

Repeal Roth Retirement Plans To Increase National Savings

By Calvin H. Johnson

Calvin H. Johnson is a professor of law at the University of Texas. The author wishes to thank Norman Stein and Eugene Steuerle for helpful comments on a prior draft without binding them to conclusions with which they disagree.

Roth IRA or 401(k) plans provide a tax exemption for profits generated under the plans. As much as \$6,000 a year may be contributed to a Roth IRA, and as much as \$22,000 a year may be contributed to a Roth 401(k).

The author's proposal would repeal the Roth plans to increase national savings. Roth plans have an ambiguous effect on private savings, because they can be funded with the addition or continuation of debt and because taxpayers reduce their savings in response to tax exemption for target savings, including savings for retirement. Roth plans also reduce federal revenue.

Congress allowed taxpayers to convert to Roth plans starting in 2010, and it scored the conversions as producing federal revenue. A conversion from a regular plan to a Roth plan, however, is just a form of federal borrowing. Current cash to the government is offset by required revenue losses in the future. When taxpayers convert, they expect tax rates to go up or

they have access to extraordinary returns, and the conversions are then an expensive and wasteful form of federal debt — unbudgeted and out of control.

The proposal is made as a part of the Shelf Project, a collaboration among tax professionals to develop proposals to raise revenue. The Shelf Project is intended to raise revenue without a VAT or a rate hike in ways that will improve the fairness, efficiency, and rationality of the tax system. Now is the time for congressional staff work to be done to prevent the impending revenue crisis. An overview of the Shelf Project is found in "How to Raise \$1 Trillion Without a VAT or a Rate Hike," *Tax Notes*, July 5, 2010, p. 101, *Doc 2010-13081*, or *2010 TNT 129-4*. Congress adopted its first Shelf Project in March 2010. New section 871(1), enacted in the Hiring Incentives to Restore Employment Act, is based on the Shelf Project proposal by Reuven Avi-Yonah, "Enforcing Dividend Withholding on Derivatives," *Tax Notes*, Nov. 10, 2008, p. 747, *Doc 2008-22806*, or *2008 TNT 219-34*.

Shelf Project proposals follow the format of a congressional tax committee report in explaining current law, what is wrong with it, and how to fix it.

Copyright 2010 Calvin H. Johnson.
All rights reserved.

"No matter how cynical you get, you can never keep up."¹

Roth IRAs and Roth 401(k)s give tax-exempt profits. The purported rationale for the tax exemption is to encourage taxpayers to save, but ending Roth plans would unambiguously improve net national savings. Net national savings is the sum of private savings and governmental dissavings. Roth plans reduce federal revenue, which increases the deficit. The impact of tax exemption on private savings is ambiguous. A Roth plan can be funded by increasing or maintaining interest-deductible borrowing. Borrowing combined with the

Roth plan is a shell game with no new savings, but it provides a tax shelter with the interest deduction for money the taxpayer has kept. Target savings, moreover, including savings for retirement, go down in response to tax exemption, because a lesser sacrifice suffices to meet the retirement goals. According to the empirical research, any increase in savings in response to tax exemption is "fragile and fleeting." The summation of the ambiguous effect on private savings and the unambiguous decrease in federal revenue means that the overall effect of Roth plans is to reduce national savings.

For 2010 and thereafter, Congress allowed taxpayers of any income level to convert a regular 401(k) or IRA qualified plan into a Roth plan. Taxpayers have to pay tax on the withdrawals, spread over 2010 and 2011. Profit thereafter is tax exempt, as in all Roths. Allowing unlimited conversion was scored as a revenue raiser, which allowed other tax breaks. However, the extra cash expected from the rollovers in the Roths is just an expensive

¹Lily Tomlin, *The Search for Signs of Intelligent Life in the Universe* (1985). This was picked by Jeffrey Yablon as his favorite tax-applicable quotation. Jeffrey Yablon, *As Certain as Death: Quotations About Taxes* 9 (2010), *Doc 2009-27145*, *2010 TNT 72-9*.

form of government borrowing — off budget and out of control. Taxpayers convert to Roth plans because they reasonably expect tax rates to go up or because they expect return on their Roth investment to be extraordinary. With either an increase in rates or extraordinary returns, conversion into a Roth becomes a particularly expensive way for the government to borrow money. Voluntary conversions into Roth plans never raise revenue in economic terms. To score the Roth conversions as positive revenue when they do so much harm to the federal deficit is an especially cynical form of bad accounting.

The proposal would repeal the tax exemption for all contributions to Roth IRAs and 401(k)s from the date the proposal is offered in Congress. Assets already in Roth plans could continue as tax-exempt plans, but they would have to be distributed at least over the next 25 years. Interest on debt the taxpayer maintains that could be repaid by liquidating the Roth plan will be disallowed starting in 2010. Distributions from the Roth would be tax free, however, even if made before retirement.

