that these covenants persist in keeping Black families out of lower-middle class and White blue-collar neighborhoods.

### Reparations and Persistent Racial Wealth Gaps

Persistent, large racial wealth gaps are well-documented. According to data from the Survey of Consumer Finances, the average wealth of Black households is only 15 percent of the average wealth of White households. To address this gap and the historical exclusion of Black households from labor and capital markets, scholars and policymakers have proposed paying reparations to Black households.

Examining the roots of the racial wealth gap and considering whether reparations might eliminate the gap, Loukas Karabarbounis of the University of Minnesota presented the paper "Reparations and Persistent Racial Wealth Gaps." The paper was co-authored with Job Boerma of the University of Wisconsin.

Karabarbounis and Boerma first evaluate the magnitude and persistence of the racial wealth gap with a long-run model with heterogenous dynasties, or families that span generations. By allowing for some dynasties to gain the benefits of investment (and pass those benefits on to subsequent generations) and others to either fail in their investments or not invest at all, the model shows how Black dynasties were largely excluded from capital markets and discriminated against in labor markets in the U.S. prior to the civil rights movement of the 1960s. The theoretical model's results match the empirical data behind the racial wealth gap, as it shows that while wages have converged over time, White dynasties are more likely than Black dynasties to see their children move up in the income distribution.
Turning to their evaluation of reparation policies, the researchers focus their attention on policies that might reduce the wealth gap. They find that, with monetary transfers that eliminate the gap in the present, Black and White dynasties still diverge again in wealth in the future, with Black dynasties being strongly underrepresented at the top of the wealth distribution. This dynamic, the authors argue, stems from the pessimistic beliefs about risky returns to investment that Black dynasties hold because of their historical exclusion from labor and capital markets. Because of this pessimism, Black dynasties in the model forego investment opportunities that White dynasties embrace. Instead of a wealth transfer, the authors find that another potential reparation policy — investment subsidies — is likely to be more effective at reducing the racial wealth gap in the long run.

**Recessions and Long-Run Racial Inequality**

Recessions present an opportunity to study differences in economic opportunities across racial groups that arise from exogenous shocks to the labor market. Research shows that recessions widen the unemployment gap between White and Black workers and that the differences are most pronounced for the youngest workers. It is important to understand these effects, as they impact family finances and, in turn, human capital investments.

Andria Smythe of Temple University presented the paper "Recessions and Long-Run Racial Inequality," which seeks to both identify the long-run effect of recessions on racial inequality and shed light on what recessions can tell us regarding the effects of persistent racial differences in economic opportunities.

To better understand these effects, Smythe used the 1979 National Longitudinal Survey, which captured employment data on 12,600 individuals aged 14 to 22 before and during the recession of the early 1980s. Using a quasi-experimental research design, Smythe was able to leverage the differences in the severity of the recession across localities and the random sampling methodology of the survey to identify the extent of the racial employment and income gaps.

The findings further understanding of the difficulties in employment and wages facing Black individuals relative to their White counterparts. For youths ages 14 to 17 during the recession, each 1 percentage point increase in the recession's severity led to a:

- 15 percent increase in the racial income gap in adulthood
- 1.4 percentage point increase in the racial poverty gap
- 9 percent increase in the work experience gap
- 3 percentage point increase in the gap in bachelor's degree attainment
- 1 percentage point increase in the employment and labor force participation gaps

While these effects were milder for young adults ages 18 to 22, the overall racial earnings gap for the sample in the author's study was 32 percent. Further, the average increase in unemployment during the recession was 4 percentage points, which translates into a long-
run racial income gap about 60 percent higher because of the recession. The author found that given the frequency of recessions — which is one about every 6.25 years — every generation of Black individuals will be disadvantaged in adulthood and less able to invest in their children, perpetuating these racial disparities in economic outcomes.

**Accounting for Black-White Wealth Gaps: Earnings, Demographics and Rates of Return**

Data from the Survey of Consumer Finances shows that within a single birth cohort (specifically, those born between 1957 and 1964), White households possess more wealth than Black households at nearly all ages and across differing levels of education.

What are the proximate drivers of this Black-White wealth gap? A large body of research has tended to look at a variety of potential factors including income, intergenerational transfers, investment opportunities and demographic factors such as family structure in isolation, while other work employs structural models that analyze some combination of these explanations.

Taking a more comprehensive approach that incorporates all these elements, Urvi Neelakantan of the Federal Reserve Bank of Richmond presented the paper, "Accounting for Black-White Wealth Gaps: Earnings, Demographics and Rates of Return." The paper was co-authored by three other researchers from the Richmond Fed: Kartik Athreya, Grey Gordon and John Bailey Jones.

The authors construct and calibrate a rich life-cycle consumption saving model that incorporates four potential drivers of the gap in wealth between Black and White households:

- Labor market outcomes (earnings, nonemployment and incarceration)
- Demographic transitions (marriage, fertility and mortality)
- Endowments and transfers (means-tested assistance, Social Security and inheritances)
- Assets and returns (investment rates of return and credit limits)

The findings of the hidden Markov model indicate that nonemployment rates and rates of return are important drivers of the wealth gap. More specifically, if there were no differences in the employment or incarceration rates between White and Black households, the mean White-Black wealth ratio drops from 2.4 to 1.7. Similarly, if there were no differences between returns from investments, the ratio goes down to 1.8. Differences in mortality and inheritance rates also have substantial but smaller effects reducing the ratio to 2.2 and 2.0, respectively.

Matthew Wells is a senior economics writer in the Research Department of the Federal Reserve Bank of Richmond.