

Social Security Plus

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In April 2017, President Trump signed into law a bill that blocks states from offering so-called Automatic IRAs, state-sponsored retirement plans that workers are automatically enrolled in if they don't have access to an employer-sponsored account.¹ Lawmakers in a number of states—including Connecticut, California, Illinois, Maryland, and Oregon—have already approved this approach.² Yet Republicans and financial industry lobbyists have argued that states shouldn't be establishing such “public options,” in part because it will create a multiplicity of potentially conflicting state laws.³

They have a point—even if it's at odds with the usual conservative celebration of state experimentation. But the solution is not to reduce opportunities for state innovation, or shy away from the proven benefits of automatic enrollment for boosting workers' savings. The solution, we argue, is to create a federal public option that would not only increase simplicity, facilitate cross-state coordination, and encourage retirement preparedness, but also reduce the risks that deters many savers, such as stock market reversals and the prospect of outliving one's savings.⁴ That solution is to give all Americans the option of using their retirement savings to purchase additional Social Security benefits.

We know this idea sounds fanciful, but in this essay we develop a straightforward proposal for carrying it out: “Social Security Plus” (SSP). SSP would allow Americans to convert their retirement savings into additional Social Security benefits merely by rolling over their IRA or 401(k) account to the Social Security Administration. Currently, Social Security benefits only replace, on average, a third to about a half of pre-retirement income,⁵ whereas the consensus view is that retirees need about two-thirds.⁶ The Social Security Plus option would fill that gap by allowing individuals to buy up to twice the standard Social Security benefit.

¹ See Mark Muro, *Failure to Adjust: The Case of Auto-IRA*, BROOKINGS (2017), available at <https://www.brookings.edu/blog/the-avenue/2017/05/08/failure-to-adjust-the-case-of-auto-ira/>

² See Ashley Ebeling, *Senate Kills State-Sponsored Retirement Plans for Private Sector Workers*, FORBES (2017), available at <https://www.forbes.com/sites/ashleaebeling/2017/05/03/senate-kills-state-sponsored-retirement-plans-for-private-sector-workers/#771c9ac652f2>

³ See Yuka Hayashi, *Senate Strikes Down Rule to Help State-Sponsored Retirement Programs*, WALL STREET JOURNAL (2017), available at <https://www.wsj.com/articles/senate-strikes-down-rule-to-help-state-sponsored-retirement-plans-1493856635#> (also discussing Republican and financial industry objections based on state-sponsored IRA plans putting downward pressure on fees).

⁴ See Anne L. Alstott, *Public Options: How to Improve Markets, Expand Freedom, and Increase Opportunity*, at 3-4 (unpublished manuscript, 2017); Jacob S. Hacker, *Medicare Plus: Increasing Health Coverage by Expanding Medicare*, 1 COVERING AMERICA: REAL REMEDIES FOR THE UNINSURED 75-100 (2001) (discussing the value of public options in a variety of contexts including with regard to social security).

⁵ See Andrew G. Biggs & Glenn R. Springstead, *Alternate Measures of Replacement Rates for Social Security Benefits and Retirement Income*, 68 Soc. Sec. Bulletin 2 (2008) (“...Social Security benefits typically account for a replacement rate of roughly 40 percent.”).

⁶ See Alicia H. Munnell & Mauricio Soto, *How Much Pre-Retirement Income Does Social Security Replace?* 36 CENTER FOR RETIREMENT RESEARCH AT BOSTON COLLEGE 2 (2005), available at http://crr.bc.edu/wp-content/uploads/2005/11/ib_36_508c.pdf (“Overall, the range of studies that have examined this issue consistently

As every retirement expert knows, the seismic shift away from defined-benefit pensions toward defined-contribution plans like 401(k)s has shifted much of the risk and responsibility for retirement savings to individual retirees, leading many Americans to insufficiently save for retirement. 401(k)s have many virtues, but they do not offer a simple defined benefit, both because private employers have no interest in taking on this responsibility and because private insurers lack the ability to spread risks over time and across large numbers of people. These are both tasks, however, that federal government is uniquely well-suited to do. If Social Security allowed people to convert some or all of their 401(k) accounts into a defined benefit, then 401(k)s could provide the same reliable monthly check that Social Security does.

Social Security Plus would also create a default option that encouraged Americans to put a sizable but manageable chunk of their paycheck into retirement savings. Four decades of mixed experience with 401(k)s has made clear that most Americans won't save enough unless they are at least encouraged by an opt-out default to do so. The biggest problem with 401(k)s is not that their returns are uncertain. It is that half of workers do not have one, and almost nobody contributes enough to them. We need to start with a presumption that workers contribute adequately to fund their retirement. And we cannot do that unless they are given the protections against risk only government can provide. This is the bargain embodied in Social Security Plus.

Finally, Social Security Plus would ensure portability and, with it, the ability of retirement savings to compound over time to the fullest extent possible. Today, even when workers do save in 401(k)s, a significant share of their savings leaks out before they retire (for example, if they cash out their balances when they switch jobs).⁷ Because SSP travels with individuals, workers don't need to rollover their balance when they change jobs, nor would there be a temptation to cash out benefits during trying times of economic transition.

The next parts of this essay will flesh out the multi-faceted benefits of Social Security Plus. We will then respond to concerns about how SSP will be implemented.

I. THE POTENTIAL BENEFITS OF SOCIAL SECURITY PLUS

A. *The Case for Social Security Plus*

The social policy story of the past generation is the shift of economic risk from government and employers onto workers and their families. This transformation has hit retirement especially hard. Forty years ago, most workers who had a pension received a guaranteed plan that was protected from market risk. These plans built on Social Security, then at its peak.

Today, such "defined-benefit" pensions are largely a thing of the past. Instead, private workers lucky enough to get a pension receive "defined-contribution" plans such as 401(k)s—which do not require contributions nor provide guaranteed benefits. Meanwhile, Social Security is set to replace less than 40 percent of pre-retirement income within a decade—down from 50 percent as late as the 1990s. As a result, the share of working-age households at risk of being

find that middle class people need between 65 and 75 percent of their pre-retirement earnings to maintain their life style once they stop working").

