University of Michigan Retirement Research Center

Key Findings

2012 Working Papers

I. Health and Disability

Trends in the Composition and Outcomes of Young Social Security Disability Awardees

by Yonatan Ben-Shalom and David Stapleton
WP 2013-284

- The number of Social Security Disability (SSD) awards in 2007 to individuals under the age of 40, 153,000, was only slightly higher than in 1996, 148,000, but this masks considerable change in the composition of awardees over that 11-year span.
- In 2007, compared to 1996, relatively more SSD awards to individuals under age 40 went to Disabled Adult Children (DAC) versus disabled workers; to disabled workers and DAC who had received Supplemental Security Income (SSI) benefits, especially as children, versus those with no SSI history; and to disabled workers and DAC with psychiatric disorders versus those with other types of impairments.
- Disabled workers who were on SSI as children are far more likely than those who were not on SSI as children to earn more than $1,000 (in 2007 dollars) annually as of the fifth post-award year.
- Compared to disabled workers, DAC are considerably less likely to work and earn more than $1,000 annually.
- Both disabled workers and DAC are far less likely to have annual earnings in excess of 12 times the non-blind substantial gainful activity than they are to earn more than $1,000.

Medicaid Insurance in Old Age

by Mariacristina De Nardi, Eric French and John Bailey Jones
WP 2012-278

- We assess both the distribution of Medicaid payments and the valuation placed on these payments by elderly singles.
- Our initial results for age 74 show that even though the poorest individuals use Medicaid most frequently, on average more payments go to middle income individuals.
- People at the top of the income distribution have the highest lifetime medical expenses, but qualify for Medicaid much less frequently. They nonetheless receive lifetime payments almost as large as those for people at the bottom of the income distribution, who die much more quickly.
- Once one accounts for risk, Medicaid is even less redistributive. Compensating differential calculations suggest that although all individuals value Medicaid well in excess of the payments they expect to receive, it is the rich, who have the most to lose, who value Medicaid most highly.

The Great Recession, Older Workers with Disabilities, and Implications for Retirement Security

by Onur Altindag, Lucie Schmidt and Purvi Sevak WP 2012-277

- While the Great Recession is associated with decreases in employment for the overall HRS sample, we find no evidence that these decreases are larger for those individuals who are in poor health and at risk of disability.
- However, respondents in poor underlying health are significantly more likely to report that they are no longer at their previous job and that their job loss was involuntary.
- We also find recession-related declines in consumption that are significantly larger for those in poor health.
- Holding underlying health conditions constant, self-reporting of health-related work limitations was 3.6 percentage points more likely in 2010 than in 2006.

Vocational Rehabilitation on the Road to Social Security Disability: Longitudinal Statistics from Matched Administrative Data *by David Stapleton and Frank H. Martin* WP 2012-269

- Substantial numbers of first-time Vocational Rehabilitation (VR) applicants entered Social Security Disability (SSD) in the 60 months following VR application — for example, 11.3 percent of those who applied for VR in 2003 (about 50,000 individuals).
- VR applicants who having already entered SSI are especially likely to enter SSD. Among those in the 2002 cohort who had already entered SSI, 28 percent had also entered SSD as of VR application, 50 percent had entered SSD as of VR closure, and 94 percent had entered SSD as of 60 months after VR application.
- Other VR applicant groups with relatively high SSD entry include non-Hispanic whites, those not employed at application, and those with more than a high school education.
- There is wide variation in SSD entry across state VR agencies, with some states having entry percentages twice as high as others.
- We also find a positive relationship between our measure of wait time and entry into SSD, and we discuss strategies to estimate the causal effect of wait time on SSD entry.

Communication with Individuals with Intellectual Disabilities and Psychiatric Disabilities: A Summary of the Literature *by Walton O. Schalick III* WP 2012-264

- We summarize a list of best-practices from the literature when attempting to communicate with and understand individuals with intellectual or psychiatric disabilities, and when fashioning in-the-field policies for these individuals:
    - Respect for the autonomy of the individuals being served.
    - Sensitivity to the stigmatizing power of labeled disabilities.
    - Active involvement of clients in the design of programs.
    - Individualization of communication strategies to meet the specific needs of the particular client.
    - Multidisciplinary collaboration, cooperation and communication.
    - Family and/or community collaboration, within the boundaries of confidentiality requirements.
    - Ongoing exploration of both new and traditional communication media.

