MICHIGAN RETIREMENT AND DISABILITY RESEARCH CENTER
UNIVERSITY OF MICHIGAN

Promoting research on retirement, disability, and Social Security policy

Key findings from 2021 papers

MRDRC released 21 working papers in 2021 on topics such as early-life adversity's influence on future disability, social predictors of scam susceptibility, and how a spouse's nursing home use affects the community dwelling spouse.

Trends in disability

The Causes and Consequences of Opioid Use among Older Americans: A Panel Survey Approach

Philip Armour, Rosanna Smart WP 2021-419, UM20-14

- We estimate the impact of 2009 opioid prescription drug use on mortality, health, labor force status, work disability, and disability program participation using the Health and Retirement Study.
- Long-panel structure allows for rich pre-drug-initiation controls and nearly a decade of observation of differences after 2009 prescription opioid use among older workers.
- Older workers with 2009 opioid prescriptions were 15 percentage points (40% over non-user baseline) more likely to develop a work-limiting health condition through 2018.
- Older workers with 2009 opioid prescriptions were 30 percentage points (300% over non-user baseline) more likely to apply for or receive Social Security disability benefits in 2016 and 2018.

The Effect of the Americans with Disabilities Act on Social Security Disability Insurance

Timothy J. Moore WP 2021-422, UM21-01

- States whose disabled workers received greater employment protections or workplace accommodations after the introduction of the Americans with Disabilities Act (ADA) generally had similar trends for Social Security Disability Income (SSDI) outcomes compared to states unaffected by the ADA in the years before it was introduced.
- After the ADA's introduction, there was an increase in SSDI applications in affected states relative to the unaffected comparison states. After controlling for permanent differences and other factors such as demographic and economic characteristics, SSDI applications increase by around 6% relative to the average rate just before the passage of the ADA. These effects last for several years immediately after the

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introduction of the ADA, and are statistically significant at conventional levels. These effects are larger in states affected by the ADA's disability employment protections, rather than just the provisions related to workplace accommodations.

- In contrast, there is no discernible change in SSDI allowance rates after the introduction of the ADA when the same estimation techniques are applied. This may partly be due to less precision being available for this outcome, although in general it looks as though the changes in SSDI application rates did not strongly elevate SSDI allowance rates.
- Consistent with the application results, there is some evidence of an increase in the overall number of SSDI beneficiaries several years after the implementation of the ADA. These effects come from states affected by the disability employment protections contained within the ADA, rather than from states only affected by the ADA's disability employment accommodations.
- The results suggest that the increases in SSDI applications are concentrated in states that had no employment protections or accommodations prior to the ADA, as opposed to states with employment protections but no accommodations. Overall, the results suggest that the ADA may have affected key SSDI outcomes, and that it did so through the increased protections provided to disabled workers.
- A planned future project will examine the ADA's effects on the Supplemental Security Income (SSI) program, which should shed further light on this issue as it protects individuals with marginal work histories.

Workplace Injuries and Receipt of Benefits from Workers Compensation and SSDI*

Daniel Ladd, David Neumark WP 2021-424, UM21-16

- A large share of workers who suffer permanently-disabling injuries covered by workers' compensation (WC) end up on Social Security disability insurance (DI): 31% based on self-reported data in the Health and Retirement Study and 50% based on combined HRS and SSA administrative data.
- SSA appears to be missing information on a sizable share of WC-benefit recipients for which SSDI offsets could potentially be applied (31% to 35%, depending on the precise data used). Moreover, based on SSA data, the frequency with which SSDI benefits are reduced because of the WC offset seems surprisingly low (33%) — at least based on the information we have.

Informing long-term projections

The Early Impacts of the Coronavirus Pandemic on Americans' Economic Security

Marco Angrisani, Jeremy Burke, Arie Kapteyn

WP 2021-426, UM21-11

- On average, financial stability improved soon after the onset of the COVID-19 pandemic.
- We observe increases in both subjective measures (e.g., financial satisfaction) and objective measures (e.g. savings activity) in 2020 relative to prior years.
- Increases in financial stability are concentrated among individuals who were more economically vulnerable prepandemic.
- We find evidence that much of the improvement, both overall and differential, was driven by the stimulus, which was more impactful for those who were more economically vulnerable.

The Relationship Between Adverse Experiences Over the Life Course and Early Retirement Due to Disability

Amanda Sonnega, Brooke Helppie McFall

WP 2021-435, UM21-07

- This study examines the relationship between adverse experiences over the life course and retirement due to disability.

