Director’s corner

John Laitner

This Newsletter features the April 2015 MRRC Researcher Workshop at the University of Michigan in Ann Arbor. The Workshop is an annual event. It is designed to provide MRRC researchers with feedback on their current MRRC projects and related work, and to acquaint a selection of new participants with our group. The topics, naturally, focus on retirement and Social Security. We keep the talks short, to allow room on the program for many presenters, and we encourage audience engagement, with discussion periods after each presentation.

This year we had 35 presentations. Eleven of the presenters were new to the workshop. The total number of participants was about 60. We were delighted to have Lynn Fisher and Nancy Early attend from SSA. We were also pleased to have Gerald Ray from SSA give a presentation on “How Data Analysis Is Transforming Disability Adjudication at SSA.” His talk was very well-received. In fact, it is fair to say that it was a “hit” with the audience.

Several of the topics this year of special interest included “means testing” and “veterans insurance.” In an era of tight government budgets, means testing seems a timely issue. We were fortunate to have interesting talks on the “Australian Age Pension and Means Testing” and a study of Chilean Pension Reforms. Veterans insurance has been a topic of current interest as well, and we had two talks on veterans’ health and disability claiming behavior. The University of Michigan is home to the HRS and PSID surveys, and, as always, many of the projects presented utilized these and related data resources.

2015 workshop offers glimpses of upcoming work

MRRC held its researcher workshop April 17 and 18, 2015. Thirty-five researchers presented work-in-progress and received feedback and answered questions from attendees. While most of the talks focused on retirement economics, there were also interesting outliers: “How Data Analysis Is Transforming Disability Adjudications at the Social Security Administration” by Judge Gerald Ray, Deputy Executive Director of the Social Security Administration’s Appellate Operations; “Genome-Wide Association Study of Educational Attainment 2.0” by Daniel Benjamin, Associate Economics Professor at Cornell University and Visiting Associate Economics Professor at University of Southern California–Dornsife; and “Retirement in Transition: A Life Course Perspective on Diverse Family Forms and Retirement Planning” by Steven Mock, Assistant Professor of Recreation and Leisure Studies and Director of the RBC Retirement Research Centre at University of Waterloo.

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“How Data Analysis Is Transforming Disability Adjudications at the Social Security Administration”

SSA’s Office of Appellate Operations handles disability appeals. Because excessive wait time can detrimentally affect job prospects, a timely, accurate appeals process is critical to applicants’, as well as federal, budgets. Ray’s presentation offered a real-world example of how data analysis can be used to improve decision making in policy application.

Ray and his team used data from electronic claim processing to help build a case-management tracking system. From there, they were able to identify bottlenecks and redundancies in the process, and determine appropriate staffing for various tasks. They mapped the adjudication process, which enabled them to build a decision tree of regulatory requirements. They developed analytical tools to guide adjudicators to policy-compliant outcomes. As these processes were rolled out, they also captured data about the adjudicators’ decisions, helping them to review decision quality and improve training.

By applying complex algorithms, Bayesian estimation, and k-means clustering techniques against historical case characteristics and pivotal issues, Ray’s team developed an analytical model that created error profiles for pivotal issues and identified groups of claims with similar characteristics. The clustering provided for logical sorting of cases so adjudicators received similar cases instead of random assignments. By giving similar cases to “specialist” adjudicators, the processing speed improved.

“Genome-Wide Association Study of Educational Attainment 2.0”

Lack of power has created methodological limitations in existing social-science genetics studies. A behavioral economics and genoeconomics researcher, Benjamin opened his presentation with a summary of the problems associated with existing genome-wide association studies (GWAS), namely replicability and robustness. He also suggested that genoeconomics promises useful controls in nongenetic empirical work, including proxies for structural parameters such as instrumental variables and control variables, as well as gene-environment interaction. In the future, social scientists may use such factors to give more accurate estimates for policy effectiveness.

With their first educational attainment GWAS (Rietveld et al. 2013, Science), Benjamin and his collaborators addressed methodological limitations by greatly increasing sample size to 125,000-individuals. That study found a linear polygenic score of approximately 2 percent of the variance in educational attainment and cognitive function.

Benjamin and collaborators increased the power again with “Educational Attainment 2.0 (EA 2.0),” which uses 65 datasets, sample size N = 305,327, and a similar analysis plan as the previous, lower-powered GWAS. So far, “EA 2.0” has identified 86 genome-wide significant single nucleotide polymorphisms (SNPs, pronounced “snips”) associated with educational attainment. (A SNP is a variation occurring among individuals at a single position in a DNA sequence.)

Readers may find more on these studies at the Social Science Genetic Association Consortium website: http://ssgac.org/Home.php.

