Improving Tax Incentives for Low-Income Savers:
The Saver's Credit

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Abstract

The federal tax system provides little incentive for participation in tax-preferred saving plans to households that most need to save more for retirement and whose contributions would most likely represent an actual increase in savings. By contrast, the tax code provides its strongest incentives to those who already are generally better prepared for retirement and who are more likely to use tax-preferred vehicles as a shelter than as an opportunity to increase overall saving. The saver's credit, enacted in 2001, helps correct this "upside-down" structure of tax incentives for retirement saving. It is the first and only major federal legislation directly targeted at promoting tax-qualified retirement saving for moderate- and lower-income workers. The limited experience with the saver's credit to date has been encouraging. Options for strengthening the credit include making it refundable, making it permanent, expanding it to provide larger incentives for middle-class households, and rationalizing the way the credit phases out at higher incomes. Such changes—now under active consideration by leading pension policymakers—would help working families save for retirement, reduce economic insecurity and poverty rates among the elderly, and raise national saving.

Improving Tax Incentives for Low-Income Savers: The Saver's Credit

For decades, the U.S. tax code has provided preferential tax treatment to employer-provided pensions, 401(k) plans, and Individual Retirement Accounts (IRAs) relative to other forms of saving. The effectiveness of this system of subsidies remains a subject of controversy. Despite the accumulation of vast amounts of wealth in pension accounts, concerns persist about the ability of the pension system to raise private and national saving, and, in particular, to improve saving among households most in danger of inadequately preparing for retirement.¹

Many of the major concerns stem, at least in part, from the traditional *form* of the tax preference for pensions. Pension contributions and earnings on those contributions are treated more favorably for tax purposes than other compensation: they are excludible (or deductible) from income until distributed from the plan, which typically occurs years, if not decades, after the contribution is made. The value of this favorable tax treatment depends on the taxpayer's marginal tax rate: the subsidies are worth more to households with higher marginal tax rates, and less to households with lower marginal rates.²

The pension tax subsidies, therefore, are problematic in two important respects. First, they reflect a mismatch between subsidy and need. The tax preferences are worth the least to lower-income families, and thus provide minimal incentives to households that most need to provide for basic needs in retirement. Instead the tax preferences give the strongest incentives to higher-income households, which, research indicates, are the least likely to need additional saving to achieve an adequate living standard in retirement.³

Second, as a strategy for promoting national saving, the subsidies are poorly targeted. Higher-income households are disproportionately likely to respond to the incentives by shifting existing assets from taxable to tax-preferred accounts. To the extent that such shifting occurs, the

¹ For a broader discussion of these issues, see William G. Gale and Peter R. Orszag, "Private Pensions: Issues and Options," in *Agenda for the Nation*, edited by Henry J. Aaron, James M. Lindsay, and Pietro S. Nivola (Washington, DC: Brookings Institution Press, 2003); Peter R. Orszag, "Progressivity and Saving: Fixing the Nation's Upside-Down Incentives for Saving," Testimony before the House Committee on Education and the Workforce, February 25, 2004; and J. Mark Iwry, Testimony before the House Committee on Education and the Workforce, Subcommittee on Employer–Employee Relations, June 4, 2003. These and related publications are available on the Retirement Security Project web site (http://www.retirementsecurityproject.org).

² Technically, the lifetime subsidy from such accounts comes from two sources: the difference (if any) between the tax rate at the time of contribution and that at the time of withdrawal, and the tax-free accumulation of funds. See Leonard E. Burman, William G. Gale, and David Weiner, "The Taxation of Retirement Saving: Choosing between Front-Loaded and Back-Loaded Options," *National Tax Journal* 54, no. 3 (September 2001); and Eric M. Engen, John Karl Scholz, and William G. Gale, "Do Saving Incentives Work?" *Brookings Papers on Economic Activity*, no. 1 (1994), 85–151. In practice, however, these items are often correlated with the tax rate at the time of the contribution, and casual evidence suggests that the up-front deductibility of most of these plans (such as 401(k)s and traditional IRAs, which provide the tax advantage at the time of contribution rather than distribution) is an important determinant of whether people make contributions.

³ See, for example, Eric M. Engen, William G. Gale, and Cori E. Uccello, "The Adequacy of Household Saving," *Brookings Papers on Economic Activity*, no. 2 (1999): 65–165.

net result is that the traditional pensions and subsidies for saving serve as a tax shelter, rather than as a vehicle to increase saving, and the loss of government revenue does not correspond to an increase in private saving. In contrast, moderate- and lower-income households, if they have pensions, are most likely to use them to raise net saving. Because moderate-income households are much less likely to have other assets to shift into tax-preferred accounts, any deposits they make to tax-preferred accounts are more likely to represent new saving rather than asset shifting.

The saver's credit, enacted in 2001, was expressly designed to address these problems. The saver's credit, in effect, provides a government matching contribution in the form of a nonrefundable tax credit for voluntary individual contributions to 401(k) plans, IRAs, and similar retirement savings arrangements. Like traditional pension subsidies, the saver's credit currently provides no benefit for households that owe no federal income tax. However, for households that owe income tax, the effective match rate in the saver's credit is higher for those with lower income, the opposite of the incentive structure created by traditional pension tax preferences.

The saver's credit is the first, and so far only, major federal legislation directly targeted toward promoting tax-qualified retirement saving for moderate- and lower-income workers. Although this is a historic accomplishment, the credit as enacted suffers from key design problems, not the least of which is the its scheduled expiration at the end of 2006. Policymakers, including Representatives Rob Portman (R-OH) and Benjamin Cardin (D-MD), are exploring possible expansions of the saver's credit. Representative Portman recently emphasized his desire to "get at what I think is the biggest potential for saving in this country, and that is those who are at modest and low income levels." This paper is intended to inform such efforts.

Section I provides background on the evolution and design of the saver's credit. Section II discusses the rationale behind the saver's credit and the role of such a credit in the pension system as a whole. Section III examines empirical data and models of the revenue and distributional effects of the saver's credit. Section IV discusses measures that would expand the scope and improve the efficacy of the saver's credit. Section V concludes.

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⁴ See, for example, Eric M. Engen and William G. Gale, "The Effects of 401(k) Plans on Household Wealth: Differences across Earnings Groups," Working Paper 8032 (Cambridge, MA: National Bureau of Economic Research, December 2000); and Daniel Benjamin, "Does 401(k) Eligibility Increase Saving? Evidence from Propensity Score Subclassification," *Journal of Public Economics* 87, no. 5–6 (2003): 1259–90.

⁵ Retirement saving for these workers is promoted—or designed to be promoted—indirectly by nondiscrimination and certain other provisions of the Internal Revenue Code of 1986 (IRC) and the Employee Retirement Income Security Act of 1974 (ERISA). Those provisions, which are subject to extensive exceptions, are intended to impose some constraint on the degree to which tax-favored benefits accrue to a limited number of owners and executives rather than the large majority of workers. The IRC and ERISA also protect and regulate the accumulation and preservation of retirement benefits. For additional discussion of these issues by the Treasury Department, see Donald C. Lubick, Assistant Secretary (Tax Policy), U.S. Department of the Treasury, Testimony before the House Committee on Ways and Means, Subcommittee on Oversight, March 23, 1999.

⁶ Michael Wyand, "Savings Effort to Continue Based on RSA Plus Savers Credit, Not LSA, Portman Says," BNA, March 16, 2004.

I. Basic Design and Evolution of the Saver's Credit

The saver's credit was enacted as part of the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA). In principle, the credit can be claimed by moderate- or lower-income households that make voluntary retirement saving contributions to 401(k) plans, other employer-sponsored plans (including Savings Incentive Match Plans for Employees of Small Employers, or SIMPLE plans), or IRAs. In practice, however, the credit is nonrefundable and thus offers no incentive to save to the millions of low- and moderate-income households without income tax liability. 9

The design of the saver's credit reflects two key objectives. First, the credit is an initial step toward addressing the "upside-down" structure of other tax incentives for saving—leveling the playing field for moderate- and lower-income workers by, in effect, matching contributions at higher rates for savers with lower incomes. Second, the credit is designed to coordinate with and support the employer-based pension system.