- The number of cumulative lifetime adversities was associated with retirement due to disability, that is, retirement in the context of a health problem that completely limits work.
- The domains of childhood financial adversity and adult social adversity were most consistently associated with an increased hazard of retirement due to disability.

Risks and resources in older age

Heterogeneity in Self-Employment and the Transition to Retirement among Older Adults in the United States

Joelle Abramowitz WP 2021-423, UM21-14

- The project used internal narrative descriptions of industry and occupation in the 1994 to 2018 Health and Retirement Study and machine learning methods to classify self-employment reports into a framework of self-employment roles (own; manage; independent).
- The project found substantial differences in demographic characteristics, work characteristics, income, and benefits, as well as substantial variation in quality of life and retirement expectations by self-employment role, pre- and post-retirement.
- The project identified distinctive patterns in role changes with the transition to retirement such that large shares of workers in all roles transition into independent self-employment at the time of retirement.
- The project identified substantial discrepancies, which vary across roles, between survey responses and administrative records and finds the most prominent discrepancies for post-retirement independent self-employment.

Auto-Enrollment Retirement Plans in OregonSaves

John Chalmers, Olivia S. Mitchell, Jonathan Reuter, Mingli Zhong WP 2021-425, UM19-03

- Launched in 2017, OregonSaves is the first state-sponsored retirement plan. It provides an automatic-enrollment retirement savings program for private-sector employees who typically work in low-wage, high turnover industries.
- OregonSaves had accumulated $118.9 million by the end of June 2021.
- About half of employees eligible for OregonSaves have participated in the program.
- The most common reason for opting out is that employees cannot afford to save.

Heterogeneity in Household Spending and Well-being Around Retirement

Patrick Moran, Martin O'Connell, Cormac O'Dea, Francesca Parodi WP 2021-427, UM21-13

- For more than half of couples in a sample of U.S. couples with a retiring member, household spending displays no substantial change between the six years before retirement and the six years after retirement.
- For a fifth of couples, large increases in spending are seen on retirement, while for a fifth large falls are observed.
- Among those whose spending fell substantially, part of the decrease can be accounted for by falls in work expenses and a switch from food consumed away from home to food prepared at home. Both of these trends are expected, and are not indicative of planning failures.
- However, households in the group whose spending falls self-report difficulties planning for the future more frequently than those with stable spending, suggesting that part of the fall in consumption indicates poor financial management.

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Contextual and Social Predictors of Scam Susceptibility and Fraud Victimization

Aparajita Sur, Marguerite DeLiema, Ethan Brown
WP 2021-429, UM21-15

- Negative life events were not associated with self-reported fraud victimization, although negative life events were statistically significantly associated with greater scam susceptibility in unadjusted models.
- Higher levels of consistent social support increased the average probability of reporting fraud victimization.
- Although clinical effects are small, consistently high levels of psychological well-being and consistently low levels of loneliness significantly reduce average scam susceptibility.
- The effects of psychosocial interventions on reducing scam susceptibility are stronger for older adults who are divorced, widowed, or never married relative to older adults who are married or partnered.

The Lifetime Risk of Spousal Nursing Home Use and its Economic Impact on the Community-dwelling Spouse

Susann Rohwedder, Péter Hudomiet, Michael Hurd WP 2021-433, UM21-12

- Households face considerable risk that one spouse moves to a nursing home while the other remains in the community.
- For married persons ages 70 to 74 this risk is 34.3%; should this happen, the average cumulative duration of spousal nursing home stays is about nine months and the associated average out-of-pocket cost is about $19,800.
- This risk varies by demographic characteristics, but it is sizeable for all.
- Long spousal nursing home stays of 100 days or more tend to be associated with large increases in out-of-pocket expenditures on nursing home care, fast depletion of assets and, thus, increased risk of poverty.
- While Social Security benefits generally reduce poverty at older ages, it does not protect families from the adverse effects of spousal nursing home use.

Mixed-methods Analysis of Consumer Fraud Reports of the Social Security Administration Impostor Scam

Marguerite DeLiema, Paul Witt WP 2021-434, UM21-Q1

- SSA impostors use four key principals of persuasion to manipulate consumers to pay money: reciprocity, authority, liking, and scarcity.
- Older adults (age 65+) are significantly less likely to report victimization relative to younger consumers, but they lose significantly more money per incident on average.
- The odds of reporting victimization are higher for consumers residing in more Black, Hispanic, and Asian neighborhoods relative to more non-Hispanic White neighborhoods.
- Financial losses are significantly higher for victims who paid impostors using wire transfers and cash compared to those who paid with retail gift cards.
- In written complaint narratives, consumers' use of words expressing "trust," "anticipation," "fear," "anger," and "sadness" are significantly associated with victimization and with the amount of money lost.