⁷ See Alicia H. Munnell, *401(k)/IRA Holdings in 2013: An Update from the SCF*, 14-15 CENTER FOR RETIREMENT RESEARCH AT BOSTON COLLEGE 6-7 (2014).

financially unprepared for retirement at age 65 has jumped from 31 percent in 1983 to more than 53 percent in 2010. In other words, more than half of younger workers are slated to retire without saving enough to maintain their standard of living in old age—roughly 70 percent of annual preretirement income.

The reason is simple: 401(k)s shift all risk and responsibility for retirement savings onto individuals, who suffer from key behavioral biases that make retirement saving and spending difficult. People fail to save enough in defined-contribution plans even when they have them. The median account value is around \$20,000, well below the savings a retired worker needs to live on. In addition, 401(k)s make individuals wholly responsible for investment decisions as well as post-retirement drawdown of accounts. By contrast, defined-benefit plans in their heyday provided pooled investment decisions governed by federal fiduciary law, and were able to partly insure against market risk by varying payout rates and the like over time. Perhaps most important, they offered a guaranteed lifetime benefit after retirement—that is, an annuity. Outside of Social Security, few Americans have access to such guaranteed benefits today, in part because of weaknesses of the private annuity market.

B. *Social Security Plus in Brief*

Social Security Plus would address all three of these problems: under-saving, market risk, and lack of attractive options for annuitization. The proposal starts with an “opt-out” savings level adequate to give all Americans a secure retirement. By default, all employees’ contribution to Social Security would be doubled from 6.2 to 12.4%—with the increase tax purchasing supplemental benefits.⁸ Individual employees would be free to opt out of the supplemental contribution (or could opt to increase their contribution until their total SSP purchases earned then 200% of standard benefits).⁹

In turn, the price of these enhanced benefits would be set so that the government would expect to neither profit nor lose from providing the added benefits. We estimate that a 30-year-old who converted about \$1,000 of 401(k) or IRA savings could purchase an extra \$181 of annual Social Security retirement benefits. Of course, converting dollars later in life would purchase fewer additional benefits. For example, \$1,000 contributed at age 60 would only purchase about

⁸ There are several alternative versions of SSP that might encourage or require employer contributions. For example, (1) an employer might be required to split (or bear some of) the costs of the enhanced SSP contribution. Or, (2) an employer might be required to contribute to an employee’s SSP so long as the employee does not opt out of his or her enhanced contribution. Required employer contributions of either type, however, are likely to be more distortive than government subsidies, see *infra* at text accompanying note 57 (discussing distortions caused by cross-subsidies from wealthier employees) and are likely to be spurned as “job killing.” Alternatively, (3) an employer’s contribution might increase merely by default with an employer option to reduce its contribution down to the current 6.2% level. A presumptive, employer-opt out option combined with bully pulpit encouragements might lead in equilibrium to some enhanced employer contributions. But worker-regarding defaults are less likely to be sticky, as repeat-contractors who had not been contributing in the past are likely to opt out. See Alan Schwartz and Louis L. Wilde, *Imperfect Information in Markets for Contract Terms: The Examples of Warranties and Security Interests*, 69 *VIR. L. REV.* 1387, 1394 (1983) (discussing near ubiquitous contracting around default Magnuson-Moss Warranty default for less generous “limited warranty”).

⁹ See *infra* at p. 4 (discussing how doubling an employee’s contribution would not by itself be sufficient to double the employee’s benefits because the employer’s contribution (currently 6.2%) would not increase whether or not the employee opted in or out of the SSP system).

\$84 of additional annual benefits. To make sure that the conversion rate was “actuarially fair” in this way, the Social Security Administration could auction some of the converted dollars it received to learn at what price market actors would be willing to provide \$100 of annuity benefits for particular retirement cohorts.

The beauty of Social Security Plus is that it provides a low-risk default savings option that builds on a program that is both familiar and popular.¹⁰ Social Security is the most successful retirement plan the United States has ever had.¹¹ It’s beloved in large part because is a model of simplicity and reliability: When you retire, you receive an inflation-adjusted monthly income that lasts as long as you live. No need to worry about whether you are choosing the right fund. No chance that you’ll be ripped off by excessive fees. It’s done for you.

The same would be true of Social Security Plus. It would not require the creation of a new government bureaucracy. The Social Security Administration already has an account set up for you and every other American with a Social Security number. It already has well-developed mechanisms for receiving and paying out billions of dollars. Social Security Plus would just represent a new source of inflows and outflows to the accounts of participating members.

Likewise, our proposal imposes no new financial or administrative burdens on employers with 401(k) plans. Employer plans already have mechanisms for periodically sending contributions to various fund plans, and Social Security Plus would just add an additional public option to employees’ menu. Moreover, if states set up their own automatic enrollment procedures for workers without employer plans, they could auto-enroll uncovered workers in Social Security Plus rather than create their own investment options, which would allow benefits to easily move with workers across state lines. Workers who don’t have access to an employer-sponsored 401(k) would be automatically enrolled in Social Security Plus under its enhanced saving scheme unless they opt out.

To be clear, employees still could choose to invest their retirement savings in mutual funds or ETFs offered by their employers’ plan or by their IRA, but Social Security Plus would allow employees to roll over some or all of their existing balances and future contributions to their Social Security Plus account with its guaranteed payout.

Right now, many workers who *have* access to a retirement plan face a Catch-22 because their employee plans’ fees are so high: They either sacrifice the tax-deferred benefits by *not* investing in their employer’s plan, or they invest but sacrifice market returns. Indeed, [fees are so high on about 16%](#) of retirement plans that young employees would be better off saving privately.¹²

¹⁰ See Jasmine V. Tucker et al., *Strengthening Social Security: What Do Americans Want?*, NATL. ACAD. OF SOC. INSURANCE 7-8 (2013), available at https://www.nasi.org/sites/default/files/research/What_Do_Americans_Want.pdf (notes the decisive popularity of Social Security both in the aggregate and across various demographic groups).

¹¹ See *Policy Basics: Top Ten Facts About Social Security*, Center on Budget and Policy Priorities (2017), available at <https://www.cbpp.org/research/social-security/policy-basics-top-ten-facts-about-social-security> (“...Social Security remains one of the nation’s most successful, effective, and popular programs”).

¹² See Ian Ayres & Quinn Curtis, *Beyond Diversification: The Pervasive Problem of Excessive Fees and “Dominated Funds” in 401(k) Plans*, 124 YALE LAW J. 1501 (2015).