Health Insurance, Health Care and Labor Supply by Older Adults *by Lauren Nicholas* WP 2011-256

- This study finds that joint replacement surgery reduces the probability of applying for Social Security Disability Insurance (SSDI) by up to 7 percentage points and is associated with working an additional 1.3 years before receiving any form of Social Security benefits.
- Elective angioplasty is associated with a 12 percentage point decline in the probablility of applying for SSDI and an additional 3.5 year delay before claiming Social Security benefits.
- The study finds no relationship between receipt of either joint replacement or angioplasty and the decision to apply for SSDI.
- Increasing access to medical care amongst chronically ill workers may help to reduce new SSDI applications.
- Temporary benefit programs to provide income support to workers taking medical leave to receive surgery, for example, could help to reduce transitions to SSDI.
- Reduction of elective procedure utilization in Medicare could adversely impact the health and economic outcomes of those who have chronic illnesses such as heart disease and arthritis. Cost-effectiveness analysis should factor in savings from elective procedures that prevent or delay health impairment or disability.

II. Social Security Old Age Survivor Insurance

Employment Trends by Age in the United States: Why Are Older Workers Different? *by Sudipto Banerjee and David Blau* WP 2013-285

- Employment trends diverged by age in the past quarter century, with employment rates declining at younger ages and rising at older ages, for both men and women.
- Social Security reform, changes in the educational composition of the population by age, and the delay in first marriage can explain 10-20% of the divergence.
- The effect of Social Security reform on the divergence in employment trends by age will persist and likely increase in magnitude as benefits decline in the future.
- Future research should study the role of other factors such as age discrimination and job displacement.

Mismeasurement of Pensions Before and After Retirement: The Mystery of the Disappearing Pensions with Implications for the Importance of Social Security as a Source of Retirement Support *by Alan L. Gustman, Thomas L. Steinmeier and Nahid Tabatabai* WP 2012-268

- There are surprisingly large differences in the estimated importance of pensions against Social Security when they are estimated with Current Population Survey (CPS) data for those ages 65 to 69 in 2006, where pension incomes among retirees are worth 59 percent of income from Social Security, vs. HRS data estimated in 1992 for members of the same cohort when they were ages 51 to 55, where expected pension wealth held by those approaching retirement age is worth 86 percent of the wealth from Social Security.
- Differences in methodology between the CPS and HRS surveys provide part of the answer. For example, the CPS excludes irregular income from pensions, while the HRS includes irregular income. Using HRS data to duplicate the calculations for the CPS when members of this cohort reach their late sixties in 2006, the ratio of income from pensions to income from Social Security is higher in HRS data at .67 than in CPS data at .59.
- Following a single cohort as it ages, the ratio of pension wealth to Social Security wealth falls from .86 for those ages 51 to 55 in 1992 to .75 when they are ages 65 to 69.
- Part of the answer is that the disposition of pensions at job termination, through cash out, roll over, and other changes at retirement, reduces the apparent share of retirement income accounted for by pensions. When the contribution of pensions to income in retirement is valued using only direct payments from pension vehicles that still exist during the retirement period, so that the support that originated in pensions but has since been transformed is ignored, an important part of the contribution pensions make to supporting consumption in retirement is ignored.
- The bottom line is that CPS data on pension incomes received in retirement understates the full contribution pensions make to supporting retirees.

Exchanging Delayed Social Security Benefits for Lump Sums: Could This Incentivize Longer Work Careers? *by Jing Jing Chai, Raimond H. Maurer, Olivia S. Mitchell and Ralph Rogalla* WP 2012-266

- We model the factors that could influence individuals to work longer if they could trade off Social Security benefit increases in exchange for an actuarially fair lump sum once they retire.
    - This can afford people flexibility over the timing of their consumption decisions.
    - Lump sums also permit people to leave assets to their heirs.
    - Some people may wish to invest a portion of their lump sum amounts in the capital market.
- Offering a lump sum equivalent in expected present value to the delayed retirement credit could be cost-neutral to the system, on average.
- Giving the delayed retirement credit as a lump sum in exchange for delayed retirement could boost average retirement ages by 1.5-2 years.
- If older individuals worked longer voluntarily, this might enhance system solvency via additional payroll tax collections.

