

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Button, Patrick; Neumark, David

Article

Age discrimination's challenge to the American economy

NBER Reporter

Provided in Cooperation with:

National Bureau of Economic Research (NBER), Cambridge, Mass.

Suggested Citation: Button, Patrick; Neumark, David (2022): Age discrimination's challenge to the American economy, NBER Reporter, ISSN 0276-119X, National Bureau of Economic Research (NBER), Cambridge, MA, Iss. 3, pp. 8-11

This Version is available at: https://hdl.handle.net/10419/277824

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



Research Summaries

Age Discrimination's Challenge to the American Economy

Patrick Button and David Neumark

Age discrimination is an important problem and challenge in the United States and elsewhere, given that policymakers are trying to lengthen work lives of older people in response to population aging. We have been studying many dimensions of age discrimination, measuring its importance in the US economy, understanding the impact of policies intended to combat it, and exploring alternative ways that protections against age discrimination can be strengthened.

Age Discrimination in Employment

Indirect evidence on age discrimination comes from comparing observed behavior of older and younger workers. For example, older workers typically have longer unemployment durations. This difference grows during economic down-

turns like the Great Recession. However, this could reflect differences in the jobs that older and younger workers are willing to accept, rather than age discrimination in hiring. Similarly, workers near traditional retirement ages, especially women, experienced larger employment losses during the COVID pandemic and the related recession, which could be due to age discrimination but could also reflect factors such as greater sensitivity of older workers to the risk of infection in the workplace.¹

One approach to isolating the effect of age discrimination is to use survey data on self-reports of the experience of age discrimination.² Evidence from this approach indicates that workers do perceive age discrimination. Moreover, this perception leads to a higher likelihood of leaving the job and a lower likelihood of remaining employed—illustrating how

perceived age discrimination can frustrate the goal of encouraging employment at older ages.

Researchers studying discrimination - including age discrimination - have turned increasingly to experimental methods, especially correspondence studies, to provide rigorous evidence on discrimination in hiring. Hiring is important to extending working lives because many workers take jobs at older ages subsequent to their career jobs. Correspondence studies create artificial applicants and measure discrimination as differences in callbacks for job interviews. We conducted a large-scale correspondence study designed to provide evidence on age discrimination in hiring, overcoming potential biases in past studies³ through the implementation of new econometric methods.⁴ We submitted résumés in response to ads for jobs that



Patrick Button is an associate professor of economics at Tulane University, executive director of The Data Hub: Tulane Center for Data Literacy, and an NBER faculty research fellow affiliated with the Economics of Aging Program. They were also previously a National Institute on Aging-funded post-doctoral scholar at the Rand Corporation's Center for the Study of Aging.

Button's research focuses on discrimination, primarily age and disability discrimination. They have quantified discrimination using correspondence studies—sending résumés of older and younger workers to job openings and comparing callback rates for interviews. In addition, they have studied the labor market impacts of age and disability discrimination laws on older workers and individuals with

disabilities.

With funding from a National Science Foundation CAREER grant, Button has been branching out into quantifying discrimination in less-studied markets and against less-studied minority groups. They are currently studying discrimination on the basis of sexual orientation and race in access to mortgage loans, and discrimination against transgender people, racial and ethnic minorities, and individuals with Medicaid in access to mental health care — "talk therapy" — appointments.

As the inaugural executive director of The Data Hub: Tulane Center for Data Literacy, they are working to establish courses, co-curricular programming, and community relationships that expand data literacy and data analysis at Tulane and in the community.

employ large numbers of fairly low-skilled workers of all ages, and that hire both older and younger workers, including administrative assistants and secretaries (female applicants); janitors and security guards (male applicants); and retail sales (both genders). We sent off applications of otherwise identical young, middle-aged, and older fictitious workers to more than

13,000 positions in 12 cities — more than 40,000 putative applicants. Overall, the callback rate was higher for younger applicants than for older applicants, pointing to age discrimination in hiring [Figure 1]. These results — which hold up in a number of sophisticated analyses — provide evidence of discrimination against both older women and older men. with the evidence also indicating that women face worse age discrimination than men.