A. Higher Matching Rates for Lower-Income Savers

Matching rates under the saver's credit reflect a progressive structure—that is, the rate of government contributions per dollar of private contributions falls as household income rises. This pattern stands in stark contrast to the way tax deductions and the rest of the pension system subsidize saving. The saver's credit is currently a small exception to this general pattern: the Treasury Department estimates that the tax expenditures associated with retirement saving preferences in 2005 will total roughly \$150 billion, of which only \$1 billion is attributable to the saver's credit.¹⁰

The saver's credit applies to contributions of up to \$2,000 per year per individual. As table 1 shows, the credit rate is 50 percent for married taxpayers filing jointly with adjusted gross

⁷ Section 25B of the IRC of 1986 was added by section 618 of EGTRRA, Public Law 107-16, 115 Stat. 38. See also IRS Announcement 2001-106, 2001-44 I.R.B. (October 29, 2001), and IRS News Release IR 2001-107, 2001-44 I.R.B. (November 7, 2001). The credit was officially titled "Elective Deferrals and IRA Contributions by Certain Individuals." Although now generally referred to as the "saver's credit," that term appears nowhere in the law.

Individuals." Although now generally referred to as the "saver's credit," that term appears nowhere in the law. "Saver's credit" was first used in IRS/Treasury administrative guidance at the suggestion of one of the authors in mid-2001 with a view to facilitating the "public marketing" of the provision, as discussed below.

⁸ The only exceptions are relatively minor: the credit may not be used by individuals who have not reached age 18 by the end of the taxable year, are full-time students, or are claimed as dependents on another return. IRC section 151(c)(4) and IRS Announcement 2001-106 elaborate on the definition of "student" for this purpose.

⁹ The saver's credit can be used to offset regular income tax liability as well as alternative minimum tax liability (IRC section 25B(g)(1)), although the latter generally is not a concern for the eligible income group.

¹⁰ Office of Management and Budget, Fiscal Year 2005 Analytical Perspectives, table 18-2.

¹¹ Both spouses in a married couple may receive the credit. For example, if each spouse contributes \$2,000 to his or her IRA, and they file jointly with adjusted gross income not exceeding \$30,000, the couple will receive a nonrefundable tax credit of \$2,000 (\$1,000 each) if they have sufficient federal income tax liability to use the credit. As discussed later, however, because the credit is nonrefundable, very few taxpayers actually qualify for the 50 percent match.

income (AGI) up to \$30,000, 20 percent for joint filers with AGI between \$30,001 and \$32,500, and 10 percent for joint filers with AGI between \$32,501 and \$50,000. The same credit rates apply for other filing statuses, but at lower income levels: the AGI thresholds are 50 percent lower for single filers and 25 percent lower for heads of households. Of course, the figures in table 1 assume that the couple has sufficient income tax liability to benefit from the nonrefundable income tax credit shown.

The saver's credit corrects the inherent bias of tax deductions or exclusions that favor high-marginal-rate taxpayers. A \$100 contribution to a 401(k) by a taxpayer in the 35 percent marginal federal income tax bracket generates a \$35 exclusion from income, resulting in a \$65 after-tax cost to the taxpayer. In contrast, without the saver's credit, a taxpayer in the 15 percent marginal bracket making the same \$100 contribution to a 401(k) would get only a \$15 exclusion from income, resulting in an \$85 after-tax cost. The tax deduction is thus worth more to the higher-income household. However, if the lower-income taxpayer qualifies for a 20 percent saver's credit, the net after-tax cost is \$65 (\$100 minus the \$15 effect of exclusion minus the \$20 saver's credit). Thus, the saver's credit works to level the playing field by increasing the tax advantage of saving for moderate- and lower-income households.

The credit represents an implicit government matching contribution for eligible retirement savings contributions. The implicit matching rate generated by the credit, though, is significantly higher than the credit rate itself. The 50 percent *credit* rate for gross contributions, for example, is equivalent to having the government *match* after-tax contributions 100 percent. Consider a couple earning \$30,000 who contributes \$2,000 to a 401(k) plan or IRA. The saver's credit reduces that couple's federal income tax liability by \$1,000 (50 percent of \$2,000). The net result is a \$2,000 account balance that cost the couple only \$1,000 after taxes (the \$2,000 contribution minus the \$1,000 tax credit). This is the same result that would occur if the net after-tax contribution of \$1,000 were matched at a 100 percent rate: the couple and the government each effectively contribute \$1,000 to the account. Similarly, the 20 percent and 10

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¹² The level of contributions eligible for the credit is reduced by the amount of distributions from any retirement saving plan or IRA by the participant or the participant's spouse during the year for which the credit is claimed, the two preceding years, or the portion of the following year that precedes the tax return due date. Distributions that are rolled over to another plan or IRA are not counted against the participant for this purpose. The IRS uses the following example to illustrate how this anti-churning provision works:

Mark's adjusted gross income for 2002 is low enough for him to be eligible for the credit that year and he defers \$3,000 of his pay to his employer's 401(k) plan during 2002. During 2001, Mark took a \$400 hardship withdrawal from his employer's plan and during 2002 he takes an \$800 IRA withdrawal. Mark's 2002 saver's credit will be based on contributions of \$1,800 (\$3,000 - \$400 - \$800).

Some gaming is still possible despite these rules (see Leonard Burman, William Gale, and Peter Orszag, "The Administration's Saving Proposals: A Preliminary Analysis," *Tax Notes*, March 3, 2003). However, in the process of designing the saver's credit, other, more restrictive anti-churning provisions were considered and rejected in the interest of keeping the proposal simple and workable.

¹³ As discussed in note 2, the entire subsidy associated with saving incentives depends not only on the tax rate at which the contribution is deducted, but also on the tax rate that applies to withdrawals, the length of time the funds are held in the account, the tax rate that would have applied to taxable funds while the funds are held in the tax-preferred account, and the rate of interest. Controlling for the latter factors, taxpayers who can deduct the contribution at a higher rate will generate larger tax savings.

percent credit rates are equivalent to a 25 percent and an 11 percent match, respectively (table 1). 14

How the Saver's Credit Works

Ruth and Tom are married, file a joint return, and have \$34,000 of income, all from Ruth's salary. Ruth is eligible to participate in her employer's 401(k) plan but has not done so in the past. Neither spouse has an IRA.

After Ruth receives a notice about the saver's credit from her employer, she and Tom decide that she will contribute \$2,000 to the 401(k) and he will contribute \$2,000 to an IRA. Their contributions reduce their adjusted gross income from \$34,000 to \$30,000, which means they qualify for the 50 percent credit rate. As a result, they receive a \$2,000 tax credit (50 percent of \$4,000). The couple begins to benefit from the saver's credit early in the year, when Ruth reduces the federal income tax withholding from her employer to reflect that she and Tom will be entitled to the credit for the year. When Ruth and Tom file their federal income tax return for the year, they claim the credit on their return. Ruth's contribution also affects her employer's 401(k) nondiscrimination test results. Ruth's contribution has increased from 0 percent of her pay in previous years to nearly 6 percent (\$2,000 divided by \$34,000), which increases the average 401(k) contribution percentage for the group of non-highly compensated employees eligible to participate in the plan. That increase, in turn, raises the permissible 401(k) contribution percentage for the highly compensated employees in the firm.

B. Enhancement of Employer-Sponsored Plans

The saver's credit was designed to support, rather than undermine, employer pension plans. Employer-sponsored plans encourage participation through employer contributions, nondiscrimination rules designed to require cross-subsidies from eager to reluctant savers, the automatic character of payroll deduction, peer group encouragement, and, often, professional assistance with investments (for example, through employer selection of investment options or provision of investment management). To support these benefits of employer-sponsored plans, the saver's credit matches contributions to 401(k) and other plans by moderate- and lower-income employees.¹⁵

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¹⁴ The true magnitude of these effective matching rates may not be evident to many taxpayers, however, because the saver's credit is presented as applying at a 50 percent, 20 percent, or 10 percent rate. Indeed, the prevalence of employer 401(k) matching contributions may well invite some households who are or have been eligible for a 401(k) to view the credit rate as a matching rate, even though the implicit matching rate is higher than the credit rate and the overall combined subsidy is substantially higher if there is an employer match. To the extent that taxpayers make such misleading comparisons, even the maximum saver's credit rate would appear to be no higher than the common 50 percent employer match. In short, the "optics" of the saver's credit may well reduce its incentive effect.

¹⁵ See J. Mark Iwry, "Expanding the Saver's Credit," Testimony before the House Committee on Education and the Workforce, Subcommittee on Employer–Employee Relations, July 1, 2003, 2–3. In particular, the saver's credit applies to both before-tax and after-tax contributions by eligible individuals. In addition, although this is not widely recognized, the credit can be claimed for voluntary employee contributions to an employer-sponsored defined benefit plan, although typically it applies to employee contributions to a defined contribution plan such as a 401(k).