A. Current Law

A Roth IRA and a Roth 401(k) plan are deposits in which the profits from the plan are exempt from income tax. In general, a taxpayer may contribute up to \$5,000 a year to a Roth IRA, and individuals 50 years or older may make an additional “catch-up” contribution of \$1,000 a year.² Taxpayers may generally contribute up to \$16,500 to a Roth 401(k) plan, and individuals over 50 may make an additional \$5,500 catch-up contribution.³ A section 401(k) plan is a plan maintained by an employer that allows the taxpayer to forgo cash compensation to make the contribution to the plan. An IRA is a contribution to an individual account made without a connection to employment. Unlike a regular IRA or 401(k) plan, the Roth plans give no deductions or exclusions for the contributions to the plan. But the regular IRAs and 401(k) plans do not give a tax exclusion for distributed profits, as the Roth plans do. As explained below, under the conditions of constant tax rates and investment reduced by upfront tax, the privileges of the two kinds of qualified plans have the same value.⁴

Both Roth and regular IRAs and 401(k)s are subject to the same nominal ceiling — for example, \$5,000 for taxpayers under 50 for an IRA — but the Roth ceiling is in fact as much as 154 percent higher because the Roth contribution is measured in money on which tax has already been paid, and the regular IRA is measured in terms of money not yet taxed.⁵

²Section 219(b)(5)(A) and (B).

³Notice 2009-94, 2009-50 IRB 848, *Doc 2009-25900*, 2009 TNT 225-12 (reporting 2010 limitations with inflation adjustments); section 402A (authorizing the Roth IRA with the same dollar limitations as for regular IRAs).

⁴See *infra* discussion accompanying Table 1.

⁵For example, if a taxpayer in a 35 percent bracket worked to make \$5,000/(1 - 35%) or \$7,992 of gross pay, he could pay 35 percent tax and contribute \$5,000 to a Roth. If we assume his contribution tripled in the years until distribution in retirement, the tripling would leave him with \$15,000 in distributions after

(Footnote continued in next column.)

The staff of the Joint Committee on Taxation estimates that Roth plans are expected to lose the federal government \$4 billion in 2010.⁶

Qualified plans are intended to provide for employment security, and premature distributions made before retirement are subject to a 10 percent penalty tax on the amount of the distribution.⁷ However, the 10 percent penalty under section 72(t) is imposed only on the taxable income from a distribution, and there is generally no taxable income in a distribution from a Roth IRA.⁸

Before 2010 Roth IRAs were unavailable to taxpayers with adjusted gross income of more than \$110,000 for single individuals or \$160,000 for joint filers,⁹ and those taxpayers could not convert their regular IRAs into Roth IRAs. In 2005 Congress repealed the income limitations to allow taxpayers with any level of income to convert to a Roth.¹⁰ Taxpayers converting to a Roth have to pay tax on the withdrawals, but for 2010 the taxable income from the withdrawals is spread over 2010 and 2011. Profit thereafter is tax exempt, as in all Roths. Conversions from regular to Roth plans were scored as positive government revenue under the cash method that Congress uses to regulate itself, and the purported extra revenue was used to justify tax breaks unrelated to qualified plans.

B. Reasons for Change

1. Impact on net national savings. The purported rationale for the tax exemption for the profits that Roth plans give is to encourage national savings. The Senate Finance Committee described it as follows:

The Committee is concerned about the national savings rate, and believes that individuals should

tax. (Note that tripling is not an extraordinary return if the period is long enough. Thus, if there is a 37-year lapse between contribution and distribution, the tripling reflects only a 3 percent annual return.)

The \$5,000 ceiling applied to regular IRAs is applied before any tax is taken out. That means the taxpayer may contribute only \$5,000 of gross pay to the tax-favored plan, not the equivalent of \$7,992 of gross pay. A tripling of \$5,000 to \$15,000 then leaves the taxpayer with tax to pay and assuming a 35 percent tax rate, the final after-tax distribution is only 65 percent times \$15,000, or \$9,750. The same \$5,000 ceiling imposed in different ways gives 154 percent more money to the Roth IRA than to the regular IRA. The same phenomenon applies to the Roth 401(k), except that the impact is 154 percent, *e.g.*, from a \$16,500 ceiling.

⁶Staff of the JCT, “Estimates of Federal Tax Expenditures for Fiscal Years 2009-2013,” JCS-1-10 (Jan. 11, 2010), *Doc 2010-631*, 2010 TNT 7-22 (year 2010).

⁷Section 72(t). Congress has in recent years expanded the cases in which distributions may be made before retirement without bearing the 10 percent penalty, including payments for medical expenses, health insurance during unemployment, higher education, or a first-home down payment.

⁸There is, however, a special antiabuse rule under which distributions from a Roth plan are subject to the 10 percent penalty tax if the taxpayer has converted from a regular plan to a Roth plan within the last five years. Section 408A(d)(3)(F)(i).

⁹Section 408A(c)(2).

