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SCHWARTZ CENTER FOR ECONOMIC POLICY ANALYSIS

POLICYNOTE

CATCH-UP CONTRIBUTIONS: AN INNOVATIVE POLICY PROPOSAL FOR SOCIAL SECURITY

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ELEVATOR PITCH

Older workers have not been able to save adequately for retirement. The median retirement savings balance for older workers is only $15,000. This note outlines catch-up contributions, a proposal that would enable workers to purchase extra benefits through Social Security. Catch-up contributions alone cannot solve the problem of inadequate retirement savings, but they mitigate systemic shortcomings of 401(k)- and IRA-based savings programs.

KEY FINDINGS

- Defaulting workers into Social Security catch-up contributions of 3.1% of earnings starting at age 50 would help bridge the gap between retirement savings and the amount needed to maintain pre-retirement living standards.

- The proposed program uses the existing structure of Social Security to target lifetime low earners, but it is attractive to all.

- It would not increase the Social Security deficit, but would somewhat strengthen the program's financial health.

- Workers are willing to contribute more than 3.1% of earnings to participate in the program, regardless of income or gender.

- Low- and middle-income workers would earn additional benefits of 7% of pre-retirement income and higher income workers would earn 3-4%.

Table 1: Workers at All Income Levels Value the Program at More than the 3.1% Contribution Rate					
Income Level	**Very Low**	**Low**	**Medium**	**High**	**Maximum**
	Maximum contribution rate worker is hypothetically willing to pay				
Men, High Risk Aversion	3.92%	5.15%	5.83%	2.99%	3.29%
Men, Low Risk Aversion	4.50%	6.27%	7.77%	4.09%	4.60%
Women, High Risk Aversion	4.63%	5.76%	6.43%	3.26%	3.56%
Women, Low Risk Aversion	5.11%	6.81%	8.37%	4.35%	4.85%

Source: Authors' calculations.

Notes: The catch-up program requires a contribution rate of 3.1 percent of salary. The table reports the contribution rates at which a single individual would be indifferent between participating and not participating in the program, assuming the same benefit level and a real risk-free rate of return of 3 percent on the household's financial assets, which is well in excess of current rates.[1]

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THE UNITED STATES FACES A RETIREMENT SAVINGS CRISIS

ReLab's policy note, "Inadequate Retirement Savings for Workers Nearing Retirement," documents that the median retirement savings account balance for those nearing retirement is $15,000.

Inadequate retirement savings will cause 8.5 million middle-class older workers and their spouses – people who earn over twice the official poverty line of $23,340 (if single) or $31,260 (if coupled) – to be downwardly mobile when they retire at age 62, falling into poverty or near poverty in their old age.

Many of these households do not have access to workplace retirement savings. In 2014, 35% of those nearing retirement did not have access to retirement plan, a share that has increased over the last 30 years. Those with access would have to save impossibly large shares of their incomes to retire at customary retirement ages. For many, delaying retirement is not a solution, due to ill health and lack of employment opportunities.

SOCIAL SECURITY CATCH-UP CONTRIBUTIONS ARE PART OF THE SOLUTION

We propose a Social Security catch-up contributions program that would allow workers to overcome the numerous shortcomings of our DC and IRA-based retirement system by purchasing extra Social Security benefits. It is designed to be attractive to workers at all income levels while targeting low-income workers facing the greatest risk of downward mobility in retirement. The program builds on the existing structure of

Social Security and somewhat strengthens the finances of the Social Security program.

Catch-up contributions are not a panacea for the retirement savings crisis. Rather, their goal is to help bridge the gap between workers' retirement savings and the amounts required to maintain pre-retirement living standards.

HOW CATCH-UP CONTRIBUTIONS WORK

The catch-up contribution program would default workers ages 50 and older into an additional Social Security contribution of 3.1 percent of salary, a 50 percent increase on current employee contributions. For a worker making $40,000, they would contribute an additional $24 a week. The employer's Social Security contribution would not increase.

Social Security benefits are based on the worker's earnings record (see box for details). In years

where workers make additional contributions, their earnings record would be increased by 50 percent.[2] For example, the earnings record of a catch-up participant with earnings of $50,000 in a particular year would be credited with a 50 percent bonus, so that it showed earnings of $75,000. Benefit calculation would follow current law, but using the earnings record inclusive of the catch-up credit.