Moreover, the saver's credit applies in addition to employer matching contributions. It can thus raise the return on 401(k) contributions: eligible taxpayers can obtain higher effective matching rates when the saver's credit is combined with employers' matching contributions to a 401(k). For households that receive a 20 percent saver's credit, for example, a 50 percent employer match of the employee's 401(k) contributions implies that the total (employer plus government) effective match rate on after-tax contributions is 87.5 percent. That is, for every \$100 in net contributions the taxpayer puts in, up to the appropriate match limits, the account will generate \$187.50.

To see how the 87.5 percent effective match rate occurs, consider a taxpayer eligible for a 20 percent credit rate under the saver's credit who contributes \$2,000 to a retirement account. The government gives a tax credit of \$400, which means the taxpayer has invested a net amount of \$1,600. This alone generates an effective match of 25 percent. At the same time, the employer matches 50 percent of the \$2,000 contribution, adding \$1,000 to the account. A total of \$3,000 is thus deposited in the account, at a cost to the taxpayer of only \$1,600 net of the tax credit. Similar calculations in table 2 show that, for taxpayers who receive a 50 percent government matching contribution, the effective matching rate, including a 50 percent employer match, is a striking 200 percent.¹⁷

In evaluating these high effective matching rates, it is important to emphasize that they apply only to the first \$2,000 of an individual's contributions. Moreover, they apply only to moderate- and lower-income households, which tend to be more reluctant savers than higher-income households because, among other reasons, they have less disposable income after providing for basic necessities. A higher effective matching rate focused on the first dollars of saving may help "jump start" voluntary contributions by moderate- and lower-income households, many of which currently do not save at all.

Employee 401(k) contributions that qualify for the saver's credit also count toward meeting the employer's 401(k) nondiscrimination tests. Accordingly, to the extent the saver's credit encourages increased participation among lower earners, higher earners may also benefit,

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¹⁶ Excluding IRA and 401(k) contributions from AGI measures also will make more households eligible for the credit and for a higher credit rate. As a simplified example, consider a married couple filing jointly who have before-tax gross earnings of \$34,000. If one spouse contributes \$2,000 to a 401(k) plan and the other contributes \$2,000 to a traditional IRA, AGI will be reduced to \$30,000, which would increase their saver's credit rate to 50 percent from 10 percent (the rate that would have applied with AGI of \$34,000).

¹⁷ The up-front deductibility of 401(k) and IRA contributions combined with taxation of withdrawals further increases the net overall return to the extent that the tax rate at the time of withdrawal is lower than the tax rate when the contributions were made. If the two tax rates are the same, the results of the saver's credit and employer match are like those in tables 1 and 2, depending on whether an employer match exists. Even if the tax rates are the same, however, the value of tax deferral with respect to the earnings on the deductible portion of the contribution—in addition to the saver's credit and any employer match—may still encourage taxpayers to contribute to the plans.

since their ability to contribute on a tax-favored basis depends on the level of contributions by less highly paid employees.¹⁸

Revenue Service (IRS) has provided employers a model notice informing employees of the credit (IRS Announcement 2001-106). Moreover, some employers that have refrained from adopting a 401(k) plan because of expected difficulty in meeting the nondiscrimination test may be encouraged by the saver's credit to set up a plan. The credit not only makes it easier for employers to pass the nondiscrimination test, but also gives eligible employees a greater incentive to demand a 401(k) plan.

The saver's credit is also designed to complement employer plans through its interaction with automatic enrollment.²⁰ Automatic enrollment makes it easier for employees to save in a 401(k) (or 403(b) or 457) plan by enrolling employees automatically without requiring them to complete an election form. Thus, unless an employee affirmatively expresses a different preference, the default mode under an automatic enrollment plan is that the employee participates at a stated percentage of compensation.²¹

Automatic enrollment, as a practical matter, is particularly geared toward encouraging participation by moderate- and lower-income employees, who are least likely to participate without it. For example, a recent analysis showed that, before the adoption of automatic enrollment, only 12.5 percent of workers with annual earnings under \$20,000 participated in a 401(k) plan; after the adoption of automatic enrollment, 79.5 percent participated.²² (Automatic enrollment, like the saver's credit, also enables higher-paid employees to contribute more by making it easier to obtain favorable results under the 401(k) nondiscrimination test.) Automatic enrollment makes the saver's credit available to more employees who otherwise would not

¹⁸ See IRS Announcement 2001-106, A-10. Under 401(k) nondiscrimination standards, the workforce eligible to contribute to the plan is divided into highly compensated employees, or HCEs (largely those earning \$95,000 or more, as indexed for 2005) and non-highly compensated employees, or NHCEs. The tests compare the average pretax contribution rates (as a percentage of pay) of the two groups, limiting the HCEs to a collective average that does not exceed the collective average for the NHCEs by more than a specified margin. (A parallel test applies to employees' after-tax contributions and employer matching contributions.) Eligible NHCEs who fail to contribute to the plan bring down the average for their group (and hence the allowable average for the HCEs) because they are counted as zeros in determining the NHCE average. The saver's credit was designed to reduce the number of zeros.

¹⁹ With the aim of reaching as many employees as possible, then-IRS Commissioner Charles Rossotti issued a news release shortly before the saver's credit took effect on January 1, 2002, encouraging employees to take advantage of the credit and enroll in 401(k) plans, and the IRS took the unusual step of preparing and publishing a Spanish-language version of the model employer notice to employees. See IR 2001-107, 44 I.R.B. (November 7, 2001).

²⁰ For additional analysis of automatic enrollment and enhancements of other "automatic" features of 401(k) plans, such as increases in contribution and diversification of investments, see William G. Gale, J. Mark Iwry, and Peter R. Orszag, "The Automatic 401(k): A Simple Way to Strengthen Retirement Savings," Retirement Security Project Policy Brief 2005-1 (http://www.retirementsecurityproject.org); and *Tax Notes* 106:10, March 7, 2005, 1207–14.

²¹ Automatic enrollment was approved in IRS Revenue Ruling 2000-8. The IRS has recently affirmed that plans are permitted to increase the automatic contribution rate over time in accordance with a specified schedule or in connection with salary increases or bonuses (IRS, letter to J. Mark Iwry, March 17, 2004).

²² Brigitte Madrian and Dennis Shea, "The Power of Suggestion: Inertia in 401(k) Participation and Savings Behavior," *Quarterly Journal of Economics* 116, no. 4 (November 2001): 1149–87.

contribute to a 401(k). By the same token, the saver's credit may encourage wider use of automatic enrollment because the credit makes automatic enrollment more valuable, and hence more acceptable, to employees entitled to the credit (without requiring the employer to make any additional matching contributions).

II. The Role of a Saver's Credit in the Pension System

As the baby-boomer generation nears retirement, the shortcomings in the nation's upside-down system of incentives for retirement saving are becoming increasingly apparent. As already noted, the existing structure is upside-down for two reasons: the tax preferences are worth the least, and thus provide minimal incentives to save in pensions to lower-income households (which most need to save more to provide for basic needs in retirement), while giving the strongest incentives to higher-income households (which least need to save more to maintain an adequate retirement living standard); and higher-income households, which benefit from the greatest pension tax subsidies, are the most likely to use pensions as a tax shelter, rather than as a vehicle to increase saving. High-income households are disproportionately likely to respond to pension tax incentives by shifting assets from taxable to tax-preferred accounts; the net result is a loss of government revenue with no increase in private saving.

Reflecting these upside-down incentives, the nation's broader pension system betrays several serious shortcomings. First, only half of workers are covered by an employer-based pension plan in any given year, and participation rates in IRAs are substantially lower. Second, even workers who participate in tax-preferred retirement saving plans rarely make the maximum allowable contributions. Only 5 percent of 401(k) participants make the maximum contribution allowed by law, and only 5 percent of those eligible for IRAs make the maximum allowable contribution.²⁴ Third, despite the shift from defined benefit to defined contribution plans, many households approach retirement with meager defined contribution balances.²⁵ The median

²³ For a broader discussion of these issues, see William G. Gale and Peter R. Orszag, "Private Pensions: Issues and Options." For a broader discussion of the objectives of the private pension system and why more has not been done to address the needs of moderate- and lower-income households, see Iwry, Testimony before the House Committee on Education and the Workforce, Subcommittee on Employer–Employee Relations, June 4, 2003.