“Retirement in Transition: A Life Course Perspective on Diverse Family Forms and Retirement Planning”

Mock’s work looks at how sexual minorities’ possible identity concealment, lower well-being, and weaker social ties may lead to decreased future-orientation and planning. Canada’s General Social Survey Cycle 21 (GSS 21) collected data on sexual orientation, and Mock used it to see if greater identity disclosure and social support—controlling for gender, relationship status, education, income, and children—had an effect on retirement planning, as evidenced by greater certainty of retirement age and likeliness to have a late-life directive. In the future, Mock would like to do similar analyses with the Panel Study for Income Dynamics.

The discussion focused on the limitations of U.S. data sets. With currently available data, it is hard to estimate the number of same-sex couples since most longstanding surveys, such as the Health and Retirement Study, do not ask about sexual orientation. Such data would be useful in addressing imminent policy and budgetary questions.
Enacted by Congress in 1998, Section 508 refers to laws requiring federal agencies to make electronic and information technology accessible to people with disabilities. According to the Section508.gov website, the laws were “enacted to eliminate barriers in information technology, open new opportunities for people with disabilities, and encourage development of technologies that will help achieve these goals.”

Investigators accepting federal grant money from such agencies as the National Institute of Health and Social Security Administration may have contractual requirements to make their resulting research accessible to disabled people who use adaptive technologies. This would apply to grant-supported research papers, websites, data, PowerPoints, videos, etc. The expectations vary according to agency and should be confirmed with the grantor.

Aside from contractual requirements, why should we make our research accessible?

The U.S. Census found that 56.7 million people, 19 percent of the population, reported a disability in 2010. That number includes 8.1 million people who had difficulty seeing, 7.6 million people with hearing difficulties, and 19.9 million people who had trouble holding a glass, pencil, mouse, etc. Ignoring accessibility means excluding potentially interested, disabled folks from the information you have to share. Any of us could become disabled at any time—would you want such an event to curtail your own intellectual life?

In addition, particularly with website design, making deliverables accessible frequently means that they are easier to use on smartphones, e-readers, and tablet computers.

SSA is committed to making its “programs, benefits, services, and facilities, and information and communications technology accessible to everyone.”

What does making research accessible mean?

This varies according to the medium, and is complicated by the wide-ranging nature of disability. Videos would need to be close-captioned for the hearing impaired and viewable to those with ADHD and/or color blindness. Websites should be navigable by more than mouse and keyboard. Podcasts would need transcripts. Research papers, along with associated equations, tables, and graphics, would need to be readable by adaptive technologies such as screen readers. While focused on web access, this video gives an excellent overview of various disabilities and what technologies people might use to cope.

Where do I start?

Software companies are continually enhancing their products on the accessibility front, so using up-to-date versions to create your deliverables will simplify making them accessible. It’s easier to build an accessible document, for example, from the start than to retrofit accessibility to an existing one. By using Microsoft Word’s built-in styles for heads, subheads, and body text, and by building Excel tables using consistent row and column headers, you will reduce the number of problems a screen-reader user would have getting through your working paper.

The United States General Services Administration offers Section 508 tutorials, guidance, and checklists at http://www.gsa.gov/portal/content/103565. Here, you will find help on creating accessible Word documents, Excel spreadsheets, websites, PDF files, and more.

Help at MRRC

Please talk to Susan Barnes (barnessu@umich.edu) if you are interested in learning more about making your deliverables accessible, or if you’d like to use MRRC’s accessible template for working papers.
In April the Social Security Administration released the 2014 Annual Statistical Supplement on its website. The work includes more than 240 tables that provide comprehensive data on Social Security and the Supplemental Security Income program. The data cover program details such as beneficiary counts, amounts of benefits, and the status of the trust funds. Most of the data are derived from SSA's administrative records. The tables also contain data on related social insurance and welfare programs. Narrative sections describe the programs' legislative history and program rules.

This year the supplement reports the following program trends:

- OASDI benefit awards in calendar year 2013 totaled 5,533,395, including 2,794,285 to retired workers, 510,867 to their spouses and children, and 861,668 to survivors of insured workers. Benefits were awarded to 868,965 disabled workers and to 497,610 of their spouses and children.

- The number of beneficiaries age 65 or older rose from about 35.7 million in 2008 to almost 40.8 million in 2013 (14.1 percent). The number of beneficiaries age 85 or older increased at a lesser rate during the five-year period (11.7 percent), from about 4.9 million in 2008 to more than 5.5 million in 2013. In 2013, about 57,000 centenarians were receiving Social Security.

- Seventy-three percent of the 37.9 million retired workers received reduced benefits because of entitlement prior to full retirement age. Relatively more women (75.4 percent) than men (70.3 percent) received reduced benefits.

- More than 3.2 million children younger than age 18 received benefits, including 1,200,282 children of deceased workers, 1,710,618 children of disabled workers, and 325,846 children of retired workers.

- Average monthly benefits for December 2013, including the 1.5 percent cost-of-living adjustment, were $1,294 for retired workers, $1,146 for disabled workers, and $1,244 for nondisabled widows and widowers. Among retired workers, monthly benefits averaged $1,451 for men and $1,134 for women. For disabled workers, average monthly benefits were $1,271 for men and $1,011 for women.