¹⁰The Tax Increase Prevention and Reconciliation Act of 2005, P.L. 109-222, section 512.

be encouraged to save. . . . In addition, the Committee believes that some individuals would be more likely to save if funds set aside in a tax-favored account could be withdrawn without tax after a reasonable holding period for retirement or certain special purposes. Some taxpayers may find such a vehicle more suitable for their savings needs.¹¹

One should take that rationale with a grain of salt, because the Roth plans clearly reduce net national savings. Roth plans may be funded by borrowing or extending the borrowing, and borrowing to carry a Roth does nothing to increase net savings. Overall, the exemption has ambiguous results on private savings, even for taxpayers without debt, but it has a strongly negative effect on net national savings because it reduces federal revenue.

a. Borrowing. The tax exemption given to the returns from a deposit in a Roth plan is inconsistent with debt undertaken or continued by the taxpayer. Debt and a Roth plan combined is a shell game with no added savings, but it generates an interest deduction at no net cost. Assume, for example, that the taxpayer borrows \$5,000 (or continues a \$5,000 debt he could pay back) and that the borrowing or continuing frees up \$5,000 for him to invest in a Roth IRA. Assume that both the Roth and the debt bear 5 percent interest, which means the \$5,000 investment as well as the debt and interest will triple in 22.5 years to \$15,000.¹² The combination of debt and the Roth has no effect on the taxpayer's beneficial interest in any period, except for tax. There is no cost for the deposit in the Roth in terms of sacrificing current consumption, because the deposit is funded by borrowing or by continuing a \$5,000 loan that the taxpayer could have otherwise repaid. Every year the Roth deposit accrues a return that is exactly offset by the increasing debt owed because of the interest. On distribution, the taxpayer will take his \$15,000, but he must use the \$15,000 to repay the debt. Because the debt and Roth offset each other, there is no extra savings available for retirement security. There are no net investable funds available to the general economy from the Roth, because the borrowing withdraws from the general economy whatever is put into the economy from the Roth. The combination of the Roth and borrowing are a net zero transaction — a shell game.

For tax purposes, however, the taxpayer can get an interest deduction from the net zero transaction if he traces the borrowing to a use that allows deduction, including both business expenses and home mortgages. The tax accounting is then a mismatch that misdescribes the taxpayer, because he excludes the revenue but deducts the related expense. The 5 percent interest is deducted every year under a compound interest schedule (starting at \$250, \$262, and \$275, and ending at \$714), such that a total of \$10,000 interest is deducted between the borrowing of \$5,000 and the repayment with interest.

¹¹Senate Finance Committee, "Report on the Revenue Reconciliation Act of 1997," S. Rep. 105-33, 5 (1997), *Doc 97-18269*, 97 *TNT* 121-24.

¹²Under the formula that describes compound growth when interim returns are not withdrawn: $\$100 * (1 + 5\%)^{22.5} = \300 .

The \$10,000 revenue from the Roth is ignored for tax purposes. The net \$10,000 deduction will shelter salary or income from unrelated sources, thus allowing tax-free use of \$10,000 that the taxpayer has retained.

In other contexts the law recognizes and prevents the deduction of interest properly matched with tax-exempt income. Since 1921 interest incurred to purchase or carry tax-exempt municipal bonds has been disallowed.¹³ As the Supreme Court said when the statute was challenged, "Under the theory of the [taxpayer], A, with an income of \$10,000 arising from nonexempt securities by the simple expedient of purchasing exempt ones with borrowed funds and paying \$10,000 interest thereon, would escape all taxation upon receipts from both sources. It was proper to make provision to prevent such a possibility."¹⁴ Debt financing of a Roth plan also resembles the transaction held invalid as a sham as a matter of law in *Knetsch v. United States*,¹⁵ in which the debt financing of an annuity was held to be a sham because it did "not appreciably affect Knetsch's beneficial interest except to reduce his tax."¹⁶

The appropriate way to view the matching of interest and Roth tax-exempt revenue is to look to the interest cost that could have been avoided if the Roth plan investment had not been incurred or the Roth were liquidated.¹⁷ For accounting purposes, the balance sheet wisely refuses to earmark borrowing and any particular asset, because the assets and borrowing are all fungible parts of a common pool, all measured in cash. It makes no sense for a taxpayer to say, "I borrowed for a specific asset," when all borrowings decrease overall net worth and when all the assets can be called on to cover borrowings.¹⁸ Cash has no name on it.

A tax could have avoided the interest cost from any debt the taxpayer has by taking tax-free distributions from the Roth to pay off the debt, or by failing to make a contribution to the Roth. As noted, distributions from a Roth are tax free, and free from the section 72(t) 10 percent penalty on premature distributions. A taxpayer could always avoid interest by distributing the account

¹³Section 265(a)(2), predecessor enacted by Revenue Act of 1921, 42 Stat. 239, section 214.

¹⁴*Denman v. Slayton*, 282 U.S. 514, 520 (1931).

¹⁵364 U.S. 361 (1960).

¹⁶*Id.* at 366. As long as the borrowing is from outside the Roth IRA account, *Knetsch* will probably not make the combination of borrowing and a Roth a sham as a matter of law. Still, as argued in the text, the net of savings and borrowing should be viewed from a balance sheet for the taxpayer's entire assets and liabilities, and costs that could be avoided are costs of acquiring or carrying the Roth plans.

¹⁷*Cf.* section 263A(f)(2)(A)(ii), which capitalizes interest that could have been avoided if the taxpayer had not undertaken large multiyear construction investments.