²⁴ For example, an unpublished study by a Treasury economist found that only 4 percent of taxpayers eligible for conventional IRAs in 1995 made the maximum allowable \$2,000 contribution. See Robert Carroll, "IRAs and the Tax Reform Act of 1997," Office of Tax Analysis, Department of the Treasury, January 2000. For IRA contributors at the limit, see also Craig Copeland, "IRA Assets and Characteristics of IRA Owners," *EBRI Notes*, December 2002. Other studies have found a paucity of 401(k) contributors to be constrained by the statutory dollar maximum. For example, the General Accounting Office (now the Government Accountability Office) found that an increase in the statutory contribution limit for 401(k)s would directly benefit fewer than 3 percent of participants (General Accounting Office, "Private Pensions: Issues of Coverage and Increasing Contribution Limits for Defined Contribution Plans," GAO-01-846, September 2001). Data from the Congressional Budget Office suggest that only 6 percent of all 401(k) participants made the maximum contribution allowed by law in 1997 (authors' calculations based on Congressional Budget Office, "Utilization of Tax Incentives for Retirement Saving," August 2003, table 27). See also David Joulfaian and David Richardson, "Who Takes Advantage of Tax-Deferred Saving Programs? Evidence from Federal Income Tax Data," Office of Tax Analysis, U.S. Department of the Treasury, 2001.

²⁵ For a discussion of this shift from defined benefit to defined contribution plans, see J. Mark Iwry, Testimony before the House Committee on Education and the Workforce, Subcommittee on Employer–Employee Relations, June 4, 2003.

defined contribution balance among all households age 55 to 59 was only \$10,000 in 2001 (table 3). Excluding the 36 percent of households that had no IRA or defined contribution plan account, the median balance for this age group was \$50,000.

Given this reality, focusing incentives for retirement saving on lower- and moderate-income households makes sense for two reasons. First, such incentives are more likely to bolster long-term economic security and reduce poverty among the elderly, since higher-income households already tend to have substantial assets and to be better prepared for retirement than other households. For some low-income families, income may be so modest that it is impossible to save after paying for necessities. Yet 60 percent of households at or below the poverty level indicate that they save. Experience with a program that provides tax breaks and matching funds to encourage saving among low-income families suggests that families will participate if presented with incentives to do so. The evidence cited above on the efficacy of automatic enrollment also suggests that low-income workers will save if presented with a sound structure within which to do so.

The second reason for focusing incentives on lower- and middle-income households is the potential impact on national saving. National saving is the sum of public saving and private saving. All else equal, every dollar of forgone revenue reduces public saving by one dollar. Consequently, for national saving to increase, private saving must increase by more than one dollar in response to each dollar in lost revenue. To raise private saving, the incentives must not simply prompt individuals to shift assets into tax-preferred pensions, but instead must generate *additional* contributions.

Since those with modest or low incomes are less likely to have other assets to shift into tax-preferred pensions, focusing pension tax preferences on moderate- and lower-income workers increases the likelihood that lost tax revenue will reflect additional contributions rather than shifts in assets. Empirical evidence suggests that tax-preferred retirement saving undertaken by lower- and middle-income workers is much more likely to represent new saving than tax-preferred retirement saving undertaken by higher-income workers. ²⁹

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²⁶ Jeanne M. Hogarth and Chris E. Anguelov, "Can the Poor Save?" *Proceedings of Association for Financial Counseling and Planning Education* (2001).

²⁷ Michael Sherraden, "Asset Building Policy and Programs for the Poor," in *Assets for the Poor: The Benefits of Spreading Asset Ownership*, edited by Thomas Shapiro and Edward Wolff (New York: Russell Sage Foundation, 2001). Also, homeownership rates rose in a demonstration program that gave strong incentives for low-income families to purchase housing. See Gregory Mills and others, "Evaluation of the American Dream Demonstration: Final Evaluation Report" (Cambridge, MA: Abt Associates, August 2004).

²⁸ Economists continue to debate the impact on private saving from existing pension incentives. Most economists agree, however, that, whatever the overall effect, focusing incentives on those with fewer opportunities to shift assets from taxable to nontaxable forms is likely to produce a larger increase in private saving for any given reduction in government revenue.

²⁹ See, for example, Eric M. Engen and William G. Gale, "The Effects of 401(k) Plans on Household Wealth: Differences across Earnings Groups," Working Paper 8032 (Cambridge, MA: National Bureau of Economic Research, December 2000), and Daniel Benjamin, "Does 401(k) Eligibility Increase Saving? Evidence from Propensity Score Subclassification," *Journal of Public Economics* 87, no. 5–6 (2003): 1259–90.

III. Effects of the Saver's Credit

Although it is too soon to obtain a definitive reading of the impact of the saver's credit, preliminary estimates and evidence can be useful in identifying some basic themes.

A. Eligibility

The nonrefundability of the credit substantially reduces the number of people eligible for it. Further, the low match rates for moderate-income households substantially reduce the number of people eligible to receive a significant incentive. Nonrefundability results in a credit that provides no incentives to tens of millions of low-income filers who qualify on paper for the 50 percent credit rate, but who have no income tax liability against which to apply the credit.

Table 4 shows that 58 million tax filers in 2005 will have incomes low enough to qualify for the 50 percent credit.³⁰ Since the credit is nonrefundable, however, only about one-seventh of them actually would benefit from the credit at all by contributing to an IRA or 401(k).³¹ Furthermore, only 104,000—fewer than one out of every 500—of filers who qualify based on income could receive the maximum credit (\$1,000 per person) if they made the maximum contribution. These households have sufficient tax liability to benefit in full from the saver's credit but sufficiently low income to qualify for the highest match rate.

For families with somewhat higher incomes, the credit's nonrefundability poses much less of a problem, since more of these families have positive income tax liabilities. For higherincome families, however, the credit provides only a modest incentive for saving. For example, a married couple earning \$45,000 a year receives only a \$200 tax credit for depositing \$2,000 into a retirement account. This small credit reflects the modest matching rate at that level of income (see tables 1 and 2), which provides less incentive to participate.

B. Usage Patterns and Distributional Effects

IRS data indicate that about 5 million tax filers claimed the saver's credit in 2002, the first year it was in effect. 32 This figure likely understates the true number of qualifying individual savers,

³⁰ These estimates are generated by the Urban–Brookings Tax Policy Center microsimulation model. (The model is based on data from the 1999 public-use file produced by the Statistics of Income Division of the IRS). The model contains additional information on demographics and sources of income that are not reported on tax returns through a constrained statistical match of the public-use file with the March 2000 Current Population Survey of the U.S. Census Bureau. The retirement savings module also uses data from the Survey of Consumer Finances and the Survey of Income and Program Participation. For more about the model, see http://www.taxpolicycenter.org.

³¹ Some households that can benefit from the saver's credit do not have positive income tax liability, but do have positive income tax liability before taking into account the Earned Income Tax Credit (EITC). For these households, the EITC refund is increased to the extent that the saver's credit reduces their pre-EITC tax liability.

³² Data for 2003 were not available at the time this paper was written.

however, because a significant portion of these returns are from married couples filing jointly, with each of the spouses perhaps making a separate qualifying contribution.³³

Table 5 shows the estimated distributional effect of the saver's credit. The data suggest that 40 percent of the benefits accrue to filers with cash income between \$10,000 and \$30,000. Households with income below \$10,000 receive almost none of the benefits, an outcome that reflects the nonrefundability of the credit.

C. Effects on Private Saving

A full assessment of the effects of the credit on private saving would require more information than is currently available, but some possible effects suggest themselves. A necessary, but not sufficient, condition for the credit to raise private saving is that there be an increase in 401(k) and IRA contributions among the eligible population.³⁴ In one survey of 401(k) plan sponsors in 2002, representatives of 71 percent of the plans indicated that they believed the saver's credit had already increased participation in their 401(k) plans, and 18 percent believed the saver's credit had caused a "major increase" in participation.³⁵ The tax preparer H&R Block has said that it claimed the credit in 2002 on behalf of more than a million clients, who saved an average of \$175 on their tax bills. An H&R Block representative has been quoted as saying that many of these clients were first-time contributors to a retirement savings plan.³⁶

IV. Options for Expansion

We consider several significant changes that could improve the saver's credit: making the credit permanent, making it refundable, expanding it to provide stronger incentives for middle-income households, changing the rate at which it phases out, and indexing it to inflation. Most of these options are already under active discussion among policymakers.

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³³ The IRS data are based on the number of tax returns that claimed the saver's credit by entering an amount on line 49 of Form 1040 ("retirement savings contributions credit") and filing Form 8880 ("Credit for Qualified Retirement Savings Contributions"). (On the 2004 tax return, the saver's credit is claimed by entering an amount on line 50.) The data do not show a breakdown of contributions by type of plan (employer plan versus IRA, for example) or size of contribution. However, partial data that shed some light on these issues are available from other sources, such as professional tax preparers, with whose aid a significant portion of returns claiming a saver's credit were filed.

³⁴ If 401(k) or IRA contributions were offset by reduced saving in other accounts or more borrowing, the net effect on overall saving rates could be zero even if the effect on 401(k) and IRA contributions were positive.