Behavioral Effects of Social Security Policies on Benefit Claiming, Retirement and Saving *by Alan L. Gustman and Thomas L. Steinmeier* WP 2012-263

- A retirement model that also includes claiming of Social Security benefits as an outcome is used to inquire about the effects of various proposals to change the Social Security system.
- Increasing the early entitlement age to 64 increases full-time employment at ages 62 and 63 by approximately 12 percentage points. Essentially, the spike in retirement from full-time work, which presently occurs at age 62, would be shifted to age 64 by this change.
- Increasing the normal retirement age to 67 for those who had an age 65 normal retirement age increases full time work by substantially less than the increases caused by raising the early entitlement age.
- Eliminating the payroll tax after the normal retirement age reduces full-time work by between 0.5 and 1 percent between age 60 and age 64 and increases full-time work by between 1 and 2 percent at age 65 and thereafter.

Induced Entry into the Social Security Disability Program: Using Past SGA Changes as a Natural Experiment *by Nicole Maestas, Kathleen Mullen and Gema Zamarro* WP 2012-262

- We find that increases in the real threshold for Substantial Gainful Activity (SGA), relative to local (state-level) average wages, are associated with significant increases in SSDI application rates.
- Our preferred estimates imply that the 1999 increase in the nominal SGA threshold from $500 to $700 led to a 4.7% increase in SSDI applications, or 0.2 new applications per year per 1,000 individuals.
- Our theoretical framework suggests that this estimate is likely to be a good approximation of potential

induced entry from a $1 for $2 benefit offset if the marginal SSDI applicant has low potential wages.

III. Current Economic Crisis

At the Corner of Main and Wall Street: Family Pension Responses to Liquidity Change and Perceived Returns *by Thomas Bridges and Frank Stafford* WP 2012-282

- Analyzing data from the Panel Study of Income Dynamics (PSID) during 1999-2009, we find that participation in and contributions to defined contribution pensions rose prior to the recessions of 2001-2002 and 2008-2009, and then declined during the recessions.
- During both recessions, families were more likely to withdraw funds from their pension, annuity or IRA. Moreover, the number of families withdrawing 60 percent or more of their pensions saw the biggest increase.
- Low wealth, low income and out-of-pocket medical expenses were predictors of reduced contributions and of overall pension withdrawals by families.
- Mortgage distress measures also predicted pension fund withdrawals.
- While tapping into pension funds can stabilize a family's consumption during periods of financial distress, this may work to limit long-term wealth accumulation for retirement.

Diminishing Margins: Housing Market Declines and Family Financial Responses *by Frank Stafford, Erik Hurst and Bing Chen* WP 2012-276

- Using the Panel Study of Income Dynamics, we study the factors related to family level mortgage distress and foreclosure in the U.S. economy, 2007-2011.
- The most substantial predictor of mortgage distress and foreclosure is the family's allocation of a high share of family income to supplement cash flow and spending.
- Higher values of housing payments to family income — HPI — were more common in markets with strong appreciation during the housing boom.
- Substantial mortgage borrowing relative to current family income is an indication that the family expects a price rise to reward their current payment burden or that they simply have housing that is likely beyond their means.

IV. Life-Cycle Model

Representativeness of the Low-Income Population in the Health and Retirement Study *by Erik Meijer and Lynn A. Karoly* WP 2013-273

- The HRS survey sample is representative for the general population it covers.
- However, we caution against estimating population totals for small subpopulations such as SSI recipients or Medicaid beneficiaries.
- HRS samples for which restricted matched administrative data are available are often not representative of the population of interest.

Motives for Bequests within the Middle Class *by John P. Laitner and Amanda Sonnega* WP 2012-275

- Using Health and Retirement Study data on the ratio of parent-to-child lifetime incomes, we analyze the motives behind bequests. We find support for an unintentional transfer model in which bequests arise from residual, unspent parent life-cycle resources.
- We find some evidence of altruistic bequest behavior, but the support seems limited.
- We show that our model can account for the frequency of dual inheritances that earlier work revealed.

Tax Elasticity of Labor Earnings for Older Individuals *by Abby Alpert and David Powell* WP 2012-272

- Studying workers ages 55-74, we find that both men and women are less likely to work if their labor income is subject to higher taxes. Men are more likely to report themselves as retired in response to tax increases.
- We find suggestive evidence that increases in the marginal tax rate are associated with reductions in labor earnings.
- Elimination of the employee portion of payroll taxes for this population would decrease the percentage of workers, both men and women, dropping out of the labor force by 1 percentage point, a 4 percent decrease from the baseline rate.