¹⁸For the argument nicely put, see William A. Klein "Borrowing to Finance Tax-Favored Investments," 1962 *Wis. L. Rev.* 608, 611-612 (1962) (arguing that a loan should be regarded as a liability to be offset against total investment and that even when the taxpayer is not strictly rational and considers the purpose of the loan to be for a specific asset, it seems that it is unsound and futile to base tax law on assumptions about the taxpayer's state of mind).

balance in his Roth plan and paying off the debt on which the interest cost accrued. The interest cost that could have been avoided by liquidating the Roth should be disallowed to prevent a sheltering deduction.

b. Impact of exemption on national debt. Ending Roth plans would improve net national savings. The Roth tax exemption for returns has a small and ambiguous effect on private savings, but it has a strong and unambiguous dissavings effect in decreasing federal revenue. The net of ambiguous and small private savings and negative public savings is a decrease of net national savings.

i. Four alternative models. Contributing to a Roth plan gives a taxpayer a higher rate of return on his investments than taxable investments because the savings become tax exempt. It is impossible to predict, however, whether the higher return will push savings in the right direction. As a matter of theory, a higher return could increase savings, decrease savings, or have no effect on savings under four distinct models:

a. Reward model. An increase in return gives the taxpayer a higher reward, and the higher reward could in theory induce a taxpayer to consume less and save more now, because the reward for deferring consumption becomes higher. This can be called the reward or substitution model.

b. Target model. Under the target savings or income model, however, savings will decrease in reaction to an increase in after-tax returns. An increased rate of return allows taxpayers to meet their retirement goals with less set aside now. Assume, for example, that a couple will need a \$100,000 annual pension to maintain their lifestyle for the expected 25 postretirement years and that they now have 25 years to save before retirement. If the couple's investments make a 4 percent return after tax, they must set aside \$37,750 a year until retirement to have a fund large enough to pay a pension of \$100,000 for 25 years after retirement.¹⁹ If relief from tax increases the return to 6 percent, however, the couple must set aside only \$23,300 a year for retirement, which is 62 percent of what was needed when the return was subjected to tax. If a tax exemption increases the couple's return from 4 percent to 6 percent, they can be expected to decrease savings by 38 percent, since their retirement goals can now be met with the lower sacrifice.

c. Fixed sacrifice model. Under the fixed sacrifice model, the same increase in return will have negligible effect on savings, because taxpayers insist on maintaining a given level of consumption and are highly unwilling to make further sacrifices to reduce current consumption. For young people especially, retirement is so far away and their current consumption needs so salient, that it is

difficult to convince them to save for their own behalf. Savings deposited in tax-incentivized accounts would simply represent a change in the form of savings that the taxpayer is willing to set aside anyway, a movement from taxable to tax-favored forms, without effecting any reduction in current lifestyle or any increase in the total amount saved. The tax benefits and increased distributions would increase retirement income but would not help national savings.

d. Debt financing model. The fourth model allowed by current law is the debt financing model, explained above. Under the debt financing model, the Roth plan deposits are funded by new borrowing or by maintaining outside borrowing that the taxpayer otherwise would have reduced. Deposits stacked to borrowing will give a tax shelter, as noted, but there is no net increased investment by the taxpayer or investment in the economy. There is also no increase in retirement security, because the savings must be used to repay the debt. Sheltering from the combination of the interest deduction and the Roth exclusion of income allow the taxpayer to increase consumption, but neither increases personal or national savings. Borrowing is the easiest way to create or maintain a Roth plan, because it is a shell game or arbitrage against the government and it requires no sacrifice of any kind. Taxpayers with a Roth could always avoid interest cost on any borrowings by making distributions from the Roth to pay off the debt.

It is impossible to determine in theory which of the four models will most affect taxpayer behavior in reaction to the Roth exemption of returns. The reward effect implies an increase in savings when returns increase. The target effect implies a decrease in savings for same-return increases. The fixed sacrifice model implies no net increase in savings but an increase in retirement income. Funding by debt implies neither an increase in savings nor retirement income. The empirical studies conclude, however, that the reward effect does not dominate and that real savings are most influenced by the target effect, or by fixed sacrifice or debt financing.

ii. Empirical results. Empirically, target savings seem to dominate the real savings in our economy. When interest rates go down, savings usually go up, apparently because of the reaction of target savers.²⁰ There is also good evidence that deposits into IRAs come out of existing savings or savings the taxpayer would have set aside anyway, which supports the fixed sacrifice model.²¹ Any increase in savings in reaction to increased returns is modest at best.²² There is a certain amount of wishful

²⁰See, e.g., A. Lars Bovenberg, "Tax Policy and National Saving in the United States: A Survey," 42 *Nat'l Tax J.* 123, 128 (1989) (reviewing literature finding that high interest rates decrease savings).

²¹Orazio P. Attanasio and Thomas C. DeLeire, "The Effect of Individual Retirement Accounts on Household Consumption and National Savings," 112 *Economic J.* 504 (2002) (finding evidence that IRA contributions came out of existing savings or savings the taxpayer would have set aside anyway).

²²For other surveys of the savings response to returns, see, for example, Jane G. Gravelle, *The Economic Effects of Taxing Capital Income 193-197* (1994) (summarizing studies of IRAs); E.

(Footnote continued on next page.)