Social Security Plus eliminates this investment dilemma by allowing employees of high-cost plans to roll over their retirement savings to the government's safe, low-cost alternative while they are still working.

C. Describing the SSP Option in More Detail

Social Security Plus would be a public option that would allow any U.S. citizen or permanent resident to purchase up to twice the benefit they would otherwise receive.¹³ Purchasing a 10% SSP supplement would entitle the buyer to 10% enhancement of all his or her social security benefits, including the spousal and disability benefits. The SSP supplement would also not be subject to legislative reduction. For example, a person who bought a 5% supplement in 2020 would be entitled to 5% more of the 2020 entitlement, even if Congress subsequently reduced the standard benefit.

As described below, the price for purchasing additional fractional benefits would be at actuarially fair rates set by the Social Security Administration (SSA). These rates would be a function of the purchaser's age and wage history, the former taking into account the time value of money and the latter predicting the purchaser's standard benefits. A \$1000 SSP purchases made early in a worker's life would have a greater present value and accordingly would buy more SSP benefits than purchases made later in a worker's life.

These purchases could either be funded from deferred tax accounts (such as IRAs, 401(k) and 403(b) accounts) on an ongoing basis, or be funded through one-off purchases. 401(k) and 403(b) plans, as well as financial intermediaries offering IRA accounts, would be required to include a Social Security Plus option in the plan menu of potential investments. Plan participants might, for example, instruct their plan to invest 30% of their 401(k) periodic savings in Social Security Plus, with the remaining 70% in traditional mutual funds. Alternatively, a plan participant might choose—either on a one-off basis or at various discrete times—to “roll over” a proportion of her accumulated plan savings to Social Security Plus.

SSP purchases could also be funded from non-tax-deferred accounts (such as Roth IRAs or even simply standalone checking or savings accounts), purchases that could again be made on either an ongoing or one-off basis. SSP benefits purchased with tax-deferred funds would be taxed as ordinary income when received, while SSP benefits purchased with non-tax deferred (Roth) funds would (like most Social Security benefits) be exempt from income tax. The SSA would accordingly keep track of the proportion of SSP benefits that were funded with tax-deferred funds; for instance, an individual who funded 70% of her SSP benefits with tax-deferred funds would only have to pay ordinary income tax on 70% of the benefits. However, the initial (actuarially

¹³ Social security benefits are available for citizens or permanent residents (i.e. “green card” holders), but not for people who reside in the U.S. on temporary work visas or undocumented workers. *See Supplemental Security Income (SSI) for Noncitizens*, SOCIAL SECURITY ADMINISTRATION (2017), available at <https://www.ssa.gov/pubs/EN-05-11051.pdf>.

fair) price for purchasing a particular percentage of SSP benefits would be the same regardless of whether the purchase was funded with Roth or non-Roth funds.¹⁴

SSP could be structured on either an opt-in or an opt-out basis. We propose a middle route where, by default, all employees would be enrolled either in SSP or their employer's QDIA with at least a 6.2% contribution. Individual employees of course would be able to increase or decrease this default contribution, but we are mandating this 6.2% default contribution for all employees to respond to the substantial shortfall in retirement savings experienced by many Americans. Creating a default of enhanced Social Security benefits is a powerful way to respond to this shortfall while preserving individual freedom.

Doubling the default social security employee contribution (from 6.2% to 12.4%) would not double an employee's social security benefits, in part because the employer's contribution would not double and in part because the supplemental income would be priced on actuarially fair basis (without subsidies). Employees working for employers without plans would by default be enrolled at this 6.2% level. Employers with plans would be able to use SSP as their plan's "Qualified Default Investment Alternative" (QDIA); hence, a plan could choose the Social Security Plus as the plan's default investment.¹⁵ The plans could choose an alternative QDIA, but they would be required to set the default contribution at, at least, 6.2% and would be required to offer SSP as one of their plan's menu investment options.¹⁶

D. *Avoiding the 3 Pitfalls of Retirement Investing*

Converting retirement investments into SSP purchases can avoid three of the problems that have plagued defined contribution plans—excessive fees, insufficient diversification, and inappropriate exposure to the equity premium. The ability to avoid excess investment fees is the single most important rationale for offering citizens the SSP public option. Workers who send their savings to SSA as it accrues avoid the gouging that has reduced the returns of many retirement programs. For example, Ayres and Curtis, in analyzing more than 3,500 401(k) retirement plans holding \$120 billion in assets under management, found that excess expenses in 2009 averaged 85 basis points with the worst 5% of plans imposing excess fees of 144 basis point annually.¹⁷ For the average plan, about half of these excess fees were unavoidably baked into the menu offerings,

¹⁴ Our proposed system thus preserves the tax-diversification attributes of Roth and non-Roth retirement investments. As with traditional retirement investments, Roth and non-Roth investments will produce identical payoffs to the government and to the taxpayer if the tax rate remains unchanged. See Scott L. Butterfield et al., *The Roth Versus the Traditional IRA: A Comparative Analysis*. 16 J. APPLIED BUSINESS RESEARCH 117 (2011) (Figure 2).

¹⁵ Social Security Plus satisfies goals of existing QDIA requirements because SSP investments avoid "the risk of large losses" and are "consistent with a target level of risk appropriate for participants of the plan as a whole." See Ayres & Curtis, *supra* note 10, at 1476.

¹⁶ Because of the benefits described below, there are good reasons to mandate that Social Security Plus be the default investment option of all deferred-tax plan. Doing so would, for example, eliminate the current embarrassment of plans with target date QDIAs charging more the 70 basis points in annual expenses. But in the spirit of incrementalism and to preserve plan autonomy we would merely require that SSP be offered as one of the menu options and leave it to the plan administrator as a fiduciary of participants to decide whether SSP should be the plan's QDIA.