How Social Security Benefits are Calculated

1) index each year's earnings by changes in national average earnings[3]

2) take the monthly average of the top 35 years' wage-indexed earnings, Average Indexed Monthly Earnings (AIME)

3) apply a three part formula to AIME to

determine the Primary Insurance Amount (PIA), the monthly benefit payable at the Full Retirement Age (in 2018, this is 90% of the first $895 of AIME, 32% of the next $4,502, and 15% of the remainder, up to $10,700)

4) adjust the Full Retirement Age benefit for early or delayed claiming

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WORKERS AT ALL INCOME LEVELS WOULD RECEIVE INCREASED BENEFITS

We model the catch-up benefits of very low, low, medium, high, and maximum lifetime earners, each of which reflect stylized life-cycle earnings patterns.

The maximum earner is assumed to earn at least the maximum amount subject to Social Security tax ($128,400 in 2018).[4] Maximum earners would enjoy the largest dollar increase in benefits - $345 a month, assuming they retire at their Full Retirement Age, reflecting the larger catch-up credits in their earnings records.

Table 2: Higher Earners Receive Larger Catch-Up Benefits					
Income Level	Very Low	Low	Medium	High	Maximum
Average monthly earnings	$925	$1,665	$3,689	$5,921	$9,126
Current Law Monthly Benefits	$775	$1,012	$1,660	$2,214	$2,695
Catch-up Benefits	$66	$119	$245	$199	$345
Benefits w/ Catch-Up Contributions	$841	$1,131	$1,915	$2,413	$3,040

Source: Authors' calculations.
Notes: All dollar amounts in 2015 dollars. Replacement rate denominators are average wage-indexed earnings. Average monthly earnings are Average Indexed Monthly Earnings.

In contrast, due to the progressivity of the Social Security benefit formula, the catch-up contribution program would provide low-income workers with the largest increases in replacement rates (the percent of pre-retirement earnings replaced by Social Security benefits). Very low, low, and medium earners would receive an increase of 7 percentage points in their Social Security replacement rates, compared with 4 percentage points for high earners and 3 for maximum earners.

These increased Social Security benefits remain insufficient to enable workers to achieve the replacement rates required to maintain their pre-retirement standard of living. This is beyond the scope of the catch-up contribution program, which seeks to provide a secure financial foundation on which workers and further policy proposals can build.

Table 3: Lower Earners Would Receive Larger Increases in Replacement Rates					
Income Level	Very Low	Low	Medium	High	Maximum
Current Law Replacement Rate	84%	61%	45%	37%	30%
Replacement Rate w/ Catch-Up Contributions	91%	68%	52%	41%	33%
Increase in replacement rate	7%	7%	7%	4%	3%

Source: Authors' calculations.
Notes: All dollar amounts in 2015 dollars. Replacement rate denominators are average wage-indexed earnings. Average monthly earnings are Average Indexed Monthly Earnings.

WORKERS AT ALL INCOME LEVELS WOULD BENEFIT FROM PARTICIPATION

The participation of both high and low earners is important to the success of the program. If low earners fail to participate, it will fail to meet the policy goal of targeting those at greatest risk of downward mobility. If high earners fail to participate, the higher returns of low earners will weaken Social Security finances. The following calculations show that the program is financially attractive to both high and low earners.

A common but incorrect way of evaluating the attractiveness of the catch-up contribution program is to treat Social Security as an investment and to calculate the real rate of return workers would enjoy on their contributions.[5] The real rate of return is positive for workers in all income groups and is as high as 4.86 percent for women with low lifetime earnings.[6]

But Social Security is more than an investment. It also provides valuable insurance against the hazards and vicissitudes of life. Benefits are paid in the form of a lifetime income that protects against the risk of outliving one's wealth.

This insurance is considerably more costly to purchase on financial markets.

To include the value of the additional insurance provided by catch-up contributions, we calculate the maximum percentage of salary that workers would be willing to pay to participate in the program (see box for details). If this exceeds 3.1 percent, workers are better off participating at a 3.1 percent contribution rate.

At all income levels, men and women born in 1949 would be willing to pay more than 3.1 percent of salary to participate in the program regardless of income and assuming a modest degree of aversion to low consumption at older ages (see Table 1). Thus, although the program targets low lifetime earners, it also benefits higher earners. At a higher but plausible degree of aversion to low consumption at older ages, willingness to pay substantially exceeds 3.1 percent. Women have a higher willingness to pay than men, reflecting their greater longevity.

