



Promoting research on retirement and Social Security policy

Key findings on potential Social Security reforms

Phase IV working papers, 2014 to 2018

MRRC investigators often study potential Social Security reforms and the issues surrounding them. They also model how proposed reforms might impact social insurance recipients, now and in the future. Here are key findings from our current five-year funding cycle that touch on frequently discussed reforms. See also “Key findings on longer work lives.”

Raising full-retirement age

Meta-Analysis of the Decline in the Labor Force Participation Rate by *Ananth Seshadri* WP 2018-381

- While roughly half of the decline in labor force participation since 2000 can be attributed to demographic shifts, participation within groups has continuously declined as well.
- Young workers in particular have been both less likely to enter the labor force and more likely to leave.
- Across the age spectrum, disability seems to be an increasingly common factor limiting work.
- Between and across demographic groups, we find evidence of covariation between wages and labor force participation consistent with lagging wage growth discouraging workers from seeking employment.
- The association between wages and continued employment has been growing, suggesting increasing incentives to remain employed, but decreasing incentives to return to employment for those out of a job.
- So overall, much of the decline in labor force participation may be related to the wage incentives associated with participation and entry in particular.

Local Economic Hardship and Its Role in Life Expectancy Trends by *John Bound, Arline*

T. Geronimus, Timothy A. Waidmann, and Javier M. Rodriguez WP 2018-389

- Reversing the trend for much of the last century, death rates of older working aged (45 to 64) non-Hispanic whites have increased in recent years, especially among low-education women. Much of this increase can be attributed to suicide and the abuse of opioids and other substances, a group of causes often called “deaths of despair.”
- Based on comparisons of mortality trends across local area labor markets with different industrial compositions, increases in all-cause death rates appear to be concentrated in areas facing the worst economic distress.
- This pattern appears to be driven by chronic disease and cancer, which have fallen most in economically stable areas. This finding is consistent with the “weathering” hypothesis that prolonged exposure to stress increases allostatic load, leading to increased incidence of cancer and cardiovascular disease.
- Increases in “deaths of despair” do not follow this pattern. We find significant effects in the other direction, with larger increases in areas with stronger economies, raising questions about the construct of despair.

The Implications of Differential Trends in Mortality for Social Security Policy

by *John Bound, Arline Geronimus, Javier Rodriguez, and Timothy A. Waidmann* WP 2014-314

- While increased life expectancy in the U.S. has been used as justification for raising the Social Security retirement ages, independent researchers have reported that life expectancy declined in recent decades for white women with less than a high school education. However, there has been a dramatic rise in educational attainment in the U.S. over the 20th century suggesting a more adversely selected population with low levels of education.
- Using data from the National Vital Statistics System and the U.S. Census from 1990-2010, we examine the robustness of earlier findings to several modifications in the assumptions and methodology employed. We categorize education in terms of relative rank in the overall distribution, rather than by credentials or years of education, and estimate trends in mortality for the bottom quartile. We also consider race and gender specific changes in the distribution of life expectancy.
- We found no evidence that survival probabilities declined for the bottom quartile of educational attainment. Nor did distributional analyses find any subgroup experienced absolute declines in survival probabilities.
- We conclude that recent dramatic and highly publicized estimates of worsening mortality rates among non-Hispanic whites who did not graduate from high school are highly sensitive to alternative approaches to asking the fundamental questions implied.
- However, it does appear that low SES groups are not sharing equally in improving mortality conditions, which raises concerns about the differential impacts of policies that would raise retirement ages uniformly in response to average increases in life expectancy.

Have We Finally Achieved Actuarial Fairness of Social Security Retirement Benefits and Will It Last?

by *Frank Heiland and Na Yin* WP 2014-307

- We show that Social Security old age pension benefit adjustments have become significantly

closer to actuarially fair across beneficiaries born between 1917 and 1943.

- For discount rates consistent with long-term average (real) interest rates, we estimate that the current adjustment schedule for workers deviates from its fair form by less than 1 percent for average-mortality beneficiaries, compared to 5.1 percent and 4.0 percent for male and female beneficiaries in 1980.
- The improvement is largely due to the increases in the Delayed Retirement Credit. For men, gains in life expectancy in conjunction with increases in the Full Retirement Age also contributed to the better fit.
- We predict that the designated increase in the FRA to age 67 will have little effect on the actuarial fit.