¹⁷ See Ian Ayres & Quin Curtis, *Measuring Fiduciary and Investor Losses in 401(k) Plans*, at 43 (working paper 2012) (Table 2).

while the other half stemmed from the self-directed choices of individual plan participants.¹⁸ The unavoidable fees were so severe in 16% plans that an employee would have been better off “saving in a standalone (after tax) account rather than contributing unmatched dollars to his employer’s plan.”¹⁹ These excess fees stemming from self-directed menu choices by individual participants are often predictable result of employer negligence in designing the menu. Ayres & Curtis found, for example, that 1) more than half of plans offered “dominated” funds that no reasonable investor should invest in (given similar, lower cost menu offerings) and 2) more than 11.5% of assets in these plans were invested in dominated high-cost funds.²⁰

In addition to excess fees, defined contribution plans allow participants to self-direct their retirement investments into allocations that fail to fully diversify systemic risk. Ayres & Curtis estimated a lower bound of the “return equivalent” losses from diversification failures to be 65 basis points in the average plan (and 127 basis points in the worst 95 percentile of plans) annually.²¹ Investing in SSP avoids the pitfall of failing to diversify by buying a risk-free annuity backed by the full faith and credit of the United States government, one not exposed to the diversifiable risk of many 401(k) allocations.

Finally, self-directed defined contribution plans are subject to “exposure mistakes,” whereby participants create retirement portfolios with unreasonably high or low exposure to the stock market and its equity premium. Financial economists have some disagreements about how much exposure is appropriate for investors at various stages in their lives:²²

However, some exposures are prima facie unreasonable judged by any of these standards. For example, one study found that in 2007 roughly half of 401(k) participants in their 20s had no exposure to equity. These investors are likely making exposure mistakes . . . by not capturing any of the substantial risk premium on equity. [Y]oung people putting all their savings in money market accounts is a horrible way to save for retirement. The same study found that more than a fifth of older 401(k) participants (ages 56-65) had more than 90% of their portfolio in equities.²³

Oldsters who invest almost entirely in equities are violating the lifecycle idea that it is appropriate to ramp down one’s exposure to system risk as one edges closer to retirement.²⁴

Dollars invested in SSP are not subject to any of these allocation mistakes. SSP investments avoid the rampant excess fees of many private plans, as the SSA is rightly renowned for producing

¹⁸ *Id.*

¹⁹ See Ayres & Curtis, *supra* note 10, at 1501.

²⁰ See *id.* at 1476.

²¹ See Ayres & Curtis, *supra* note 18, at 43 (Table 2). The estimates are lower bounds because they are measures of plan-level diversification which might mask more substantial diversification failures by individual participants.

²² See Ian Ayres & Edward Fox, *Alpha Duties: The Search for Excess Returns and Appropriate Fiduciary Duties*, U. PENN LAW REV. (forthcoming, 2018).

²³ See Ayres & Fox, *supra* note 23, at 11.

²⁴ Although alternative theories of Paul Samuelson and Robert Merton would suggest that market exposure should turn, not on one’s age, but purely on one’s risk aversion. See Ayres & Fox, *supra* note 23, at 9-11.

benefits with relatively little administrative expense.²⁵ SSP investments also eliminate diversification mistakes as social security benefits are not subject to diversifiable, idiosyncratic risks to which individual stock and many mutual funds fall prey. Finally, SSP investments are not subject to exposure mistakes because a guaranteed annuity substitutes for stock market exposure.

E. *Government as Superior Risk Bearer*

Even if a defined contribution plan is optimally invested in low-cost, fully diversified, and age-appropriate equity exposures, workers still are forced to bear the systemic risk that investment returns during their lifetime will fall below expectations, such as through unexpected inflation eroding the purchasing power of the retirement nest egg. In an earlier time, defined benefit plans placed this systemic risk on employers, who owed their retired workers their promised pension (often with cost-of-living adjustments) regardless of whether the pension's portfolio had a good year. The move to defined contribution plans was spurred in large part by the growing acknowledgement that many employers were not well placed to bear this non-diversifiable risk. Individual workers are even less able to bear the risk of an underperforming stock market,²⁶ but this is just what defined contribution plans force them to bear. Instead of making employers or employees bear the system risk of stock market underperformance, SSP transfers the risk to the federal government, whose unique ability to run deficits makes it a better bearer of system risk.

F. *Leakage and Coverage Problems*

The current defined contribution system is also hounded by leakage and coverage problems that reduce the retirement assets at work for many participants. The coverage problem is simply that more than half of establishments fail to offer any retirement benefits,²⁷ with “[roughly] half of the American workforce [in 2017 not having] access to any kind of employer sponsored retirement plan.”²⁸ The problem is particularly pronounced among small employers, for whom the fixed costs of administration can make providing defined contribution plan prohibitive. SSP can help with these gaps in 401(k) coverage; Employers—even small ones—already have systems in place for deducting Social Security contributions from employees’ pay and forwarding them to the SSA. Our proposal auto-enrolls anyone who works for an employer without a retirement plan. These

²⁵ Olivia S. Mitchell, Administrative Costs in Public and Private Retirement Systems, in *Privatizing Social Security* (1998) available at <http://www.nber.org/chapters/c6255.pdf> (“administrative costs equaled 0.6 percent of benefits paid, or 0.4 percent of contributions”).

²⁶ See Jacob S. Hacker, *Restoring Retirement Security: The Market Crisis, The “Great Shift,” and the Challenge for Our Nation*, 19 *ELDER LAW J.* 15 (2011).

²⁷ See Eli R. Stoltzfus, *Defined Contribution Retirement Plans: Who Has Them and What Do They Cost?*, BUREAU OF LABOR STATISTICS 3 (2016) (Chart 1), available at <https://www.bls.gov/opub/btn/volume-5/pdf/defined-contribution-retirement-plans-who-has-them-and-what-do-they-cost.pdf>

²⁸ [Who Are Uncovered Workers, and Why Should We Care About Them?](https://www.napanet.org/news/managing-a-practice/industry-trends-and-research/who-are-uncovered-workers-and-why-should-we-care-about-them/) Available at <https://www.napanet.org/news/managing-a-practice/industry-trends-and-research/who-are-uncovered-workers-and-why-should-we-care-about-them/>.

employers, by default, would simply deduct a bit more money from employees' salaries and forward it to the SSA.²⁹

Our proposal also responds to the coverage problem of employers' plans having suboptimal employee enrollment and/or contribution. A 2011 analysis of Vanguard plans showed that less than a quarter of the plans had auto-enrollment and a very few had default employee contributions as large as 6.2%.³⁰ By requiring automatic enrollment and a default plan contribution of at least 6.2%, our proposal is likely, in equilibrium, to substantially increase the rate at which employees invest in their future.³¹ Individual employees would be able to opt out of the SSA contributions (or contribute more), but experience shows that the nudges of default enrollment and default contributions would almost certainly expand aggregate coverage for employees with and without 401(k) plans.