³⁵ See the web site of *Plan Sponsor* magazine (http://www.plansponsor.com), July 23, 2002. It should be noted that the survey was targeted to compliance with the EGTRRA legislation generally; the questions regarding the saver's credit constituted only a small fraction of the total questions in the survey. In addition, *Plan Sponsors* surveyed a small sample apparently selected informally from clients of the surveying firm; the basis for determining the impact on participation in the 401(k) was not made clear. Nonetheless, the results, reflecting the perceptions of those who administer 401(k) plans, are striking, especially given that they were sampled only six months after the credit took effect.

³⁶ B. Tumulty and C. Burnett, "Bush Shuns Retirement Tax Credit," Gannett News Service, March 1, 2004; B. Tumulty, "White House Drops Saver Credit," *Green Bay Press-Gazette*, February 21, 2004.

A. Eliminating the 2006 Sunset

In order to reduce the apparent revenue cost, Congress stipulated that the saver's credit would sunset at the end of 2006.³⁷ It would cost between \$1 billion and \$2 billion a year to make the saver's credit permanent. As table 6 shows, estimates generated by the Tax Policy Center model are similar to those published by the Congressional Budget Office.

B. Making the Credit Refundable

As noted above, tens of millions of low-income workers are unable to benefit from the credit because it is nonrefundable. To extend the intended saving incentive to most lower-income working families would require making the saver's credit refundable.³⁸

Some members of Congress and others have long had reservations about making tax credits refundable. Their concern is often based on a sense that refundability converts a tax credit into a form of "welfare," which is viewed as undesirable, and that refundable credits tend to pose an unacceptable risk of fraud. It is not clear, however, that concerns typically raised about refundable credits are applicable to the saver's credit. In order to qualify for the saver's credit, an individual must make a contribution to a tax-preferred account, which is verified by third-party reporting (by the IRA trustee or plan administrator). In addition, to limit potential abuses, policymakers could require tax filers to have at least \$5,000 in earnings per person to claim the refundable credit.

Table 7 reports the revenue effects of making the saver's credit refundable, as estimated using the Tax Policy Center microsimulation model. Extending the credit, without adding refundability, would reduce revenues by between \$1 billion and \$2 billion a year. Adding refundability would cost \$3 billion a year. Thus, the revenue loss from extending the credit and making it refundable would be about \$4 billion a year.³⁹

Making the credit refundable would help equalize the tax benefits of saving for higherand lower-income households, leveling the playing field between income tax payers and workers who pay payroll tax but have no income tax liability. Refundability would significantly benefit lower-income earners, with over 42 percent of the tax benefit accruing to individuals and families with \$20,000 or less in cash income (table 8). Specifically, based on the results in table 4, refundability would make the full credit available to 49 million returns (65 million people) who are currently ineligible for any credit and to another 9 million returns (12 million people)

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³⁷ Various proposals—including bills introduced by Senator Jeff Bingaman (D-NM) and Representative Richard Gephardt (D-MO, S. 2733 and H.R. 4482, respectively) and H.R. 1776, the Pension Preservation and Savings Expansion Act of 2003, introduced by Reps. Portman and Cardin (see section 102 of that bill)—would remove the sunset on the saver's credit.

³⁸ This change was proposed in a bill introduced by then-House minority leader Richard Gephardt in 2002 (H.R. 4482, 107th Cong., 2d Sess.). It was also proposed in a bill introduced by then-Senator John Edwards (D-NC) in 2004 (S. 2303, 108th Cong., 2d Sess.).

³⁹ Requiring tax filers to have at least \$5,000 in earnings per person (\$10,000 for joint filers) in order to claim a refundable credit would reduce the cost by about \$0.5 to \$0.7 billion a year.

who are eligible for a partial credit. Put differently, the "capacity" of the saver's credit—which we define as the total amount of saver's credit that could be made if everyone contributed the maximum amount—would rise from less than \$14 billion under current law to \$94 billion under refundability. Refundability could also positively affect firms' willingness to offer pensions. Since the credit encourages low-income workers to contribute to 401(k)s, it tends to improve the average rate of contribution by non-highly compensated employees who are eligible to participate in the 401(k), hence making it easier for firms to meet the 401(k) nondiscrimination standards.

Short of direct income tax refundability, other variations and alternatives are possible. For example, a bill introduced by Senator Jeff Bingaman (D-NM) in 2002 would in effect make the saver's credit refundable, but only by matching qualifying contributions of individuals with no income tax liability who purchase an inflation-indexed U.S. savings bond that they cannot redeem until retirement age. Another possibility would involve providing a tax credit to financial institutions for contributions that they make to their clients' savings accounts, as was proposed in the Treasury Department's February 2000 Retirement Savings Accounts approach. The effect would be similar to that of a refundable tax credit at the individual level. A final possibility would be to deposit the refund directly into the saving account or 401(k), an option that is apparently under discussion but raises significant technical issues.

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⁴⁰ If the saver's credit remains nonrefundable, it should be coordinated better with the child tax credit. The legislation enacting the saver's credit provided originally that it would be taken into account after most other nonrefundable or partially refundable tax credits, notably the partially refundable child tax credit. See IRC sections 24(b)(3)(B) and 25B(g)(2) and IRS Announcement 2001-106 (sample notice). The nonrefundable component of the child tax credit "competes" with the nonrefundable saver's credit to reduce the same income tax liability. Accordingly, if the child tax credit completely eliminated a taxpayer's income tax liability, it would effectively crowd out the saver's credit, so that the latter would lose its incentive effect. (In contrast, the EITC is refundable and does not reduce the amount of the saver's credit.) However, since enacting the saver's credit, Congress has made temporary changes to the interaction of the credits that have reversed this stacking order and taken the saver's credit into account before the nonrefundable portion of the child tax credit. Congress could make these changes permanent, preserving the incentive value of the saver's credit by amending the tax code to permanently provide that the saver's credit be taken into account to offset tax liability before the child tax credit. Stacking the saver's credit before the child tax credit, if scored as a change in law, would cost about \$500 million a year. This is a distinctly second-best solution, however, compared with the far more effective step of making the saver's credit refundable.

⁴¹ See S. 2733 (107th Cong., 2d Sess.).

⁴² See U.S. Department of the Treasury, "General Explanations of the Administration's Fiscal Year 2001 Revenue Proposals," February 2000, 49–52.

⁴³ One apparent problem is the lack of easily accessible bank routing numbers for many IRAs and 401(k)s. Other complications include the need for plan sponsors to administer the account balances resulting from such deposits, including the possible need for additional "buckets" in plan data systems to keep separate track of different kinds of funds. This would be a particularly challenging problem if the balance attributable to the saver's credit were taxable when withdrawn from a Roth IRA, even after retirement. On the other hand, if the saver's credit balance were not taxable when withdrawn from a Roth IRA, it would escape tax permanently. In addition, consideration reportedly has been given to the possibility of treating the government's deposit as satisfying some of the employer's contribution obligations under the nondiscrimination standards, as if the government deposit were an employer contribution. This would in effect shift part of the employers' responsibility for funding retirement benefits for lower-income employees from employers to the government. As noted, the saver's credit already helps plans pass the nondiscrimination tests insofar as it induces additional contributions by moderate-income workers.

C. Indexing AGI Limits to Inflation

The AGI phaseout limits for the credit rates are currently not indexed to inflation. As a result, the credit grows less generous over time, as inflation pushes more households above the phaseout thresholds. Most features of the tax code are indexed to inflation, so that inflation by itself does not increase tax burdens. The saver's credit thresholds could be made to conform to this general tax treatment. As shown in appendix table 1, indexation would add \$11.9 billion over the next 10 years to the cost of the refundable credit.

D. Expanding Eligibility to More Middle-Income Households

Another set of possible expansions to the saver's credit would extend eligibility to additional middle-income households. The credit could be expanded along three dimensions: changes to the credit rate, the income limit, and the manner in which the credit is phased out.

First, the 20 percent and 10 percent credit rates available to eligible joint filers with AGI between \$32,500 and \$50,000 could be raised to 50 percent. His would make the 50 percent credit available to tens of millions of additional households who, for the most part, confront 0, 10 percent, or 15 percent marginal income tax rates and therefore have relatively little to gain from the traditional income tax incentive structure. Estimates using the Tax Policy Center model show that 96 percent of households that would benefit from the expanded 50 percent credit are in the 15 percent marginal tax bracket. These households typically have fewer assets to help meet basic needs in retirement and are among those that most need help to save for retirement. According to the model, median financial assets among households that would benefit from the expanded 50 percent credit rate are currently about \$30,000.