Calculating Workers' Value of the Program

· To make this calculation, we construct an economic model in which workers earn labor market income, make Social Security contributions, participate in the catch-up contribution program, and save for retirement.

· Their savings earn a risk-free 3.0 percent real return, which is higher than current rates, but close to historic norms. During retirement, they receive both their regular and catch-up Social Security benefits and draw down their savings.

· They are averse to the prospect of low consumption should they live to advanced ages. We calculate the contribution rate at which the worker is as well of contributing as not contributing to the program.

CATCH-UP CONTRIBUTIONS SOMEWHAT STRENGTHEN SOCIAL SECURITY'S FINANCES

Projections using the Urban Institute DYNASIM model show that by bringing additional revenues into the Social Security program, catch-up contributions will delay the exhaustion of the Social Security by 3 years, from 2034 to 2037.[7] Another commonly used metric for evaluating Social Security solvency is the 75 year shortfall,

the percentage point increase in payroll tax that is required so that the present value of benefits equals the present value of taxes, over a 75 year horizon. Simulations using the DYNASIM model indicate that the program will slightly reduce the 75-year shortfall.

POLICY RECOMMENDATIONS

Social Security catch-up contributions can help bridge the gap between retirement wealth and the amounts needed to maintain pre-retirement consumption. The benefit formula targets low lifetime earners yet is attractive to all, and would somewhat strengthen Social Security finances.

However, participation may depend on workers having confidence they will be paid promised benefits. Before implementing a catch-up contribution program, the government should first take steps to strengthen Social Security.

Experience with 401(k) plans shows that well-designed defaults (such as auto enrollment) can achieve high participation rates.[8] We are cautiously optimistic that defaults can achieve high participation rates in a catch-up contribution program. If take-up falls short, policymakers should consider a default.

Even with catch-up contributions, workers still need a strong second tier of retirement savings to supplement Social Security – one which allows them to save over their whole careers. Guaranteed Retirement Accounts (GRAs) would support this need. GRAs are individual accounts requiring employers and employees to contribute, with a fair and effective refundable tax credit provided by the government. GRAs provide a safe, effective vehicle for workers to accumulate personal retirement savings over their working lives.[9]

ENDNOTES

1. High risk-aversion individuals are assumed to have a constant relative risk aversion utility function with a coefficient of risk aversion of five and low risk aversion individuals have a coefficient of risk aversion of two. We use Social Security Administration cohort mortality tables adjusted to reflect socioeconomic mortality differentials (Brown, Liebman, and Pollet (2002).

2. This includes workers earning above the Social Security taxable maximum; their benefits would be calculated as if the taxable maximum was 50 percent higher.

3. Earnings are subject to a taxable maximum, and earnings after the year in which the worker turns age 60 are not indexed.

4. The scaled earnings are constructed by Clingman & Burkhalter (2013) and reflect typical age-earnings profiles. The AIMEs of the five scaled earners correspond to the 8th, 16th, 39th, 70th, and 100th percentiles of the distribution of AIMEs. The "career-average earnings levels" are 25 percent, 45 percent, 100 percent, and 160 percent of the AWI for the very low, low, medium, and high hypothetical workers, respectively.

5. This is the interest rate at which the expected present value of benefits, with each year's benefit multiplied by the probability of surviving to that year, equals the expected present value of contributions, also multiplied by survival probabilities.

6. See appendix Table 1.

7. The DYNASIM projected exhaustion date matches the 2016 Social Security Trustees' Report projection.

8. See Madrian and Shea (2001).

9. Ghilarducci and James (2018).

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Appendix Table 1: Rate of Return on Catch-Up Contributions					
Income Level	**Very Low**	**Low**	**Medium**	**High**	**Maximum**
Men born 1949	3.59%	3.59%	3.52%	-0.39%	-0.23%
Women born 1949	4.61%	4.61%	4.54%	0.75%	0.94%
Men born 1965	3.97%	3.96%	3.89%	0.03%	0.20%
Women born 1965	4.86%	4.85%	4.78%	1.03%	1.22%

Source: Authors' calculations.
Notes: Authors assume population average mortality for the relevant birth cohort and exclude spousal and survivor benefits.

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