On the Distribution and Dynamics of Medical Expenditure Among the Elderly

Karolos Arapakis, Eric French, John Bailey Jones, Jeremy McCauley WP 2021-436, UM19-11

- Over their remaining lives, households at age 65 will incur, on average, $272,000 in total medical spending, of which $59,000 will be paid out of pocket.
- At the top tail, 10% of households will incur more than $563,000 in total medical spending of which $121,000 will be paid out-of-pocket.
- The level and the dispersion of remaining lifetime

medical spending diminishes only slowly with age. For example, on average, a household alive at age 90 will still spend more than $99,000 in total, and $21,000 out-of-pocket, before they die.

Modern work requirements

Worker Functional Abilities, Occupational Requirements, and Job Accommodations: A Close Look at Three Occupations

Megan Henly, Debra Brucker, Andrew J. Houtenville WP 2021-430, UM21-04

- Using a weighted sample of an online panel survey of 802 adults working as cashiers, receptionists, or nurses/nursing assistants, we find that about half received some type of workplace accommodation for health or mental health problems. An additional 10% of workers in these occupations indicated that they needed an accommodation but did not receive one. Note that we asked about accommodation use prior to asking about health or disability status which likely encouraged reporting of workplace interventions.
- Using the Work Disability Functional Assessment Battery (WD-FAB), we find that overall levels of functioning were significantly higher for workers across these three occupations who do not receive an accommodation relative to those who do in most physical and mental functioning dimensions. Within each occupation, differences were most pronounced among cashiers. This suggests that accommodation use mitigates limitations in functional ability and may be useful in retaining workers who experience functional decline.
- Data from the Occupational Requirements Survey (ORS) help to illustrate the relative importance of these differences. We identify requirements of these three occupations as they relate to the specific dimensions of the WD-FAB, and find that some areas of functioning are essential to all three occupations (and all occupations, on average) such as fine motor function and upper body function, whereas other areas of functioning are more essential to certain occupations (e.g., communication and cognition for cashiers relative to others and basic mobility for those in nursing relative to others). This suggests a process that could incorporate the collection of accommodation information into ORS or the Occupational Information Network (O*NET), and could, in turn, inform the Social Security Administration's disability determination process.

The Role of Physical Job Demands and the Physical Work Environment in Retirement Outcomes

Italo Lopez Garcia, Kathleen J. Mullen, Jeffrey Wenger WP 2021-437, UM21-05

- We find a positive and robust association between occupational physical job demands with the probability of being retired at any age, as well as with the probability of transitioning into full retirement from full-time work.
- These effects are almost entirely concentrated in men, and they are also larger among older workers, defined as those above the median age in the sample (67 years), as well as workers without a college degree.
- The associations between the physical environment and retirement outcomes are generally weaker, most likely because physical activities and the physical work environment are highly correlated.

Actuarial adjustments of benefits

Is the Adjustment of Social Security Benefits Actuarially Fair, and If So, for Whom?

Irena Dushi, Leora Friedberg, Anthony Webb
WP 2021-421, UM20-06

- Average Social Security claim ages among male retired-worker beneficiaries have diverged considerably. The 25th percentile claim age remains just above 62, while the 75th percentile claim has reached 66 for recent

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retiring cohorts.

- Life expectancy is lower for those who claim at early ages. For the 1931-32 and later birth cohorts, life expectancy at age 62 for age-62 claimants is around 1-2 years lower than for age-66 claimants. Consequently, late claimants are adversely selected.
- The impact of selective claiming on actuarial fairness of benefit adjustments has been limited by the low rates of these adjustments for most of the cohorts we study. For the 1931-32 birth cohort, the return to delaying claiming was -0.32% for claimants who actually delayed until age 66, versus -2.63% for claimants who claimed at 62.
- For later cohorts, the return to delay has become systematically positive for those who actually delay. Yet, the fiscal impact on the Trust Fund of selective claiming remains modest, increasing Trust Fund payouts by 0.3-0.5% for recent retiring cohorts that we study.
- Many of these patterns are magnified when comparing high and low lifetime earners. Selective claiming occurs within all lifetime earning quartiles, but it increases the return to delay by larger margins for high earners. The return to delay has reached around 5% for those in the highest earning quartile who actually delay claiming among cohorts of recently retiring beneficiaries.
- Consequently, the impact of selective claiming on inequality in lifetime benefits is greater than on overall benefit payouts, raising lifetime benefit payouts by 1.9% for the highest-earning relative to the lowest-earning quartile among recent retiring cohorts that we study.