The problem with leakage, meanwhile, is not that employees have too *few* opportunities to *invest* for retirement, but rather that they have too *many* opportunities to *disinvest*. Munnell's analysis of Vanguard retirement accounts suggests that about more than 1.5% of assets "leak" from the balances—not because of high fees but because of various forms of withdrawals.³² Over time, these leakages can reduce the size of a participant's nest egg at the time of retirement by more than 25%.³³ The largest source of leakage are account cashouts; these can occur when employment with a particular plan employer ends and the former employee, instead of maintaining an account with the plan or rolling the balance over to an IRA, directs the plan to cash out his or her balance. The temptation to grab the cash happens even though most of these cashouts are subject to a 10% early withdrawal penalty. Other sources of leakage include hardship withdrawals, post age 59 and a half withdrawals, and loan defaults.³⁴

We respond to leakage in part by creating a default that upon job separation any 401(k) balances would "roll into" SSP unless the employee indicates that he or she wants to keep the funds invested in her former employer's plan or "roll over" the funds to an IRA account. SSP purchases are likely to be less subject to leakage, in part because SSP purchases would not be subject to loan defaults, post 59 and a half withdrawals, or cashout withdrawals. Under our proposal, SSP purchases would still provide the individual with the option of hardship withdrawals (which are currently estimated to account for leakages of more than 0.3% a year).³⁵ While some

²⁹ Jacob Hacker, How to Rescue Retirement, POLITICO.COM (June 7, 2018), available at <https://www.politico.com/agenda/story/2018/06/07/retirement-security-risk-000669> ("Step No. 2 is to automatically enroll workers and set a default contribution rate.").

³⁰ Paul Schott, Helping Working Americans Achieve a Financially Secure Retirement How the 401(k) System Is Succeeding (July 28, 2011), available at https://www.ici.org/401k/background/ci.11_pss_ayco_401k.print.

³¹ Employers who offer defined benefit plans would be required to establish a default SSP contribution to offer comparable total benefits as a worker who relied solely on a 6.2% SSP contribution.

³² See Munnell, *supra* note 11, at 6-7 (2014).

³³ *Id.*

³⁴ See Thomas Olson, *401(k) Leakage: Crafting a Solution Consistent with the Shift to Employee-Managed Retirement Accounts*, 20 ELDER LAW J. 460-465 (2012).

³⁵ It would be possible to have an SSP program without the possibility of hardship withdrawals, but we worry that removing the possibility would unduly discourage SSP purchases.

of these hardship withdrawals are appropriate, employers have poorer incentives to police hardship than the SSA. Accordingly, proposal would likely produce less leakage even here.

Our SSP proposal thus responds powerfully to the substantial shortfalls in retirement savings discussed above. By expanding coverage with auto-enrollment and substantial contribution defaults and by curtailing leakage, our proposal is almost certain to induce greater retirement savings and to keep these amounts invested throughout employees' worklives.

G. Annuitization Barriers

A defined contribution participant who manages to avoid all of the foregoing pitfalls and reaches retirement age with a sufficiently large savings accumulation is still not out the woods. Defined contribution plans require participants to either 1) continue to manage a retirement investment portfolio and take the risk that their accumulation will run out before they die or 2) confront an annuitization market that is subject to some of the pitfalls mentioned earlier. Many annuities, like mutual funds, also charge excessive fees, including surrender charges of 7% to 20% if a holder cashes out her investment early; annual management fees of up to 2%; annual insurance fees over 1%; and various insurance riders.³⁶ Moreover, the shrouding of these fees and the diversity of annuity terms makes comparison shopping all the more difficult; it's little wonder that the decisions of whether or not, with whom, and how to annuitize causes so much anxiety and reluctance to annuitize.³⁷

SSP radically simplifies the annuitization process. A plan participant can purchase an inflation-adjusted life annuity with the imprimatur of the SSA, and relative to the private market, the purchaser can better trust that the annuity is being offered without excess fees. An SSP purchase also has lower counterparty risk; while the purchaser of a private annuity has to worry about whether the annuity company will be around and financial able to make its annual payments 20 or 30 years in the future, this counterparty risk is smaller when the promisor is the federal government and its "full faith and credit" backing.³⁸

What's more, SSP solves the missing market for "pre-retirement annuities."³⁹ There are no private inflation-adjusted life annuities that twenty-year olds can purchase that will start paying if they live to retirement. However, private pre-retirement annuities exponentiate the counterparty risk problem, since paying money to private company in hopes that they will repay 70 or 80 years in the future is not something that prudent workers would do. But SSP fills this missing market— a twenty- or thirty-year old can purchase supplemental benefits with less concern about whether

³⁶ Why Are Annuity Fees so High?, available at <http://time.com/money/collection-post/2791254/why-are-annuity-fees-so-high/>.

³⁷ See OLIVIA S. MITCHELL & ANNAMARIA LUSARDI, FINANCIAL LITERACY: IMPLICATIONS FOR RETIREMENT SECURITY AND THE FINANCIAL MARKETPLACE 162 (2011) ("For example, the many different types of fixed and variable annuities offered in the current market might overwhelm a consumer unfamiliar with these products.").

³⁸ The SSP purchases can arguably be structured to qualify as public debt under the U.S. Constitution's Public Debt Clause (Amendment XIV, Section 4) ("The validity of the public debt of the United States, authorized by law, including debts incurred for payments of pensions . . . shall not be questioned.")

³⁹ See Ian Ayres & Barry Nalebuff, *Insurance You Want to Collect*, FORBES (2010), available at <https://www.forbes.com/forbes/2010/0510/companies-annuities-investing-retirement-insurance-why-not.html#58fbe1099303>

the counterparty will be in existence when it comes time to pay. Pre-retirement purchasing provides important benefits over the current system of purchasing (if at all) post-retirement:

The cumulative chance of dying between 40 and 67 is roughly 20%. Because of the chance you'll get nothing, this prefunding of an annuity at 40 will, if you do make it, boost your return by 25% (over and above the gain from 27 years of compounding).⁴⁰

Moreover, as discussed above, pre-retirement SSP purchases insulate the purchaser from the vagaries of market fluctuations. The SSP just represents a safe, simple, one-and-done option. Instead of having to continually consider and recalibrate your investment allocations while confronting a bewildering annuities market often filled with rapaciously self-interested actors, SSP purchasers can safely turn their attention to other pursuits of happiness—safe in the knowledge that they will have an inflation-adjusted nugget for as long as they live.