These findings are consistent with many other studies that find evidence of age discrimination in hiring, especially for women.

There is other evidence of age discrimination in hiring from nonexperimental approaches. In data from a single company hiring across multiple stores, a change in hiring procedure from inperson interviews to age-blind online assessments was rolled out over time. The in-person interviews, in which the interviewer could assess age immediately, led to lower hiring of older applicants. Older applicants fared better in the age-blind online assessments, getting more interviews — likely because of more work experience — but adverse treatment of older

applicants emerged after the interviews, when age became apparent.⁵

Age Discrimination Laws

The US Age Discrimination in Employment Act (ADEA) passed in 1967, only a few years after legislation prohibiting discrimination based on race, ethnicity, and gender. Many states also have their own age discrimination laws, and these

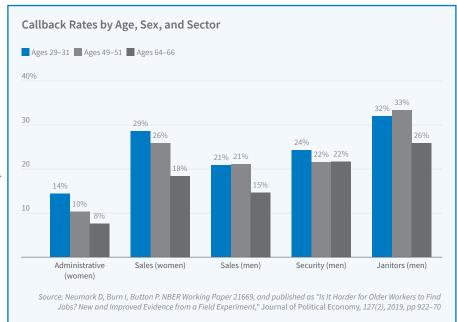


Figure 1



David Neumark is Distinguished Professor of Economics and codirector of the Center for Population, Inequality, and Policy at the University of California, Irvine. He has previously held positions at the Federal Reserve Board, the University of Pennsylvania, Michigan State University, and the Public Policy Institute of California, and is currently a visiting scholar at the Federal Reserve Bank of San Francisco and a senior research fellow at the Workers Compensation Research Institute.

Neumark has made research contributions in numerous areas of labor economics that intersect with major public policy issues. These include the measurement of labor market discrimination, where his contributions include the use of matched employeremployee data to test for discrimination and innovations in the application of audit and correspondence studies.

Neumark was also a contributor to the "new minimum wage research," studying the use of state-level minimum wage variation to estimate minimum wage effects. His subsequent work examined the effects of minimum wages on the income distribution, human capital, and earnings. He also studied the complementarities between minimum wages and the Earned Income Tax Credit, as well as the labor market impacts of city living wage laws.

He has also contributed to the analysis of age discrimination, studying how stronger age discrimination laws complement policy reforms intended to increase labor supply of older workers, conducted a large-scale field experiment testing for age discrimination, and developed methods to test for age stereotypes in job ads. He has also consulted on large classaction discrimination lawsuits.

are sometimes stronger than the ADEA, in part by allowing larger damages to be awarded in court.

There was some concern when the ADEA was enacted that it would result in fewer long-term employment relationships between firms and workers because firms would find it difficult to use implicit contracts that rewarded older workers for high effort and productivity throughout their careers. However, this fear was not realized. The ADEA and earlier state laws appear to have strengthened long-term relationships, perhaps because the primary effect was to assure workers that they would not be arbitrarily terminated in their 40s or 50s after making long-term contributions to the firm.⁶

There is ample evidence that age discrimination laws have been effective in boosting employment of older workers.⁷ For example, we have matched information on state laws to the data collected in the correspondence study we described earlier. In states where age discrimination laws allow larger damages, there is less evidence of age discrimination against older women and men applying for retail jobs.⁸

The evidence from this study also partially allays another potential concern—that stronger age discrimination laws deter hiring of older workers by raising the cost of firing them. We do, however, find some evidence for this concern in the aftermath of the Great Recession, when stronger state age discrimination laws were associated with weaker outcomes for older workers.⁹

Another type of evidence comes from comparing the effects of Social Security reforms intended to encourage later retirement across states with stronger versus weaker age discrimination laws. Increases in the full retirement age coupled with lower benefits at the early retirement age of 62 had a greater impact — delayed benefit claiming, and higher employment at older ages — in states where the laws were stronger. This evidence points directly to complementarities between supply-side policies to encourage longer work lives and laws reducing age discrimination.