Second, the 50 percent credit rate could be expanded to working households with AGI up to \$60,000 or \$70,000 (for joint filers). Some of these households—about 5 percent under the option that increases eligibility for the 50 percent credit to \$70,000 for joint filers—are in the 25 percent marginal tax bracket and therefore already receive a somewhat larger incentive to save under the traditional system of tax subsidies. The vast majority, however, are in the 15 percent bracket, and many of these households have somewhat more disposable or discretionary income remaining after meeting essential short-term needs than do lower-income families in the same tax bracket. These households may thus be more likely than lower-income households to respond to the incentive, and more likely than higher-income households to respond by increasing their net saving rather than merely shifting assets. (If the 50 percent credit rate were expanded to joint filers with incomes of up to \$70,000, the Tax Policy Center model suggests that the newly eligible households would have median financial assets of \$42,000 and mean financial assets of \$83,000.)

⁴⁵ Income eligibility levels would be increased to various degrees by the Bingaman and Gephardt bills (S. 2733 and H.R. 4482) and slightly by the Portman-Cardin bill (H.R. 1776, section 401).

⁴⁴ See J. Mark Iwry, "Expanding the Saver's Credit," Testimony before the House Committee on Education and the Workforce, Subcommittee on Employer–Employee Relations, July 1, 2003, 4.

Finally, whatever the level of AGI at which eligibility for the 50 percent credit rate stops, the credit rate could be made to phase down ratably from 50 percent to 0 over a specified range of AGI, such as \$10,000. Such a smooth phasedown would remove the "cliffs" in the current credit structure, in which the credit rate declines steeply as income rises, resulting in very high effective marginal tax rates for many savers who use the credit. For example, consider a married couple earning \$30,000 in AGI and contributing \$2,000 to an IRA. At present, if the couple's AGI increases to \$30,001, the tax credit for that contribution declines from \$1,000 to \$400—a \$600 increase in tax liability triggered by a \$1 increase in income.

We examine three potential expansions of the 50 percent credit: to joint filers with AGI of \$50,000, \$60,000, and \$70,000. Each involves a ratable phasedown of the credit from 50 percent to 0 over a \$10,000 AGI range. The income cut-offs for single filers and heads of households would remain in the same proportion to the joint filer thresholds as under the current saver's credit. As table 9 shows, extending the 50 percent credit rate to joint filers with AGI of \$50,000 adds about \$5 billion a year to the cost of the credit. Each \$10,000 increment above \$50,000 then adds another \$4 billion a year in revenue cost.

Appendix tables 1 and 2 show the 10-year costs of these expansions along with making the credit refundable; appendix tables 3 through 5 show the distributional effects. Extending the saver's credit past its 2006 sunset, making it refundable, indexing its AGI thresholds to inflation, and expanding the 50 percent credit rate to joint filers with \$50,000 of AGI is estimated to cost about \$136.2 billion in tax revenue over 10 years (appendix table 1). Tax filers with cash income under \$40,000 would receive about half the tax benefits; the rest would mostly accrue to tax filers with cash income between \$40,000 and \$75,000 (appendix table 3). These changes could be paid for by repealing (or letting expire) the portion of the recent income tax cuts that pertains to high-income households and by selective reforms to the recently enacted changes to the estate tax. 46

V. Conclusion

The saver's credit offers the potential to help correct the nation's "upside-down" tax incentives for retirement saving. The current tax system provides the weakest incentives for participation in tax-preferred saving plans to those who most need to save for retirement and who are more likely to use tax-preferred vehicles to increase net saving than as a shelter from tax. The limited experience with the saver's credit has been encouraging. Several options are available, however, to improve the design of the credit: making it refundable, making it permanent, expanding it to provide more powerful incentives for middle-income households, and indexing its thresholds to inflation. These changes would further help lower- and middle-income families save for retirement, reduce economic insecurity and poverty rates among the elderly, and raise national saving.

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⁴⁶ For further discussion of these revenue options, see Leonard E. Burman, William G. Gale, and Jeffrey Rohaly, "Options for Reforming the Estate Tax," *Tax Notes*, April 18, 2005, 379–385; and William G. Gale and Peter R. Orszag, "An Economic Assessment of Tax Policy in the Bush Administration: 2001–2004," *Boston College Law Review*, 2005, 45: 1157–1231.

Table 1. Saver's Credit Rates and Effective Matching Rates by Income (dollars except where stated otherwise)

Adjusted Gross Income			Tax credit for	After toy cost	Effective after-	
Married filing jointly	Singles and married filing separately	Credit rate (percent)	\$2,000 contribution	of \$2,000 contribution	tax match rate (percent)	
0-30,000	0-15,000	50	1,000	1,000	100	
30,001-32,500	15,001-16,250	20	400	1,600	25	
32,501-50,000	16,251-25,000	10	200	1,800	11	

Source: Authors' calculations.

Note: Calculations assume that the taxpayer has sufficient income tax liability to benefit from the nonrefundable credit shown, and exclude the effects of any tax deductions or exclusions associated with the contributions or with any employer matching contributions.

Table 2. Total Effective Match Rates with Saver's Credit and a 50 Percent Employer Matching Contribution

(dollars except where stated otherwise)

		Net after-tax contribution	Total contribution after 50 percent employer match	Ratio of total contribution to employee's after-tax contribution	Effective after-tax match rate (percent)	
50	1,000	1,000	3,000	3.000	200.0	
20	400	1,600	3,000	1.875	87.5	
10	200	1,800	3,000	1.667	66.7	

Source: Authors' calculations.

Note: Calculations assume that the taxpayer has sufficient income tax liability to benefit from the nonrefundable credit shown, and exclude the effects of any tax deductions or exclusions associated with the contributions.

Table 3. Ownership of Assets in Retirement Accounts among Households Age 55-59, by Income, 2001 (dollars except where stated otherwise)

Income percentile	Percentage of households in indicated	Media	Share of aggregate	
	income range with assets	All households in income range	Households with assets only	- assets of all households (percent)
Below 20	25.0	0	8,000	1.1
20-39.9	49.6	0 12,000		4.2
40-59.9	61.6	7,200	28,000	8.6
60-79.9	91.0	50,000	54,000	16.7
80-89.9	95.4	148,000	190,000	18.8
90–100	92.1	215,000 299,0		50.6
All households	63.6	10,400	50,000	100.0

Source: Authors' calculations using the 2001 Survey of Consumer Finances.

Note: Throughout table, "assets" refer only to assets held in defined contribution plans or Individual Retirement Accounts.

Table 4. Eligibility for 50 Percent Credit Rate

	Returns by Filing Status (thousands) ^a					
	Single	Married filing jointly	Head of household	Other	Total	
A. Total returns	59,884	60,289	20,949	3,453	144,575	
B. Returns eligible for 50 percent credit based on income ^b	26,692	19,088	10,506	1,616	57,903	
C. Returns that would receive any benefit from 50 percent credit ^c As a share of those eligible based on income (=C/B)	5,438 20.4%	2,757 14.4%	612 5.8%	214 13.3%	9,022 15.6%	
D. Returns that would benefit in full for maximum allowed contribution As a share of those eligible based on income (=D/B)	24 0.1%	14 0.1%	60 0.6%	5 0.3%	104 0.2%	

a. Both filing and non-filing units are included. Filers that can be claimed as dependents by other filers are excluded.

b. Eligible returns exclude filing units above the relevant AGI threshold and those claimed as dependents on other tax returns.

c. Returns that would receive any benefit form the saver's credit are eligible and would see some reduction in taxes as a result of the credit if a contribution were made to an approved retirement account.

d. Returns that would benefit in full from the 50 percent saver's credit for the maximum alowable contribution are both eligible and would see a reduction in taxes equal to the size of the credit if the maximum contribution were made to an approved retirement account.