II. IMPLEMENTATION CONCERNS

A. Take Up

In summary, the previous section suggested that SSP can produce several benefits for supplement purchasers—including the elimination of excessive fund fees, annuitization fees, and allocation errors concerning diversification and exposure—while simultaneously ameliorating leakage and coverage gaps. But these benefits only accrue if individuals actually exercise the SSP option. The program is worse than irrelevant if no one purchases supplemental benefits.

SSP is, however, likely to have substantial take up. Setting SSP as the default investment with a default contribution of 6.2% for employees without retirement plans almost guarantee increased participation. The “iron law” of default inertia is likely to create a sizeable pool of individuals who stick with the default. This is especially likely given Social Security’s relative popularity as a government program: More than 70% of Americans have a favorable view of Social Security, and this level of support is fairly constant across income levels and political affiliations (59% of Republicans, 79% of Democrats and 74% of independents).⁴¹

This popularity should also impact the number of participants who opt for SSP in defined contribution plans. Ayres & Curtis found that, partly due to naïve diversification, plan participants put 11.5% of plan assets in menu offerings in which no reasonable person should invest.⁴² SSP should garner at least this proportion of defined contribution assets under management – which would represent more than \$400 billion – and this could be much larger if plans started to adopt

⁴⁰ See *id.*

⁴¹ See Tucker et al., *supra* note 8 (Table 1).

⁴² See Ayres & Curtis, *supra* note 10, at 1506.

SSP as their default plan investment.⁴³ If 10% of currently uncovered employees stuck with the 6.2% default that might represent on the order of \$200 billion.⁴⁴

To be sure, take-up might be depressed by concerns that the government would somehow renege on its promise to pay enhanced benefits; indeed, the same counterparty risk concerns that depress the take-up rate of private annuitization (to less than 20%)⁴⁵ might also depress SSP participation. Retirees are also reluctant to buy annuities in part because of a kind of “lost principal aversion” to losing all their savings if they die unexpectedly soon,⁴⁶ and many defined contribution plans fail to offer annuitization as even an option for workers at the time of retirement.⁴⁷ As discussed above, our SSP proposal reduces the anxiety of and greatly simplifies annuitization decision-making. The ability to for workers, throughout their working years, to buy delayed, pre-retirement annuities is likely to reduce this lost principal annuitization; because they would be making the contributions before the prospect of an untimely early death, this scenario would not be as salient as a prospect of having to scramble to make ends meet after they have exhausted their savings.

Finally, SSP take-up might be perversely impacted by cross-subsidization, especially concerning regarding sex, race, and class. While SSP would be priced to be actuarially fair overall, sub-groups with different life expectancies could, in present value terms, expect to receive back more or less than they paid in. For example, because women tend to live longer than men, actuarially fair life annuities have been estimated to transfer approximately 10% of value from men to women in a representative sample of 65 year olds.⁴⁸ Fortuitously, it has also been estimated that the spousal benefit under Social Security (which would also be enhanced by SSP purchases) goes some ways toward offsetting the gender disparities caused by differences in life expectancy.⁴⁹

⁴³ *Frequently Asked Questions About 401(k) Plans*, INV. CO. INST., http://www.ici.org/policy/retirement/plan/401k/faqs_401k [<http://perma.cc/DR5Z-2LTL>].

⁴⁴ Approximately 75 million uncovered employees earning median wage of \$45,000. See [Who Are Uncovered Workers, and Why Should We Care About Them?](#) Available at <https://www.napa-net.org/news/managing-a-practice/industry-trends-and-research/who-are-uncovered-workers-and-why-should-we-care-about-them/>.

⁴⁵ See John Beshears et al., *What Makes Annuitization More Appealing?* 1, 17 (Nat'l. Bureau of Econ. Research Working Paper No. 18575, 2012) (“In defined contribution (DC) savings plans, only 10% of participants who leave their job after age 65 annuitize their assets..”; “[annuitization] is decreasing in...worries about counterparty risk”).

⁴⁶ See Jeffrey R. Brown et al., *Why Don't People Insure Late-Life Consumption? A Framing Explanation of the Under-Annuitization Puzzle*. 98 AMER. ECON. REV. 305 (2008). Annuity companies have responded to this concern by guaranteeing minimum payouts (with “period certain” annuities (which of course reduce the benefits for retirees who die unexpectedly late). See Shlomo Benartzi et al., *Annuitization Puzzles*, 25 J. ECON. PERSPECT. 157 (2011).

⁴⁷ See Benartzi et al., *supra* note 42, at 149 (“...only 21 percent of defined contribution plans even offer annuities as an option...”). A notable exception to this pattern is TIAA-CREF: annuities were the only retirement benefits provided by TIAA-CREF until 1989, but since then non-annuity options have been offered and the popularity of life annuities declined over the course of the 1990s. See John Ameriks, *Recent Trends in the Selection of Retirement Income Streams Among TIAA-CREF Participants*, TIAA CREF Inst. 2, 9-10 (2002) (Chart 2), available at <https://www.tiaa.org/public/pdf/institute/research/dialogue/74.pdf>.

⁴⁸ See George J. Benston, *The Economics of Gender Discrimination in Employee Fringe Benefits: Manhart Revisited*, 49 U. CHICAGO LAW REV. 489, 537 (1982) (Table 5).

⁴⁹ See Melissa M. Favreault & Frank J. Sammartino, *The Impact of Social Security Reform on Low-Income and Older Women*, URBAN INSTITUTE (2002), available at <http://webarchive.urban.org/publications/411169.html> (“Women's longer life expectancy is not taken into consideration when benefits are calculated, so men and women with identical work histories and earnings receive identical benefits. In addition, women's lower life-time earnings and discontinuous

Nonetheless, as with any kind of insurance, adverse selection by those with lower expected claims might dampen participation. With regard to SSP, those groups with shorter expected longevity (including men, African-Americans, and the poor)⁵⁰ are most at risk to opt out. Since differential pricing on the basis of race or sex would raise substantial constitutional questions under the Equal Protection Clause,⁵¹ we propose SSP pricing that would be race-blind and sex-blind but that varies by the standard contribution (“AIME”) quintiles discussed in the next section.⁵² Poorer retirees with shorter expected longevity would accordingly be able to purchase more annual benefits per dollar than their richer retirees with longer expected longevity.