Eliminating the RET

Does Eliminating the Earnings Test Increase the Incidence of Low Income among Older Women?

by *Theodore F. Figginski and David Neumark* WP 2015-325

- The elimination in 2000 of the retirement earnings test (RET) beyond the full-retirement Age (FRA), was intended to boost employment of those in this age range. But the elimination of the RET makes those who are working more likely to claim Social Security benefits at earlier ages, reducing benefits in the longer-run. This latter effect could lead to lower family income (including benefits) at older ages – perhaps in particular for older women who are likely to outlive their spouses.
- We confirm past findings that the elimination of the RET led to earlier claiming of benefits for women, and hence lower benefits.
- We find evidence that the elimination of the RET is associated with higher incomes and hence of lower incidence of low family incomes initially – when women are around age 70 – but higher incidence of low income as women reach their mid-70s and beyond.
- These findings raise cautionary flags about proposals to reduce or eliminate the RET between ages 62 and the FRA.

Lump sums for delaying retirement

Older People's Willingness to Delay Social Security Claiming

by *Raimond H. Maurer and Olivia S. Mitchell* WP 2016-346

- In our HRS module, we show that many older Americans would be willing to delay claiming their Social Security benefits if they were offered an actuarially fair lump sum to do so.
- Overall, half of the respondents say they would delay claiming if no work requirement were in place under the status quo, and only slightly fewer with a work requirement.
- If no work is required, the average amount needed to induce delayed claiming is about \$60,400, while when part-time work is required, the average is \$66,700. This implies a low utility value of leisure foregone of only \$6,300, or less than 20 percent of average household income.
- Delayed claiming would have a positive effect on beneficiaries' retirement security, in that their Social Security income streams rise per year of delay. Indeed benefits, claimed at age 70 are more than 75 percent higher than at age 62.

Will They Take the Money and Work? An Empirical Analysis of People's Willingness to Delay Claiming Social Security Benefits for a Lump Sum

by *Raimond H. Maurer, Olivia S. Mitchell, Ralph Rogalla, and Tatjana Schimetschek* WP 2014-308

- Our research asks whether replacing Social Security's annuitized, delayed retirement credit with a lump sum payment would potentially induce people to claim benefits later and work longer.
- Using an experimental module in the American Life Panel, we show that:
 - people would voluntarily work longer if they were offered an actuarially fair lump sum instead of the delayed retirement credit under the current system, and
 - people would voluntarily work between one-quarter and half of the additional time until claiming.
- The claiming delay would average half a year if the lump sum were paid for claiming later than

age 62, and about two-thirds of a year if the lump sum were paid only for claiming after the full-retirement age.

- Individuals who respond most to the lump sum incentives are those who would have claimed earliest, under the current rules.

Encouraging longer careers

Addressing Social Security's Solvency While Promoting High Labor Force Participation

by *John Laitner* WP 2018-386

- Income and payroll taxes may cause households to retire earlier than maximal society-wide efficiency might favor. Hence, Social Security reforms that seek to encourage longer careers might be able to deliver higher tax revenues with less sacrifice of household utility than would otherwise be the case.
- Recent Social Security Trustee reports show that demographics and other changes are jeopardizing the solvency of OASI and other programs. Higher payroll taxes or lower retirement benefits are possible remedies. Incentivizing longer careers is another.
- The Social Security benefit formula, through its indexing of past earnings, tends to leave few incentives to work past the early 60s. Since income and other taxes may encourage early retirement, a case can be made for re-examining the indexing formula.

Understanding Earnings, Labor Supply, and Retirement Decisions

by *Xiaodong Fan, Ananth Seshadri, and Christopher Taber* WP 2017-367

- This paper develops and estimates a rich life-cycle model that merges Ben-Porath human capital, neoclassical, endogenous labor supply, and retirement frameworks. Each individual makes decisions on consumption, human capital investment, labor supply, and retirement. Investment in human capital generates wage growth over the life-cycle, while depreciation of human capital is the main force generating retirement.
- We use the estimated model to simulate the impacts of various policy changes
 - The model shows that less generous Social

Security benefits result in higher labor supply later in the life cycle, as workers adjust their investment over the life cycle. This results in a higher human capital level as well as higher labor supply earlier in the life cycle.