The Interplay of Wealth, Retirement Decisions, Policy and Economic Shocks *by John Karl Scholz and Ananth Seshadri* WP 2012-271

- Using a life-cycle model we analyze, household by household, the implications of wealth shocks and changes in Social Security policy on retirement decisions.

- We estimate the impact on economic decisions of a sudden, unexpected shock that results in a 20 percent decline in wealth.

  - Since poorer households are less reliant on private savings to finance retirement than are richer households, this decline in wealth has a much smaller impact on their decisions.
  - Richer households experience a greater decline in consumption than poorer households.
  - The decline in wealth induces households to postpone retirement by one year, on average, with poorer households remaining relatively unaffected; households cut health expenditures, which increases mortality; and households save less than they otherwise would since their lifetime horizon is shorter.

- We estimate the impact of an unanticipated increase in the Early Eligibility Age (EEA) for retirement from age 62 to 64 when households are 55 years old.

  - Households decrease their consumption beginning at age 55, especially poorer households, and increase their savings.
  - The median retirement age rises to 64 from 62.
  - Households spend a little less on medical expenses, and working longer mitigates the adverse consequences for health for most households.

V. Retirement Behavior

Optimal Life Cycle Portfolio Choice with Variable Annuities Offering Liquidity and Investment Downside Protection *by Vanya Horneff, Raimond Maurer, Olivia S. Mitchell and Ralph Rogalla* WP 2013-286

- We devise a life-cycle consumption and portfolio choice model for an individual who -- in addition to stocks and bonds -- can gradually purchase fairly-priced deferred variable annuities with Guaranteed Minimum Withdrawal Benefits (GMWBs).

- We show that investors optimally purchase measurable amounts of GMWBs well before retirement because of their flexibility and access to the stock market.

- Policyholders will exercise this flexibility by taking withdrawals to adjust their portfolios and consumption streams. Nevertheless, at retirement, they also convert much of their accumulated amounts into additional annuities.

- Heterogeneity analysis suggests that differences in individuals' cash out and annuitization patterns result from variations in realized cumulative equity market return and labor income trajectories.

Personality Traits and Economic Preparation for Retirement *by Michael D. Hurd, Angela Lee Duckworth, Susann Rohwedder and David R. Weir* WP 2012-279

- Personality traits operate through economic resources and consumption levels and impact one's adequacy of preparation for retirement.

- Individuals with higher levels of conscientiousness are more likely to be economically prepared for retirement, because of greater earnings and high saving.

- Neuroticism negatively affects wealth among married persons, particularly females, while conscientiousness positively affects wealth among both males and females, and openness positively affects wealth among females.

- Among single persons, and in contrast to our findings among married persons and the overall sample, conscientiousness does not predict economic preparation for retirement.

- Neuroticism negatively affects preparation for retirement among both single males and single females, while extroversion negatively affects preparation for retirement among single males.

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Barriers to Later Retirement: Increases in the Full Retirement Age, Age Discrimination, and the Physical Challenges of Work *by David Neumark and Joanne Song* WP 2012-265

- For older workers caught by increases in the Full Retirement Age, stronger state age discrimination protections increase employment and increase the likelihood of new employment.
- Physical challenges faced by older workers are a barrier to extending work lives, although some workers are able to reduce physical demands of jobs by moving to new jobs, or through changes at the current employer.
- Stronger age discrimination protections do not appear to make it easier for workers with physical challenges at work to move to new jobs, or — in particular — to jobs that are less physically demanding.

Investment Decisions in Retirement: The Role of Subjective Expectations *by Marco Angrisani , Michael Hurd and Erik Meijer* WP 2012-274

- An economic model that allows individuals to have different beliefs about stock market returns than the average of the past 50 years represents individuals' investment behavior better than a typical "rational" economic model.
- If stock market returns are, on average, as they were in the past 50 years, individuals incur a welfare loss of up to 12 percent, depending on risk aversion.
- If stock market returns are, on average, as they were in the past 10 years, individuals on average invest near-optimally.

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About the MRRC

The MRRC promotes high quality research on retirement and Social Security policy; communicates findings to the policy community and the public; enhances access to relevant research data; and helps to train new scholars. MRRC serves the public and policy community as an authoritative source of information on a range of issues related to retirement income security.