Differences in expected claiming do not necessarily imply that every insurance pool will unravel as a result of adverse selection. Here too, differences in longevity do not necessarily imply that SSP take-up would enter a death spiral with participation from only the very healthiest workers. The substantial benefits in fees and simplicity, combined with inertial power of defaults, are likely to ensure substantial participation.

B. Pricing and Cash Flows

While we previously laid out how SSP would impact individuals’ choices, our goal here is to flesh out how SSP would impact the Social Security Administration (SSA) itself. To begin, our SSP proposal is not a call for Congress to create a huge new bureaucracy; rather, our proposal centrally utilizes SSA’s existing capacities. The SSA already has an account for every worker, as well as procedures for taking in and paying out money associated with accounts. As such, there should be minimal costs involved simply in taking in or paying out larger accounts. Analogously, employers already have mechanisms for withholding and sending a portion of an employee’s salary to the SSA, as well as a mechanism to allow employees (for example via the W-4 form) to change the default amount of withholding. Certainly, there would be some additional costs in keeping track of individual employee SSP purchases (particularly in the pricing of SSP annuities), but these should be relatively modest.

As for pricing, the goal would be to set purchase amounts that represent actuarially fair compensation for the SSA taking on the obligation of paying supplemental benefits. The SSA already has substantial actuarial capacity to assess the future longevity of successive worker cohorts.⁵³ However, to further ensure that SSP benefits are accurately priced, we propose that the SSA auction a fraction (say 10%) of the obligations to the private market. One way that SSP auctions might work would be for the government to solicit bids on how much money an annuity provider would need to be paid this year in order to take on an annuity obligation for a particular cohort quintile. For example, the SSA might auction for the cohort that will turn 65 in 2050 how much a private actor would need to be paid to take on paying the benefit obligations of 1% of the

work histories mean that their spouse and/or survivor benefits are often higher than their own retired worker benefits.”).

⁵⁰ See ANNE ALSTOTT, *A NEW DEAL FOR OLD AGE* (2016).

⁵¹ See Benston, *supra* note 44, at 495 (discussing Manhart as non-constitutional analog).

⁵² See *infra*, at pp. 11-12.

⁵³ The SSA’s Office of Chief actuary makes systematic estimate of cohort longevity and expected claims. See, e.g., Bruce D.Schobel, *The 2017 Social Security Trustees Report*, 71 J. FIN. SERV. PRO. 42 (Nov. 2017).

2nd AIME quintile.⁵⁴ The bidders with the lowest bids (i.e., willing to be paid the least) would win the auction. The SSA would ensure that they remained able to pay the future obligations by requiring the winning bidders to maintain overtime, fully-funded, and prudently invested funds. In this way, SSP could be expected to be deficit neutral.

To give a rough approximation of how a system with SSP pricing might work, we've crudely simulated the cost of purchasing a 1% supplement in benefits:⁵⁵

Table 1

Contribution Needed to Buy 1% Increase for Different Contribution Ages										
	20	25	30	35	40	45	50	55	60	65
All beneficiaries	1496	1595	1701	1813	1933	2061	2198	2343	2498	2664
Lowest AIME quintile	768	818	873	930	992	1058	1128	1202	1282	1367
Second AIME quintile	1433	1528	1629	1737	1852	1974	2105	2244	2393	2551
Third AIME quintile	1681	1792	1911	2037	2172	2316	2469	2632	2807	2992
Fourth AIME quintile	1798	1917	2044	2179	2323	2477	2641	2815	3002	3200
Highest AIME quintile	1825	1946	2074	2212	2358	2514	2681	2858	3047	3249

Table 1 shows that in 2016 dollars, a beneficiary in the highest AIME quintile (and hence be expected to pay the largest amount for benefits) would, at age 35, need to pay \$2,212 to purchase 1% supplement benefits. The cost of these supplemental benefits would also increase for older beneficiaries (e.g., to \$3,249 for 65 year olds) because the earlier contributions have a larger present value. Beneficiaries in lower quintiles can purchase a supplemental percentage more cheaply—not because the purchase is subsidized, but merely because they would purchase a percentage supplement to a smaller basic benefit.

Table 2 extends the simulation to show the amount that a worker, on average, would have to pay annually in 2016 dollars in order to double their benefits.

Table 2

⁵⁴ AIME stands for the “Average indexed monthly earnings” and is a standard measure of participant contributions.

⁵⁵ Our simulation assumes that workers retire at 65 and die (with certainty) at 80 and follows Liebman in assuming a real annuitization rate of 1.29%. See Jeffrey B. Liebman, *Redistribution in the Current U.S. Social Security System* 21 (2000), available at <http://www.nber.org/books/feld02-1>. Alternative assumptions can be easily analyzed by downloading the underlying spreadsheet (available at www.ianayres.com/SSP.xls).

	Average Annual Earnings	PV as of age 65 of SS taxes	Av. Net Transfer	PV as of age 65 of SS Benefits	Average Annual SSP Contribution Necessary to Increase to 200%	% of Annual Earnings Necessary to Increase SS to 200%
All beneficiaries	49,055	266,377	-	266,377	4,404	9.0%
Lowest AIME quintile	15,071	98,570	38,098	136,668	2,259	15.0%
Second AIME quintile	36,672	229,200	25,902	255,102	4,217	11.5%
Third AIME quintile	53,062	302,190	(2,954)	299,236	4,947	9.3%
Fourth AIME quintile	65,548	334,756	(14,710)	320,046	5,291	8.1%
Highest AIME quintile	76,462	373,371	(48,492)	324,879	5,371	7.0%

Table 2 shows simulation estimates that a third quintile worker would need to pay \$4,947 annually in order to double their Social Security benefits, which would represent 9.3% of that quintile's median salary. Workers in lower quintiles would have to pay a larger percentage of their salary to buy an additional 100% of benefits, because these supplements *are not* subsidized while standard benefits *are* subsidized. At age 65, the highest quintile workers, in present value terms, can expect to receive \$48.4 thousand less than they pay in, while lowest quintile workers can expect to receive \$38.1 thousand more.