Improving program communication

Mixed-methods Study to Understand Use of the my Social Security Online Platform

Lila Rabinovich, Francisco Perez-Arce

WP 2021-428, UM21-08

- My Social Security (MySSA) is a key online resource offered by the Social Security Administration, yet the number of people with a MySSA account remains low.
- Our analysis of existing survey data shows that the strongest predictor both for having an account and the number of activities conducted on the MySSA platform is being a Social Security beneficiary. Internet literacy and educational levels also are important determinants of account ownership and usage. Younger individuals are less likely to use MySSA than older ones, even after controlling for beneficiary status.
- Qualitative interviews with Social Security beneficiaries and nonbeneficiaries reveal that there are four key reasons for not creating a MySSA account: (1) lack of awareness of MySSA; (2) no relevance/need; (3) security and privacy concerns; and (4) low internet/computer literacy.
- When interviewees created or logged into an account, they found the MySSA platform to be clear, navigable, and relevant. Nonretired, nonbeneficiary participants found the information on the platform to be particularly instructive and useful.
- For younger people especially, MySSA could be a potentially useful financial and retirement preparedness tool, by prompting individuals early and clearly about important information and actions for financial (especially retirement) planning, and by providing a salient shock to correct expectations about future retirement benefit amounts.
- A key challenge to use of MySSA appears to be getting people to create an account in the first place and not their retention once they create an account.

State and local pensions

Underfunded Public Sector Pension Plans, Social Security Participation, and the Retirement Decisions of Public Employees

Leslie Papke WP 2021-420, UM20-05

- Public employee retirement is most responsive to program eligibility focal points – becoming eligible through meeting age and service requirements – at all ages beginning at age 50. Becoming eligible for early retirement or normal retirement between the ages of 50 and 54 increases the probability of retirement by about 0.05 and 0.06.

- Participants at the key preretirement age categories who are also covered by Social Security are much more likely to retire than those without Social Security in the same age group. The economic magnitude of the effect is on par with the increased probability of retirement due to poor health. Depending on the particular age group, having Social Security coverage approximately doubles these retirement probabilities.
- Special early-out provisions also encourage earlier retirement, over and above the plan's early retirement provisions, particularly for public employees with Social Security coverage.
- Public employee retirement decisions are sensitive to plan underfunding and sustainability – the probability of retirement falls as plan underfunding increases. This effect is smaller than the influence of plan features.
- At retirement, public employees in the Health and Retirement Study without Social Security coverage (and wealth) have significantly higher housing and non-housing wealth, as well as deferred pension wealth, reflecting the greater generosity of these uncovered plans. Only about 20 percent of those who retire in the sample have defined contribution plans along with their defined benefit plans – the average amount in the funds is about $30,000 in 2012 dollars, although those without Social Security have about $2,000 more.
- There is a great deal of inequality across states in taxable resources available to sustain public plan solvency. For example, in 2017 the states with the lowest level of taxable resources per capita – around $50,000 — include Mississippi, West Virginia, Alabama, Idaho and New Mexico. But states with some of the highest pension underfunding per capita also have the highest taxable resources – New Jersey, Delaware, Massachusetts, New York and Connecticut — have over $80,000 in taxable resources per person.
- My effective sustainability measure — the rate that applied to the state's taxable resources would equal the outstanding unfunded public pension liability — is at least 5 percent for half the states, but for Connecticut, Mississippi, Hawaii, Alaska, Colorado, New Mexico, the rate exceeds 10 percent, and for New Jersey, Illinois and Kentucky, this rate is closer to 20 percent. In calculating this rate, pension liability could be split into "legacy debt" that arose before the pension fund was substantially prefunded, and the effective tax rate calculated for "current accrued service" to reduce the intergenerational transfer of public service costs. This calculation can independently inform policy regarding which states can pay for public sector services from its own resources.