¹⁹The formula for constant payment for m years until retirement to yield an annuity of \$100 for n years after retirement is $X = \$100 * [1 - 1/(1+i)^n] / [(1+i)^m - 1]$. The formula is a combination of the standard formula for the present value of an annuity (to describe the endowment needed to give \$100 a year for 25 years) and the standard formula for equal annual payments to reach that endowment. With i of 4 percent and m and n of 25 years, X is \$37.5, and with i of 6 percent, X is \$23.3.

thinking, because everyone likes a boondoggle and would like to see it justified. It is the consensus of the economics profession across the political spectrum, however, that any increase in savings from an increase in returns is a “fragile and fleeting thing.”²³

The empirical studies, moreover, look at general savings returns or at regular IRAs, but Roth IRAs should induce *less* savings than regular IRAs because the Roth entails no future obligations. For a regular IRA, the taxpayer must pay ordinary income tax on a distribution. Unlike withdrawals from a bank account, withdrawals from a regular qualified plan are not tax free. Thus, a rational saver must set aside not only enough for retirement needs, but also enough to reach an endowment that will pay the tax on the distributions in retirement. For the Roth plans, by contrast, the distributions are tax exempt and the taxpayer has no future tax obligations and no reason to save for them. The empirical studies on regular IRAs can therefore be expected to overstate the positive impact of the tax incentive from the Roth plans on savings.²⁴

iii. Public loss. While the effect of the Roth IRA on private savings is modest or negative, the impact of the Roth on government savings is entirely negative. The federal loss is measured by the value of the tax exemption, which depends on tax bracket and is as high as 35 percent of the earnings. High-bracket investors who do not go into the Roth plan would undoubtedly go into some other tax-favored investments (like municipal bonds), but if the quantity of tax-favored investments is constant (as in the common economic expression, “all other things being equal”), the high-bracket investors moving out of Roth plans will displace other investors in the next best investment, and like a series of cascading fountains, the displacement from Roth plans would ultimately push the same quantity of investment into fully taxed investments. The federal budget is running a \$1.3 trillion annual deficit, increasing government debt by that much each year.²⁵ Roth plans increase the deficit by the tax the government must forgo in savings.

Philip Howrey and Saul Hymans, “The Measurement and Determination of Loanable-Funds Savings,” in *What Should Be Taxed: Income or Expenditure?* 1, 30-31 (1980) (finding no response to increased interest); Robert Hall, “Intertemporal Substitution in Consumption,” 96 *J. Pol. Econ.* 339 (1988) (finding no savings response to increased interest returns and disputing apparent findings that savings respond to increased interest); Barry Bosworth, Gary Burtless, and John Sabelhaus, “The Decline in Saving: Evidence From Household Surveys,” in 1991-1 *Brookings Papers on Economic Activity* 183.

²³Jonathan Skinner and Daniel Feenberg, “The Impact of the 1986 Tax Reform Act on Personal Savings,” 17, National Bureau of Economic Research, Working Paper No. 3257 (1990) (describing a consensus in the economic literature that any positive response of savings to an interest rate increase is “fragile and fleeting”).

²⁴Jane Gravelle, “Individual Retirement Accounts (IRAs): Issues, Proposed Expansions, and Retirement Savings Accounts (RSAs),” 8, Congressional Research Service (Sept. 15, 2000).

²⁵Congressional Budget Office, “The Budget and Economic Outlook: An Update,” Summary Table 1 (Jan. 2010), *Doc 2010-1831*, 2010 *TNT* 17-29 (\$1.3 trillion current deficit); Alan J.

(Footnote continued in next column.)

The total savings in the economy is the net of private savings and public dissavings. The deficit is government dissavings. The government’s borrowing because it does not have the revenue draws savings out of the economy or absorbs foreign investment that would be available for private investment. Because the tax given up by the Roth IRA has a modest or negative effect on private savings and is entirely an increase in deficit on the federal level, the net impact of the Roth IRA on savings is strongly negative.

c. Revenue loss not focused on retirement security. Qualified plans were originally created to provide retirement security rather than augment the estates of taxpayers who are wealthy enough to leave an estate.²⁶ Owners of traditional IRAs are thus required to begin taking minimum distributions from their IRAs beginning at 70½, amortizing their account over what is now a 17-year expected remaining life.²⁷ Roth IRAs, however, are exempt from the minimum distribution requirements,²⁸ and thus the accounts may be used to augment an estate when retirement security is no longer an issue. Estate enhancement is a goal of those who have already provided for their income security, and indeed it is only the wealthy who can get the benefit of the enhancement. It is unclear why the government should subsidize the enhancement of estates. The government’s purpose is not to make rich people richer, I presume. From the perspective of retirement security, expansion of the tax-favored plans into the realm of estate wealth is a waste of government subsidy that is inconsistent with the core mission of the IRA. Consistent with the general goal of qualified plans, would it make sense to require that the Roth IRA reduce the amount generating tax-exempt income by distributing the account over its expected life?

Roth plans also do not require that the money be saved for retirement. As noted, section 72(t) imposes a 10 percent penalty on distributions from a qualified plan before retirement, except for some permitted uses. The 10 percent penalty, however, is measured by the taxable amount of the distribution, and for a Roth there is no general taxable amount.²⁹ The ability to withdraw tax free without penalty means that much of the revenue lost

Auerbach and William G. Gale, “The Economic Crisis and the Fiscal Crises: 2009 and Beyond,” *Tax Notes*, Oct. 5, 2009, p. 101, *Doc 2009-20422*, 2009 *TNT* 190-10 (estimating a permanent fiscal gap of \$1.3 trillion).