The experimental evidence described above points to stronger age discrimina-

tion against women than men. This may be partly attributable to intersectional discrimination by age and gender. Because Title VII of the Civil Rights Act, which in part prohibits sex discrimination, is separate from the ADEA, the courts have not recognized, under the ADEA, intersectional claims of age discrimination against older women. 11 Reducing age discrimination against older women could be particularly important for financial security at older ages, as many women outlive their husbands and eventually become impoverished. 12

Age Stereotypes and Age Discrimination

Enforcement of laws prohibiting age discrimination in hiring relies first and foremost on comparing the age distribution of hires to the age distribution of applicants. Hiring a disproportionately low share of older applicants provides prima facie evidence of discrimination. But if employers can discourage older workers from applying in the first place, they may be able to avoid or limit such evidence, allowing them to discriminate with greater impunity.

How might employers do this? There are fairly well-known stereotypes of older workers, such as that they are less sophisticated with technology, or less physically fit. We used the text of job ads from the correspondence study described above to study whether the same employers found to be discriminating against older workers also used job-ad language with agerelated stereotypes. This is based on methods from computational linguistics and machine learning, which we use to measure the "semantic similarity" of job-ad language with typical age stereotypes. It turns out that the same employers who discriminated against older men in the experiment also tended to use more subtly ageist language in their job ads. 13

Moreover, use of these age-related stereotypes in job ads does appear to deter older workers from applying for jobs. A survey on the Amazon Mechanical Turk platform shows that job-ad language identified as semantically similar to age stereotypes is actually perceived as ageist.¹⁴ More strikingly, in an experiment posting artificial job ads that randomly vary short phrases in job ads to sometimes convey even subtle age stereotypes, older workers respond strongly, with substantially fewer older workers applying to the jobs with stereotyped job-ad language. These ads attract workers who are 2.5 years younger on average, and can reduce the share of applicants over age 40 by 10 percentage points or more. 15 Calculations suggest that the implied effect in reducing the share of older job seekers who are hired is of the same magnitude as the effect of direct age discrimination measured in the correspondence study.

Disability Discrimination

Although we have focused to a large extent on age discrimination and the ADEA, one can also think about discrimination based on disability as related to age discrimination, given that work-related disabilities increase with age, especially beyond age 50 or so. Ageist stereotypes may also lead to perceptions that older workers have, or eventually will have, disabilities. While the Americans with Disabilities Act attempts to provide protection from disability discrimination, many states have stronger or broader disability discrimination laws that better protect against disability discrimination.

Two studies that compared hiring rates of older workers and younger workers by state age and disability discrimination laws found that disability discrimination laws have small positive effects or no effects on older workers. ¹⁶ Recent work also finds that these state laws reduce reliance on Social Security Disability Insurance, likely by removing some discriminatory barriers to employment. ¹⁷

Policy Implications

The research documenting the existence of age discrimination and pointing to possible ways to enhance protections against it has important policy implications. Policymakers are likely to enact additional supply-side pol-

icy changes — including Social Security reforms—to incentivize work at older ages. If they do not also combat age and disability discrimination, then these supply-side changes may do more to reduce retirement benefits than to increase work at older ages. Our research documents that this problem could be more severe for older women, who already face lower retirement benefits and longer life expectancy.

¹ "Early Evidence on the Impact of COVID-19 and the Recession on Older Workers," Bui T, Button P, Picciotti E. NBER Working Paper 27448, June 2020, and Public Policy & Aging Report 30(4), October 2020, pp. 154–159.

Return to Text

² "Age Discrimination, Job Separation, and Employment Status of Older Workers: Evidence from Self-Reports," Johnson R, Neumark D. NBER Working Paper 5619, June 1996, and Journal of Human Resources 32(4), Fall 1997, pp. 779-811.