Totalization agreements

Expansion of the Totalization Program Using Simplified Agreements to Eliminate Dual Taxation

María Prados, Dongwook Kim WP 2021-431, UM21-Q2

- We analyze a hypothetical expansion of the international totalization program to allow for agreements to eliminate dual social security taxation.
- These agreements could, theoretically, have the potential effect of decreasing relocation costs for multinational firms, thus encouraging foreign direct investment (FDI).
- We consider a set of 11 potential partners, consisting of developed and developing economies, several of them middle income, in Europe, Africa, and Asia.
- We estimate international relocation costs of managerial talent to be low without international agreement in several of the developing countries we studied as potential

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partners.

- An additional agreement would not much change the international flows of capital or multinational production with those countries.
- There would be some small-scale increase in FDI from the U.S. to some of these countries.

- Some developing countries we studied do not currently have sufficient relative advantages — in terms of country-embedded productivity or returns to managerial power — to attract activity from American subsidiaries.
  - An agreement to eliminate dual taxation does not affect the incentives of American firms to relocate subsidiaries there.
- We found that an agreement to eliminate dual taxation would increase U.S. FDI to four out of 11 potential candidates.
- An agreement to eliminate dual taxation with the 11 countries we considered would cost the SSA some revenues, which we estimate would be less than $114.3 million a year. This does not account for potential revenues due to Americans relocating permanently abroad and never becoming eligible for SSA benefits.

Estimating the Impact of Missing Totalization Agreements

Ananth Seshadri, Junjie Guo WP 2021-432, UM21-Q4

- We find suggestive evidence that international social security agreements increase labor mobility.
- We estimate that, on average, the social security agreements between Canada and countries that have no social security agreement with the U.S. reduced Canadian (relative to U.S.) exports to and increased Canadian imports from those countries.
- The impact on exports increases over time and is concentrated among the agreements enacted either before 1995 or after 2010 with countries that have a low real GDP per capita, a low exports-to-GDP ratio, and a medium imports-to-GDP ratio.
- The impact on imports is concentrated in the first three years following the social security agreements with middle-sized countries at the upper end of the distribution of real GDP per capita.

International

Public Pension Design and Household Retirement Decisions: A Comparison of the United States and Germany

David Knapp, Jinkook Lee, Maciej Lis, Drystan Phillips WP 2021-417, UM19-13

- Social Security's spousal and survivor benefits provide substantial additional lifetime benefits to households entitled to them.
- The design of Social Security encourages delayed claiming through increasing own and survivor benefit payments, but discourages delayed claiming by households entitled to a spousal benefit because the worker must claim in order for the spouse to receive a spousal benefit.
- Consistent with past research, we find incentives to delay claiming are associated with continued work, but only in the case of a worker's own benefit.
- For married working men, we find that incentives from survivor benefits to delay claiming and incentives from spousal benefits to claim sooner are not associated with their decision to retire.
- For married working women, we find that supplemental benefits from their husband's spousal and survivor benefits, which should provide a disincentive to continue working, are not strongly associated with their retirement timing.
- Repeating our analysis for German couples, where benefit rules and incentives pertaining to survivor benefits are less complex, we find that workers respond to incentives to delay claiming in a way that is consistent

with the incentives created by survivor benefits, but small sample sizes prevent conclusive results.

Work Capacity Assessments for Disability Benefit Determinations: An International Comparison

Lila Rabinovich WP 2021-438, UM21-03

- This paper examines work capacity assessments for disability determination processes in eight countries: Australia, New Zealand, Spain, Luxembourg, Iceland, United Kingdom, Ireland, and Canada. We find that current systems rely to a significant degree on an assessment of claimants' functional capacity, beyond their medical condition.
- Nevertheless, there remains an almost universal primary emphasis on the medical aspects of disability, even as countries have pivoted toward a greater focus on functional capacity and away from purely medical diagnoses. This persistent emphasis does not consider other individual needs and capacities or environmental factors such as the functional requirements of actual jobs in the economy.
- Moreover, there are variations between countries in whether and to what extent a claimant's medical and functional data is complemented by vocational or biographical information. Although most countries do consider this information to some extent, how this is weighed against or alongside other evidence remains unclear.
- Finally, for all of the countries included, there is an absence of structural, standardized consideration of the functional requirements of actual jobs in the economy and other environmental factors, against which the claimant's capacity to work can be weighted.
- The optimal approach to work capacity assessments will depend significantly on country-level contextual factors; politics, socioeconomic setting, resources, types of programs, and programmatic and policy goals.
- While it is unlikely that a perfect system free of biases and weaknesses can be developed, the availability of comparative overviews of different ways of assessing work capacity is valuable as researchers and policymakers continue to search for answers. ❖

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