- Modeling labor supply and human capital decisions jointly is critical in an analysis of the effect of policy changes.
- While presumably other factors would be important for explaining other features of labor markets, endogenous labor supply is critical for understanding life-cycle human capital investment, and retirement choices.

Adjusting the Payroll Tax to Promote Longer Careers by John Laitner and Daniel Silverman

WP 2017-363

- This paper re-estimates the life-cycle model of Laitner and Silverman (2012) using up-to-date data and improvements in methodology to analyze a prospective Social Security reform that a number of authors have suggested, namely a payroll-tax cut targeted on households near retirement.
- Our model is limited to couples and the analysis studies male retirements, taking female labor force participation as given; thus, our simulations concentrate on male retirement.
- If we make revenue-neutral changes by lowering the payroll tax at ages near retirement and raising it earlier, we can encourage longer careers — enhancing efficiency. Our improved parameter estimates can enhance confidence in the overall results.
- The increases in labor force participation that we find are slightly smaller than LS (2012), but we suggest explanations for the difference.
- Our results are generally consistent with earlier work, though they point to slightly more limited policy benefits.

Medicare Expenditures, Social Security Reform, and the Labor Force Participation of Older Americans by Yuanyuan Deng and Hugo Benítez-Silva

WP 2015-330

- This paper provides an empirical analysis of the effects on Medicare costs of the changes in the OA system resulting from the 1983 amendments.
- Using data from the Medicare Current Beneficiary

Survey (MCBS), we empirically analyze the Medicare expenditures of individuals around retirement age as a function of their health insurance coverage and labor market attachment.

- Our results show a significant effect of employment measures as well as insurance coverage types, suggesting a sizable effect of employment and insurance on Medicare expenditures as well as on total health expenditures and on out-of-pocket health expenditures.
- Our findings allow us to compute the total savings to the Medicare system resulting from individuals working while receiving health insurance coverage at older ages. We estimate savings of 2.89 billion dollars a year, as well as another 333.67 million per year resulting from the delay in enrollment into the Medicare system, given that some individuals do not enroll in Medicare when first available, and this is more common among those who work and have insurance coverage.
- These results suggest that any future reform to the social insurance system will have to account for the effect on Medicare costs of policies that likely lead to increases in employment and employer provided health insurance coverage among populations eligible for Medicare.

Do Payroll Taxes in the United States Create Bunching at Kink Points? by David Powell

WP 2015-327

- Using data from the Social Security Administration, I exploit two recent short-term changes in payroll taxes to study whether labor earnings responded:
- The Making Work Pay Tax Credit reduced the payroll tax by 6.2 percentage points up to \$6,451 (\$12,903 for couples) of earnings in 2009 and 2010. I test for bunching at this kink.
- In 2011, payroll taxes were reduced by two percentage points, changing the incentives to bunch at the taxable earnings maximum.
- I find evidence of bunching induced by the payroll tax changes.
- I estimate a tax elasticity of labor earnings of 0.08 at the taxable earnings maximum, which suggests that policy proposals to raise or eliminate the payroll tax cap should consider labor supply behavioral responses to this policy.

- I also estimate larger responsiveness to the Making Work Pay Tax Credit.

Protecting low-income seniors

Understanding Participation in SSI by Kathleen McGarry and Robert F. Schoeni WP 2015-319

- Discussions of potential changes frequently include increases in the normal retirement age and changes to the Consumer Price Index—both of which will reduce benefits. These benefit reductions are likely to have significant implications for the well-being of low-income elderly who depend heavily on Social Security.
- There remains a subset of elderly with incomes below the poverty line, and many of these individuals are not enrolled in the SSI program. Here we begin to examine the relationship between family and public assistance.
- While we find some evidence of substitution between sources of assistance, it is small.
- We are currently augmenting our study with additional years of data and a more complete accounting of state benefits.