Table 5. Effect of the Saver's Credit—Distribution of Income Tax Change by Cash Income Class, 2005

Cash income class		Tax Units ^b		Percent change	Percent of	Average tax	Average Federal Tax Rate ^d		
(thousands of 2005	Number	Percent of	Percent with	in after-tax	total income	_	Average red	erai i ax Kate	
dollars) ^a	(thousands)	total	tax cut	income ^c	tax change	change (\$)	No credit	Current law	
Less than 10	19,561	13.5	0.2	0.0	0.1	0	3.5	3.5	
10–20	25,611	17.7	5.0	0.1	14.7	-15	4.8	4.7	
20–30	19,954	13.8	12.4	0.2	25.3	-33	10.2	10.1	
30–40	15,289	10.6	11.3	0.1	22.2	-38	14.5	14.4	
40-50	11,738	8.1	14.0	0.1	16.2	-36	16.8	16.8	
50-75	20,700	14.3	7.9	0.1	20.0	-25	18.5	18.5	
75–100	11,936	8.3	0.4	0.0	0.6	-1	20.0	20.0	
100-200	14,432	10.0	0.3	0.0	0.6	-1	22.3	22.3	
200-500	3,797	2.6	0.3	0.0	0.2	-1	25.4	25.4	
500-1,000	642	0.4	0.2	0.0	0.0	-1	27.2	27.2	
More than 1,000	336	0.2	0.1	0.0	0.0	-1	31.2	31.2	
All	144,575	100.0	6.2	0.0	100.0	-18	20.8	20.7	

Note: Baseline is current law without the saver's credit.

a. Returns with negative cash income are excluded from the lowest income class but are included in the totals.

b. Includes both filing and non-filing units. Tax units that are dependents of other taxpayers are excluded from the analysis.

c. After-tax income is income less individual income tax, net of refundable credits; corporate income tax; payroll taxes (Social Security and Medicare); and estate tax.

d. Average federal tax (individual income tax, net of refundable credits; corporate income tax; payroll taxes [Social Security and Medicare]; and estate tax) as a percentage of average cash income.

Table 6. Alternative Estimates of Revenue Effects of Saver's Credit, 2006–2015 (billions of dollars)

	Joint Tax Committee,	Administration fiscal 2005 budget,	Revenue Effect from Eliminating Sunset			
	revenue effect	tax expenditure	Congressional	Urban-Brookings		
Fiscal year	given 2006 sunset	estimate ^a	Budget Office	Tax Policy Center		
2002	1.0			_		
2003	2.1	0.9				
2004	2.0	1.0				
2005	1.9	1.1				
2006	1.8	1.2				
2007	0.9	0.7	0.5	0.6		
2008	0.1		1.5	1.7		
2009	0.1		1.4	1.6		
2010	0.1		1.3	1.5		
2011	0.1		1.3	1.6		
2012			1.3	1.8		
2013			1.2	1.7		
2014			1.1	1.6		
2015			1.0	1.5		

Sources: Joint Tax Committee, Office of Management and Budget; Congressional Budget Office; authors' calculations using Urban-Brookings Tax Policy Center Microsimulation Model.

a. Tax expenditure estimates differ in certain respects from estimated revenue effects.

Table 7. Revenue Cost of Extending Saver's Credit and Making It Refundable, 2006–2015 (billions of dollars)

Fiscal year	Extend existing credit beyond 2006	Extend and make refundable
2006	0.0	1.3
2007	0.6	4.3
2008	1.7	5.3
2009	1.6	5.1
2010	1.5	4.9
2011	1.6	4.7
2012	1.8	4.4
2013	1.7	4.2
2014	1.6	4.1
2015	1.5	3.9
Total, 2006-15	13.8	42.2

Source: Authors' calculations using Urban-Brookings Tax Policy Center Microsimulation Model.

Table 8. Effect of Making the Saver's Credit Refundable—Distribution of Income Tax Change by Cash Income Class, 2005

Cash income class		Tax Units ^b		Percent change	Percent of	Average tax	Average Feder	Average Federal Tax Rate ^d	
(thousands of 2005 dollars) ^a	Number (thousands)	Percent of total	Percent with tax cut	th in after-tax income ^c	total income tax change	change (\$)	Current law	Proposal	
Less than 10	19,561	13.5	4.0	0.3	10.1	-16	3.5	3.3	
10–20	25,611	17.7	8.3	0.3	32.3	-38	4.7	4.5	
20-30	19,954	13.8	7.6	0.2	28.9	-44	10.1	9.9	
30–40	15,289	10.6	4.5	0.1	15.7	-31	14.4	14.3	
40-50	11,738	8.1	2.0	0.0	5.0	-13	16.8	16.7	
50-75	20,700	14.3	0.7	0.0	3.6	-5	18.5	18.5	
75–100	11,936	8.3	0.2	0.0	0.9	-2	20.0	20.0	
100-200	14,432	10.0	0.2	0.0	1.3	-3	22.3	22.3	
200-500	3,797	2.6	0.2	0.0	0.2	-2	25.4	25.4	
500-1,000	642	0.4	0.3	0.0	0.0	-2	27.2	27.2	
More than 1,000	336	0.2	0.1	0.0	0.0	-1	31.2	31.2	
All	144,575	100.0	3.9	0.0	100.0	-21	20.7	20.7	

Note: Baseline is current law.

a. Returns with negative cash income are excluded from the lowest income class but are included in the totals.

b. Includes both filing and non-filing units. Tax units that are dependents of other taxpayers are excluded from the analysis.

c. After-tax income is cash income less individual income tax, net of refundable credits; corporate income tax; payroll taxes (Social Security and Medicare); and estate tax.

d. Average federal tax (individual income tax, net of refundable credits; corporate income tax; payroll taxes [Social Security and Medicare]; and estate tax) as a percentage of average cash income.

Table 9. Revenue Cost of Extending Saver's Credit and Expanding Eligibility for Top Credit Rate, 2006–2015 (billions of dollars)

Year	Extend existing	Extend and expand eligibility for 50 percent credit rate to jo filers with AGI up to					
	credit beyond 2006	\$50,000	\$60,000	\$70,000			
2006	0.0	2.0	3.6	5.4			
2007	0.6	6.3	10.8	16.0			
2008	1.7	7.1	11.5	16.5			
2009	1.6	6.7	10.9	15.7			
2010	1.5	6.4	10.6	15.1			
2011	1.6	6.7	10.8	15.2			
2012	1.8	7.5	11.6	16.0			
2013	1.7	7.1	11.0	15.3			
2014	1.6	6.8	10.5	14.7			
2015	1.5	6.5	10.0	14.0			
Total, 2006–15	13.8	63.2	101.4	144.0			

Source: Authors' calculations using Urban-Brookings Tax Policy Center Microsimulation Model.

Note: The income cut-offs for single filers and heads of households would remain in the same proportion to the joint filer thresholds as under the current saver's credit.

Appendix Table 1. Saver's Credit Options—Effect on Income Tax Revenues, 2006-2015 (billions of dollars)

	Fiscal Year										
											Total
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2006-2015
Current law baseline											
Extend saver's credit	0.0	-0.6	-1.7	-1.6	-1.5	-1.6	-1.8	-1.7	-1.6	-1.5	-13.8
Extend and index	-0.1	-0.9	-2.1	-2.1	-2.2	-2.5	-3.0	-3.0	-3.1	-3.1	-22.0
Extend and make refundable	-1.3	-4.3	-5.3	-5.1	- 4.9	-4.7	-4.4	-4.2	-4.1	-3.9	-42.2
Extend, index, and make refundable	-1.4	-4.7	-5.9	-6.0	-6.0	-6.0	-5.9	-6.0	-6.0	-6.0	-54.1
Extend and increase phaseout to \$50,000	-2.0	-6.3	-7.1	-6.7	-6.4	-6.7	-7.5	-7.1	-6.8	-6.5	-63.2
Extend and increase phaseout to \$60,000	-3.6	-10.8	-11.5	-10.9	-10.6	-10.8	-11.6	-11.0	-10.5	-10.0	-101.4
Extend and increase phaseout to \$70,000	-5.4	-16.0	-16.5	-15.7	-15.1	-15.2	-16.0	-15.3	-14.7	-14.0	-144.0
Extend, index, and increase phaseout to \$50,000	-2.3	-7.2	-8.4	-8.5	-8.7	-9.5	-10.8	-10.9	-10.9	-11.0	-88.1
Extend, index, and increase phaseout to \$60,000	-3.9	-12.0	-13.2	-13.2	-13.5	-14.4	-15.9	-15.9	-16.0	-16.0	-134.0
Extend, index, and increase phaseout to \$70,000	-5.8	-17.2	-18.5	-18.6	-18.9	-19.8	-21.4	-21.4	-21.4	-21.4	-184.5
Extend, index, increase phaseout to \$50,000, and make refundable	-4.5	-13.5	-14.8	-14.8	-14.9	-14.9	-14.7	-14.7	-14.7	-14.8	-136.2
Extend, index, increase phaseout to \$60,000, and make refundable	-6.3	-18.8	-20.0	-20.0	-20.1	-20.0	-19.8	-19.8	-19.8	-19.8	-184.3
Extend, index, increase phaseout to \$70,000, and make refundable	-8.2	-24.2	-25.5	-25.5	-25.6	-25.5	-25.3	-25.3	-25.2	-25.2	-235.7

Appendix Table 2. Saver's Credit Options—Effect on Income Tax Revenues, 2006–2015 (billions of dollars)