²⁶Boris Bittker and Lawrence Lokken, *Federal Taxation of Income Estates and Gifts*, para. 63.3.4 (3d ed. with 2010 online supplements) (saying Congress imposed minimum distribution requirements to ensure that IRAs are used primarily for retirement savings, “not as vehicles to build wealth for transmission to heirs”).

²⁷Section 401(a)(9)(A)(ii). The 17-year expected life assumes a single annuitant of age 70. Reg. section 1.401(a)(9)-9 (2002).

²⁸Section 408A(c)(5)(A).

²⁹There is an antiabuse rule impeding conversion from a regular plan to a Roth plan just to withdraw amounts prematurely without penalty. It provides that distributions will be treated as if they came from the prior qualified plan if the distribution comes within five years of conversion. Section 408A(d)(3)(F)(i). The exception is narrow, however.

	(1) Roth Plan (exempts profits from tax)	(2) Regular Qualified Plan (soft money investing)
1. Income	\$100	\$100
2. Tax on income at 1/3 * row 1	(\$33.33)	no tax
3. Investable [rows 1-2]	\$66.67	\$100
4. Growth [row 3 triples]	\$200	\$300
5. Taxable amount	no tax	\$300
6. Tax on profit at 1/3	no tax	(\$100)
7. End result	\$200	\$200

to the Roth plan goes not to support retirement spending but to support the purchase of large consumer goods before retirement.

2. Revenue from rollover. Before 2010, Roth IRAs were unavailable to taxpayers with AGI of more than \$110,000 for single individuals or \$160,000 for joint filers,³⁰ and those taxpayers could not convert their regular IRAs into Roth IRAs. The purpose of the limitation was to focus the expensive tax subsidy entailed in qualified plans on the retirement security of those who would not be secure without help and on those less able to save. The antidiscrimination rules of employer plans, for instance, withhold the tax benefits of qualified plans from highly compensated employees unless lower-compensated employees are included nondiscriminatorily in the plan.³¹ For one-person IRAs, the income limits prevented a plan from being exclusively for high-income individuals.

Congress repealed the income limitations for 2010 and thereafter to allow taxpayers with any level of income to convert from a regular IRA or 401(k) plan to a Roth plan.³² Taxpayers converting to a Roth plan have to pay tax on the withdrawals as ordinary income. For conversions in 2010, Congress temporarily allowed the tax to be spread by reporting the income over 2010 and 2011. Profit from the plan thereafter is tax exempt, as in all Roth plans.

The conversion to a Roth plan without regard to income level was added by a conference committee in 2005 without any relevant amendment in either the House or Senate and without providing a rationale.³³ The primary motive for the change was apparently the scoring of the change as a revenue raiser.³⁴ The JCT scored the conversions to a Roth plan as raising revenue of \$6.4 billion within the 10-year window of cash revenue that

Congress uses to regulate itself.³⁵ The purported revenue gain was used to offset the revenue loss Congress created by granting tax relief in areas unrelated to retirement plans.

Although Roth conversions were scored as more cash for the government within a 10-year window, the conversions lose the government money in economic (net present value) terms and make the deficit worse. Conversions produce their revenue for the government disproportionately within the 10-year window, and they cause the government to forgo revenue on distributions that are disproportionate beyond the 10-year window. The revenue forgone beyond the window hurts the government deficit more than the cash within the window helps.

The pattern of cash now in return for giving up cash later is a borrowing pattern, and with every conversion, the government is borrowing on terms that make the long-term deficit worse. In cases in which taxpayers elect the conversion, Roth conversions are a particularly expensive form of government borrowing. Taxpayers convert into Roth plans because they reasonably expect that tax rates will go up or that returns on their Roth IRAs will be extraordinary. With either an increase in rates or extraordinary returns, conversion into a Roth becomes a wasteful way for the government to borrow money. Any expansion of the qualified plans, by conversion or otherwise, is a tax expenditure, which subsidizes beneficiaries and loses revenue compared with a progressive income tax. To score the Roth conversions as positive revenue when they do so much harm to the federal deficit is a particularly cynical form of bad accounting.

a. Normal-rate government borrowing. A conversion from a regular qualified plan into a Roth plan is always an unbudgeted, controlled form of government borrowing, but in very narrow circumstances, shown in Table 1 above, the borrowing is at rates like those at which the government would borrow more generally. A Roth plan requires a contribution of after-tax money or take-home pay but then exempts the taxpayer from tax on the subsequent income or gains. The tax is paid upfront, and neither growth nor distributions are taxed. The regular IRAs and 401(k)s allow a deduction or exclusion of amounts contributed to the retirement account, and the account is allowed to grow without tax, but distributions

³⁰Section 408A(c)(2).

³¹Bittker and Lokken, *supra* note 26, at para. 61.1 (recounting that antidiscrimination rules were adopted in 1942 to prevent qualified plans from being twisted toward tax avoidance by small groups of highly compensated officers and directors). *Id.* at para. 61.2.3 for a description of the antidiscrimination rules.

³²The Tax Increase Prevention and Reconciliation Act of 2005, P.L. 109-222, section 512.

³³Conference Committee Report on H.R. 4297, H. Rep. No. 109-455 (Title VIII.B).