Means testing

The Effects of Means-tested, Noncontributory Pensions on Poverty and Well-being: Evidence from the Chilean Pension Reforms

by Italo Lopez Garcia and Andres Otero Correa
WP 2017-358

- We study the effects on labor supply and well-being of a major reform to the Chilean, privately managed pension system in 2008, which introduced means-tested, noncontributory pensions and contribution incentives to workers. The new set of reforms were intended to guarantee a minimum level of consumption upon retirement, prevent old-age poverty and reduce gender inequalities, while at the same time provide the right incentives to increase the density of contributions.
- Our preliminary results suggest that an increase of \$100,000 Chilean pesos (US\$150) in expected pension wealth induced by the reform would not change labor market participation among men, but

would reduce female labor market participation by 3 percent, due to a negative income effect.

- Conditional on participation, reform would reduce labor informality among men and women, using different measures of informality such as contributing to the pension system, having a contract, or self-employment rates. These changes are larger among older individuals near retirement and are amplified by the effect of accrued pension wealth, demonstrating that the new incentives to contribute operate in the right direction.
- We observe significant increases in aggregate household expenditures, in the number of dental care visits among women, and some improvements in subjective well being measures among males such as self-perceived health, feeling depressed, or feeling sad. We do not find significant impacts in more objective measures of physical health or in medical expenditures among men and women.
- While most of the new reforms were targeted to females, we do not detect significant improvements in subjective well-being among them. While our results are only based on the sub-sample of individuals that were still not retired in 2008, where the reforms were implemented, the results in outcomes other than labor supply may change when we add to the sample the pool of individuals that were already retired in 2008, and that were also benefited by the reforms.

Means Testing Social Security: Modeling and Policy Analysis by Rafal Chomik, John Piggott,

Alan D. Woodland, George Kudrna, and Cagri Kumru
WP 2016-337

- Contrary to conventional wisdom, our analysis has found that means testing delivers fewer overall distortions and increased welfare compared to a universal pension offering the same maximum benefit level.
- Compared to an OECD average of 9.5 percent of GDP allocated to pension spending, Australia's annual spend is 2.9 percent of GDP. Hence, the comparison with many OECD countries reveals that Australian pension arrangements are cheaper both at present and based on future projections. The lower cost is largely due to the flat-rate benefit and means testing.
- Means testing also increases incentives for self-provision. Reduced or zero public benefits payable

to the richest groups of retirees can improve labour force participation for that group. Lower public spending on pensions can lead to higher aggregate labour supply – modelled to be 1.4 percent higher with means testing than with a universal pension.

Distributional Effects of Means Testing Social Security: An Exploratory Analysis by Alan L.

Gustman, Thomas L. Steinmeier, and Nahid Tabatabai
WP 2014-306

- In a sample from the Health and Retirement Study, means tests of Social Security reducing the benefits of those falling in the top quarter of all households based on means, defined as Average Indexed Monthly Earnings (AIME), or total wealth, or pension wealth, would reduce total household benefits by 7 to 9 percentage points, amounting to 15.4 to 16.4 percent of the benefits of affected workers at baseline. The means test would reduce the replacement rate up to the first bracket in the Primary Insurance Amount (PIA) formula from 90 percent to 40 percent.
- As the basis for the means test is changed, different households are affected. It will make a great deal of difference, at least to some households, which definition of means is chosen.
- Which measure of means is chosen will make a great deal of difference to policymakers holding specific views as to how best to define means. For example, if a policymaker believes that wealth is the appropriate basis for a means test, but another basis for means testing is in fact selected, households that are held by the policymaker to have low means will nevertheless suffer a reduction of benefits.
- Many households labeled as having high means when ranked by a particular criterion, whether it is lifetime covered earnings, wealth, or pension wealth, will not have their benefits reduced by the same amount.

and singles with marriage-related policies (marital income tax, and Social Security spousal and survival benefits).

- We find that these marriage-related provisions reduce the participation of married women over their life cycle, the participation of married men after age 55, and the savings of couples.
- These effects are also large for the 1955 cohort who had much higher labor market participation of married women to start with.



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Adjusting survivor benefits

Marriage-related Policies in an Estimated Life-cycle Model of Households' Labor Supply and Savings for Two Cohorts by Mariacristina

De Nardi and Fang Yang WP 2017-371

- We estimate a rich life-cycle model of couples

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