Return to Text

³ "Is It Harder for Older Workers to Find Jobs? New and Improved Evidence from a Field Experiment," Neumark D, Burn I, Button P. NBER Working Paper 21669, November 2017, and Journal of Political Economy 127(2), April 2019, pp. 922-970.

Return to Text

⁴ "Detecting Discrimination in Audit and Correspondence Studies," Neumark D. NBER Working Paper 16448, September 2021, and Journal of Human Resources 47(4), Fall 2012, pp. 1128-1157.

Return to Text

⁵ "Age Discrimination in Hiring: Evidence from Age-Blind vs. Non-Age-Blind Hiring Procedures," Neumark D. NBER Working Paper 26623, January

2020, forthcoming in Journal of Human Resources.

Return to Text

⁶ "Age Discrimination Laws and Labor Market Efficiency," Neumark D, Stock W. NBER Working Paper 6088, July 1997, and Journal of Political Economy 107(5), October 1999, pp. 1081–1125. Return to Text

⁷ "The Age Discrimination in Employment Act and the Challenge of Population Aging," Neumark D. NBER Working Paper 14317, September 2008, and Research on Aging 31(1), January 2009, pp. 41–68.

Return to Text

8 "Do State Laws Protecting Older Workers from Discrimination Reduce Age Discrimination in Hiring? Evidence from a Field Experiment," Neumark D, Burn I, Button P, Chehras N. NBER Working Paper 25369, December 2018, and Journal of Law and Economics 62, May 2019, pp. 373-402.

Return to Text

⁹ "Did Age Discrimination Protections Help Older Workers Weather the Great Recession?" Neumark D, Button P. NBER Working Paper 19216, December 2013, and Journal of Policy Analysis and Management 33(3), Summer 2014, pp. 566-601.

Return to Text

¹⁰ "Do Stronger Age Discrimination Laws Make Social Security Laws More Effective?" Neumark D, Song J. NBER Working Paper 17467, July 2013, and Journal of Public Economics 108, December 2013, pp. 1–16.

Return to Text

11 "Gendered Ageism and Disablism and Employment of Older Workers," McLaughlin J, Neumark D. NBER Working Paper 30355, August 2022. Return to Text

12 "Why Retirement, Social Security, and Age Discrimination Policies Need to Consider the Intersectional Experiences of Older Women," Burn I, Button P, Figinski T, McLaughlin J. NBER Working Paper 27450, June 2020, and Public Policy & Aging Report 30(3), July 2020, pp. 101–106. Return to Text

13 "Older Workers Need Not Apply? Ageist Language in Job Ads and Age Discrimination in Hiring," Burn I, Button P, Munguia Corella L, Neumark D. NBER Working Paper 26552, May 2020. Published as "Does Ageist Language in Job Ads Predict Age Discrimination in Hiring?" in *Journal of* Labor Economics 40(3), July 2022, pp. 613-667.

Return to Text

¹⁴ "Machine Learning and Perceived Age Stereotypes in Job Ads: Evidence from an Experiment," Burn I, Firoozi D, Ladd D, Neumark D. NBER Working Paper 28328, January 2021.

Return to Text

15 "Help Really Wanted? The Impact of Age Stereotypes in Job Ads on Applications from Older Workers," Burn I, Firoozi D, Ladd D, Neumark D. NBER Working Paper 30287, July 2022.

Return to Text

¹⁶ See Endnote 8; also "Does Protecting" Older Workers from Discrimination Make It Harder to Get Hired? Evidence from Disability Discrimination Laws," Neumark D, Song J, Button P. NBER Working Paper 21379, September 2015, and Research on Aging 39(1), December 2016, pp. 29–63.

Return to Text

¹⁷ "Do Stronger Employment Discrimination Protections Decrease Reliance on Social Security Disability Insurance? Evidence from the US Social Security Reforms," Button P, Khan M, Penn M. The Journal of the Economics of Ageing 22, June 2022. Return to Text