Table 3 shows the impact of doubling the employee's SS contribution from 6.2% to 12.4% to purchase SSP:

Table 3:

	Average Annual Contribution if 6.2% of Annual Earnings	PV of SSP benefits as of 65	PV of SS Benefits (Net of Transfer) plus PV of SSP	% Increase in Benefits
All beneficiaries	\$ 3,041	\$ 103,338	\$ 369,715	38.8%
Lowest AIME quintile	\$ 934	\$ 31,749	\$ 168,417	23.2%
Second AIME quintile	\$ 2,274	\$ 77,252	\$ 332,353	30.3%
Third AIME quintile	\$ 3,290	\$ 111,779	\$ 411,014	37.4%
Fourth AIME quintile	\$ 4,064	\$ 138,081	\$ 458,127	43.1%
Highest AIME quintile	\$ 4,741	\$ 161,073	\$ 485,952	49.6%

Table 3 shows, for example, that the lowest quintile worker would contribute about \$934 more each year, and that doing so would ultimately purchase 38.8% more benefits. Again, because SSP would be offered without cross-subsidies, higher-quintile workers would purchase a larger proportion of benefits. For example, the highest AIME quintile, by doubling their contribution, would enhance their benefit by almost 50%.

Finally, there is a substantial question of what the SSA should do with the billions of dollars that it would receive for these SSP purchases. Currently, the SSA has a trust fund of more than \$2.8 trillion (by law invested solely in Treasury securities⁵⁶), which represents a thin layer of liquidity for what is largely a pay-as-you-go system.⁵⁷ 2017 was the first year in which the SSA paid out more than it received, and the SSA estimates that its reserves will be exhausted by 2034 if nothing is done to enhance its revenues or reduce its obligations.⁵⁸

One possibility might be to try legally to segregate revenues from SSP purchases in order to keep the pressure on Congress to pass legislation to make the non-supplemental system solvent again.⁵⁹ Another politically attractive option would be to use SSP revenues to delay solving the solvency problem. The SSP revenues might allow Congress to kick the solvency problem down the road for another few decades. In either case, a non-trivial influx of funds is likely to swell the SSA's current reserves by many multiples of its current state; a balanced, low-beta portfolio with some exposure to equities is likely to outperform the current all-Treasury model. But we intentionally leave these aspects of our proposal unspecified; to our mind, reasonable people could differ on the question of what to do with SSP revenues, and the answer is largely orthogonal to the substantial benefits outlined above.

CONCLUSION

The transformation of America's retirement system over the last generation has replaced the "three-legged stool" of Social Security, defined-benefit pensions, and private retirement savings with what is in effect a two-legged stool: Social Security and private savings, inside and outside 401(k)s. A two-legged stool is not stable. What is needed is a secure savings option that provides people with guaranteed benefits in return for substantial contributions. Our new public option, Social Security Plus, provides that. It sets a default contribution rate tied to Social Security that ensures adequate savings. In return, it provides the basic protections against inflation, market, and longevity risk that savers need to feel secure when sacrificing present consumption for future security.

Although we believe traditional Social Security should also be shored up, we see this public option as a vital addition to the system, not simply a backdoor route to expanding Social Security. Social Security Plus would be a separate benefit based on one's own supplemental contributions, integrated with Social Security but distinct in both conception and structure. In effect, it would maximize the two biggest advantages of traditional private defined-benefit plans: pooled investment that reduces market risk and fees, and an inflation-adjust annuity that promises to be

⁵⁶ See Social Security Administration, *Trust Fund Data: Old-Age, Survivors, and Disability Insurance Trust Funds, 1957-2017*, available at <https://www.ssa.gov/oact/STATS/table4a3.html>.

⁵⁷ Olivia S. Mitchell, Administrative Costs in Public and Private Retirement Systems, in *Privatizing Social Security* (1998) available at <http://www.nber.org/chapters/c6255.pdf>

⁵⁸ See Social Security and Medicare Board of Trustees, *A Summary of the 2018 Annual Reports* (2018), available at <https://www.ssa.gov/oact/trsum/>

⁵⁹ See Munnell et al, How would investing in equities have affected the Social Security trust fund?, BROOKINGS.COM (July 28, 2016), available at <https://www.brookings.edu/research/how-would-investing-in-equities-have-affected-the-social-security-trust-fund/>, (proposing investing funds in a separate Fed-style investment board that passively invests in equities)

there as long as you need it. With Social Security Plus, workers have the opportunity to stop worrying about investments that charge excessive fees or fail to keep up with inflation, or about annuity companies that might go belly up.

At the same time, Social Security Plus would not have the main defect of traditional defined-benefit plans (or Social Security, for that matter)—namely, that employers or other plan sponsors might not sufficient fund a plan to meet its future payout obligations. Under Social Security Plus, there is no comparable risk of employers failing to meet their defined contribution obligation, because these obligations are due on a monthly or quarterly basis *during* an employee's working life.⁶⁰ In short, SSP gives workers the assurance that they will never outlive their retirement savings. In this essay, we have sketched out how such a program can be cheaply implemented, actuarially fair, and likely to have substantial take-up.

Finally, while our proposal is structured as a deficit-neutral option—whereby a class of individuals would pay a present value equivalent to their expected future benefits—there is nothing about SSP that would preclude the possibility of a more progressive benefit scheme; indeed, Congress might choose to subsidize the price of annuity benefits for the poorest among us. Such subsidies would have to be paid for, and like all explicit or implicit taxes, would likely induce some distortions. Since implicitly taxing the voluntary purchases of wealthier workers is likely to induce too much adverse selection to be effective, we suggest funding any such subsidies through general tax revenues.

Americans know the current system isn't working, and they want it to become more like Social Security: simple, guaranteed, secure. Employers are not going back to their traditional role. Americans will not magically become super-savers. A generation of risk-shifting has failed. We shouldn't slash Social Security. We should make it the model for a transformed private system that actually provides retirement security.

⁶⁰ Irena Dushi *et. al*, *Contribution Dynamics in Defined Contribution Pension Plans During the Great Recession of 2007–2009*, 73 SOCIAL SECURITY BULL. 1 (2013).