³⁴Leonard Burman, "Roth Conversions as Revenue Raisers: Smoke and Mirrors," *Tax Notes*, May 22, 2006, p. 953, *Doc 2006-9286*, 2006 TNT 92-42.

³⁵JCT, "Estimated Revenue Effects of the Conference Agreement for the 'Tax Increase Prevention and Reconciliation Act of 2005,'" JCX-18-06 (May 9, 2006), *Doc 2006-9029*, 2006 TNT 90-6.

	(1) Roth IRA (exempts profits from tax)	(2) Regular IRA (soft money investing)
1. Income	\$100	\$100
2. Tax on income at 25% * row 1	(\$25)	no tax
3. Investable [rows 1-2]	\$75	\$100
4. Growth [row 3 triples]	\$225	\$300
5. Taxable amount	no tax	\$300
6. Tax on profit at 45%	no tax	(\$135)
7. End result	\$225	\$165

are then subject in full to tax at ordinary rates. The deduction or exclusion under the regular plan allows investment not just of the posttax take-home pay, but also the larger pretax gross pay. Tax is paid not upfront, but only on distributions from the investment.³⁶ The pattern for the regular IRA is sometimes called soft money investing or the cash flow consumption tax pattern.

If tax rates upfront at contribution are the same as tax rates at the end at distributions, the yield exemption given by the Roth IRA will have the same value to the taxpayer as the soft money investing privilege provided by the regular IRA. Table 1, on the previous page, shows the equivalent results assuming tax rates at one-third of income and a return that triples the investment between contribution and distribution.

Ordinarily in an income tax, the profits from the tripling in column 1 of table 1 would be subject to an income tax. The Roth plan exemption is a privilege compared with ordinary income tax, because the gain from the tripling is not taxed, leaving \$200 at the end of the example. But with the same rates and reduction in contribution by the amount of tax, the Roth gives the same final results as the regular qualified plan, shown in column 2 of table 1. If rates are constant and the amount invested is reduced by upfront tax, a taxpayer does not care whether he pays tax on inputs (at row 2), as in the Roth plans, or on results (at row 3), as in the qualified plans. The equivalence holds true for any (constant) tax rate and any multiple of growth.³⁷ The equivalence of the

profits exemption as in Roth IRAs and the input exemption as in regular IRAs and other qualified plans is commonly called the Cary Brown thesis in honor of the economist who first saw it, surprisingly late in the history of the income tax.³⁸

A conversion from a regular plan (column 2 of table 1) to a Roth plan (column 1) is like the taxpayer lending the government money. The government would collect tax of \$33.33 on the conversion (line 2), but it would forgo tax of \$100 on the distribution of profit (line 6). The borrowing would be forced on the government without its control. But if the qualified plans compared in Table 1 in columns 1 and 2 invest in risk-free federal bonds, the conversion would not be at an interest rate particularly adverse to the government. Assume the plan invests in risk-free federal securities giving, for example, a 3 percent return. A tripling of the accounts shown in Table 1 would have implied there were 37 years between the contribution and distribution — for instance, a contribution at age 35 and a distribution at 72.³⁹ The government is then getting \$33.33 on conversion and forgoing \$100 tax in 37 years. That cash pattern is identical to borrowing \$33.33 by selling a federal bond paying the 3 percent interest after tax.⁴⁰

There seems to be no special reason for the taxpayer to convert from a regular plan to a Roth plan under the circumstances in Table 1, because the taxpayer is indifferent between the regular plan and the Roth plan. The taxpayer will clearly convert, however, when rates are expected to rise or the taxpayer knows the returns within the Roth plan will be extraordinary, and in those cases the government is borrowing at highly disadvantageous interest rates.

b. Rates up. Given the federal deficit running at \$1.3 trillion, it is reasonable to assume that tax rates will go up in the future. The Roth plan is better than a regular IRA or 401(k) for the taxpayer if the tax rate at the time of distribution is higher than the tax rate at the time of contributions to a Roth IRA. Table 2, above, looks at a taxpayer who goes from a 25 percent tax rate at the time of contributions to a 45 percent tax rate at the time of distributions.

³⁶The pattern of the regular IRA is also the pattern for employee qualified plans under which contributions by the employer on behalf of the employee are exempted from the employee's tax (although the employer gets an immediate compensation deduction), but ordinary income is paid on the distributions.

³⁷The result shown in Table 1 can be generalized by describing the columns algebraically. The algebraic description of Roth IRA (profit exemption) of column 1 is $\$100 * (1 - t) * (1 + R)^n * (1 - 0)$, where t is the tax rate and $(1 + R)^n$ is the compound growth at rate R for period n . The \$100 is a unit of income. The $(1 - 0)$ term at the end simply says there is no tax on distributions. The soft money investing of the regular IRA, column 2, is $\$100 * (1 - 0) * (1 + R)^n * (1 - t)$, using the same notation. Profit exemption (1) must equal soft money investing privilege (2):

$$(1) \$100 * (1 - t) * (1 + R)^n * (1 - 0) =$$

$$(2) \$100 * (1 - 0) * (1 + R)^n * (1 - t),$$

because of the commutative law of multiplication, which says that it does not matter whether you put the reduction by tax $(1 - t)$ near the front of the expression or at its end.