	Calendar Year										
											Total
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2006-2015
Current law baseline	·										
Extend saver's credit	0.0	-1.8	-1.7	-1.6	-1.5	-1.9	-1.8	-1.6	-1.5	-1.4	-14.7
Extend and index	-0.2	-2.1	-2.1	-2.2	-2.2	-3.0	-3.0	-3.1	-3.1	-3.1	-24.1
Extend and make refundable	-3.7	-5.4	-5.2	-5.0	-4.8	-4.5	-4.3	-4.1	-4.0	-3.8	-44.7
Extend, index, and make refundable	-4.0	-5.9	-6.0	-6.0	-6.1	-5.9	-6.0	-6.0	-6.0	-6.1	-58.0
Extend and increase phaseout to \$50,000	-5.8	-7.3	-6.8	-6.5	-6.2	-7.6	-7.3	-6.9	-6.6	-6.3	-67.3
Extend and increase phaseout to \$60,000	-10.4	-11.7	-11.1	-10.7	-10.3	-11.8	-11.2	-10.7	-10.2	-9.7	-107.8
Extend and increase phaseout to \$70,000	-15.5	-16.8	-15.9	-15.4	-14.7	-16.3	-15.6	-14.9	-14.2	-13.7	-152.8
Extend, index, and increase phaseout to \$50,000	-6.5	-8.4	-8.4	-8.6	-8.8	-10.8	-10.9	-10.9	-11.0	-11.1	-95.3
Extend, index, and increase phaseout to \$60,000	-11.3	-13.2	-13.1	-13.4	-13.6	-15.9	-15.9	-15.9	-16.0	-16.1	-144.5
Extend, index, and increase phaseout to \$70,000	-16.5	-18.5	-18.5	-18.9	-19.0	-21.4	-21.4	-21.4	-21.4	-21.4	-198.4
Extend, index, increase phaseout to \$50,000, and make refundable	-12.9	-14.8	-14.8	-14.9	-15.0	-14.7	-14.7	-14.7	-14.7	-14.8	-145.8
Extend, index, increase phaseout to \$60,000, and make refundable	-18.1	-20.0	-20.0	-20.0	-20.1	-19.8	-19.8	-19.8	-19.8	-19.8	-197.2
Extend, index, increase phaseout to \$70,000, and make refundable	-23.5	-25.5	-25.5	-25.6	-25.6	-25.3	-25.3	-25.2	-25.2	-25.2	-252.0

Appendix Table 3. Effect of Reforming the Saver's Credit—Distribution of Income Tax Change by Cash Income Class, 2005

Cash income class		Tax Units ^b	D	Percent change	Percent of	Average tax	Average Feder	al Tax Rate ^d
(thousands of 2005 dollars) ^a	Number (thousands)	Percent of total	Percent with tax cut	in after-tax income ^c	total income tax change	change (\$)	Current Law	Proposal
Less than 10	19,561	13.5	4.0	0.3	2.6	-16	3.5	3.3
10–20	25,611	17.7	9.7	0.3	10.0	-45	4.7	4.4
20-30	19,954	13.8	16.7	0.5	19.2	-112	10.1	9.6
30–40	15,289	10.6	18.0	0.4	16.0	-122	14.4	14.1
40-50	11,738	8.1	17.9	0.4	16.7	-166	16.8	16.4
50–75	20,700	14.3	19.6	0.4	32.8	-185	18.5	18.2
75–100	11,936	8.3	1.3	0.0	1.2	-11	20.0	20.0
100-200	14,432	10.0	0.6	0.0	0.8	-7	22.3	22.3
200-500	3,797	2.6	0.5	0.0	0.2	-5	25.4	25.4
500-1,000	642	0.4	0.4	0.0	0.0	-5	27.2	27.2
More than 1,000	336	0.2	0.1	0.0	0.0	-1	31.2	31.2
All	144,575	100.0	10.9	0.2	100.0	-81	20.7	20.6

Note: Baseline is current law. Reform includes making the credit refundable, increasing the AGI limit for married couples filing jointly to \$50,000, and phasing out the limit over \$10,000.

a. Returns with negative cash income are excluded from the lowest income class but are included in the totals.

b. Includes both filing and non-filing units. Tax units that are dependents of other taxpayers are excluded from the analysis.

c. After-tax income is cash income less individual income tax, net of refundable credits; corporate income tax; payroll taxes (Social Security and Medicare); and estate tax.

d. Average federal tax (individual income tax, net of refundable credits; corporate income tax; payroll taxes (Social Security and Medicare); and estate tax) as a percentage of average cash income.

Appendix Table 4. Effect of Reforming the Saver's Credit—Distribution of Income Tax Change by Cash Income Class, 2005

Cash income class	Tax Units ^b			_	Percent of	Average tax	Average Federal Tax Rate ^d		
(thousands of 2005 dollars) ^a	Number (thousands)	Percent of total	Percent with tax cut	in after-tax income ^c	total income tax change	change (\$)	Current law	Proposal	
,								•	
Less than 10	19,561	13.5	4.0	0.3	1.8	-16	3.5	3.3	
10–20	25,611	17.7	9.7	0.3	6.9	-45	4.7	4.4	
20–30	19,954	13.8	16.7	0.5	13.4	-113	10.1	9.6	
30–40	15,289	10.6	23.7	0.6	16.5	-183	14.4	13.9	
40-50	11,738	8.1	19.8	0.5	12.6	-181	16.8	16.4	
50-75	20,700	14.3	27.4	0.7	41.9	-342	18.5	17.9	
75–100	11,936	8.3	11.4	0.1	5.6	-79	20.0	20.0	
100-200	14,432	10.0	0.9	0.0	0.9	-11	22.3	22.3	
200-500	3,797	2.6	0.5	0.0	0.2	-7	25.4	25.4	
500-1,000	642	0.4	0.5	0.0	0.0	-6	27.2	27.2	
More than 1,000	336	0.2	0.1	0.0	0.0	-1	31.2	31.2	
All	144,575	100.0	13.7	0.2	100.0	-117	20.7	20.5	

Note: Baseline is current law. Reform includes making the credit refundable, increasing the AGI limit for married couples filing jointly to \$60,000, and phasing out the limit over \$10,000.

a. Returns with negative cash income are excluded from the lowest income class but are included in the totals.

b. Includes both filing and non-filing units. Tax units that are dependents of other taxpayers are excluded from the analysis.

c. After-tax income is cash income less individual income tax, net of refundable credits; corporate income tax; payroll taxes (Social Security and Medicare); and estate tax.

d. Average federal tax (individual income tax, net of refundable credits; corporate income tax; payroll taxes [Social Security and Medicare]; and estate tax) as a percentage of average cash income.

Appendix Table 5. Effect of Reforming the Saver's Credit—Distribution of Income Tax Change by Cash Income Class, 2005

Cash income class	Tax Units ^b			Percent change	Percent of	Average tax	Average Federal Tax Rate ^d		
(thousands of 2005 dollars) ^a	Number (thousands)	Percent of total	Percent with tax cut	in after-tax income ^c	total income tax change	change (\$)	Current law	Proposal	
Less than 10	19,561	13.5	4.0	0.3	1.4	-16	3.5	3.3	
10–20	25,611	17.7	9.7	0.3	5.2	-45	4.7	4.4	
20–30	19,954	13.8	16.7	0.5	10.2	-113	10.1	9.6	
30–40	15,289	10.6	23.9	0.7	14.3	-208	14.4	13.8	
40-50	11,738	8.1	27.2	0.6	12.1	-230	16.8	16.2	
50–75	20,700	14.3	28.7	0.8	35.9	-386	18.5	17.8	
75–100	11,936	8.3	29.7	0.5	19.3	-359	20.0	19.6	
100-200	14,432	10.0	1.7	0.0	1.2	-18	22.3	22.3	
200-500	3,797	2.6	1.0	0.0	0.2	-10	25.4	25.4	
500-1,000	642	0.4	0.7	0.0	0.0	-9	27.2	27.2	
More than 1,000	336	0.2	0.5	0.0	0.0	-4	31.2	31.2	
All	144,575	100.0	16.1	0.3	100.0	-154	20.7	20.5	

Note: Baseline is current law. Reform includes making the credit refundable, increasing the AGI limit for married couples filing jointly to \$70,000, and phasing out the limit over \$10,000.

a. Returns with negative cash income are excluded from the lowest income class but are included in the totals.

b. Includes both filing and non-filing units. Tax units that are dependents of other taxpayers are excluded from the analysis.

c. After-tax income is cash income, less individual income tax net of refundable credits; corporate income tax; payroll taxes (Social Security and Medicare); and estate tax.

d. Average federal tax (individual income tax, net of refundable credits; corporate income tax; payroll taxes [Social Security and Medicare]; and estate tax) as a percentage of average cash income.

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