³⁸Cary Brown, "Business-Income Taxation and Investment Incentives," in *Income, Employment and Public Policy: Essays in Honor of Alvin H. Hanson* 300 (1948).

³⁹ $\$100 * (1 + 3\%)^{37.167} = \300 .

⁴⁰The calculation is the same as *supra* note 39.

	(1) Roth Plan (exempts profits from tax)	(2) Regular Qualified Plan (soft money investing)
1. Income	\$100	\$100
2. Tax on income at 35% * row 1 (tax funded by borrowing)	(\$35)	no tax
3. Invested	\$100	\$100
4. Extraordinary Growth [10x row 3]	\$1000	\$1000
5. Taxable amount	no tax	\$1000
6. Tax on profit at 35%	no tax	(\$350)
6. Repayment of debt plus 4% interest on \$35	(150)	
7. End result	\$850	\$650

The conversion from a regular qualified plan in column 2 to the Roth plan in column 1 makes sense for a taxpayer. By the conversion, his final position on distribution improves from \$165 to \$225.

The conversion, however, is an expensive way for the government to borrow money. If tax rates had remained constant, as noted, a tripling over 37 years would imply the government borrowing at 3 percent.⁴¹ But now the government is collecting (borrowing) \$25 cash and forgoing (repaying) \$135 cash in 37 years. That is like borrowing at an interest rate of 4.6 percent.⁴² The government has had an involuntary increase in its debt by reason of the conversion, off budget and out of its control, and the interest it pays on the debt is higher than the 3 percent rate it needs to pay by assumption on an explicit debt.

Column 2 (no conversion) is also considerably better tax policy. The tax brackets attempt to adjust the tax rates to the taxpayer's standard of living, so that income used for subsistence or desperate needs is taxed at zero or modest rates and income used for luxuries is taxed at higher rates. The distribution (row 5) is a better indicator of the taxpayer's standard of living than the contribution is. The judgment reflected in the tax brackets is that the taxpayer is supposed to be paying tax at 45 percent, and the Roth plans avoid the judgment of the tax brackets.

A general increase in tax rates, moreover, reflects greater government needs. When there is a revenue crisis, the government needs the 45 percent (or above) tax rates. The 45 percent rates reflect the community judgment that greater sacrifices must be made, but the Roth plan has gained immunity from those sacrifices. The 25 percent tax paid when rates were low was the last contribution the taxpayer makes to the common obligation.

c. Extraordinary return rates. The conversion from a regular plan to a Roth IRA will also be a particularly expensive form of government borrowing when the return rate on the investment within the Roth is especially high and the taxpayer knows it in advance.

Assume now that the investment in the plan yields an extraordinary return rate (but constant tax rate) and that the taxpayer knows the returns will be extraordinary.⁴³ A taxpayer who knows that the return will be high would

be better off paying upfront taxes at the time of distribution by borrowing money or selling unrelated assets to put pretax income into extraordinary return investment. In Table 3, above, the taxpayer rationally converts from a regular qualified plan (column 2) into a Roth plan (column 1) and pays the resulting tax with outside borrowing. Thus, \$100 pretax income is invested in the account under both the Roth and regular plans. Assume the accounts grow by 10 times over 37 years, which implies 6.4 percent annual growth.⁴⁴ Although the taxpayer did not reduce the \$100 investment in the Roth by tax paid on conversion, the \$35 was financed outside the Roth, and that involves cost measured by the outside source. Assume that the taxpayer lost a \$35 asset paying 4 percent after tax or borrowed at 4 percent after tax. At the end of 37 years at 4 percent, the \$35 dollars would represent a terminal value cost at distribution of $\$35 * (1 + 4 \text{ percent})$, or \$150.37, which is subtracted at row 6A.

The Roth plan is better than the regular qualified plan for the extraordinary return, so long as the taxpayer funds the tax due on conversion by relatively cheap funding from outside the account. The taxpayer would therefore rationally convert from column 2 to column 1 owing \$35 tax. Table 3 breaks the Cary Brown equivalence between the Roth and regular IRA, because the taxpayer pays the tax with the lower 4 percent outside discount rate instead of reducing the account investment assumed to give an internal rate of return of 6.4 percent. Conversion from a regular plan to a Roth plan would be rational for the taxpayer under conditions similar to those in Table 3.

For the government, situations like Table 3 again represent involuntary borrowing, and at an interest rate higher than it needs to incur. The government collected \$35 tax at the time of conversion but had to forgo \$350 tax on distribution. Borrowing \$35 cash now and returning the money with interest in the assumed 37 years represents a borrowing rate of 6.4 percent, which is exactly the extraordinary return given by the asset in the plans. The

the amount of tax due upfront for the Roth, the Roth and the IRA will have the same effect on the taxpayer. This is just another illustration of the Cary Brown thesis, which holds true no matter the growth rate of the underlying investment. What is cause for indifference for the taxpayer, however, still amounts to borrowing at extraordinary rates for the government (6.4 percent in the illustration in the text).

⁴⁴ $\$100 * (1.064)^{37.167} = \$1,000.$

⁴¹Supra note 39.

⁴² $\$25 * (1 + 4.6\%)^{37.167} = \$135.$

⁴³If the taxpayer does not know about the extraordinariness of the return beforehand and reduces the amount invested by
(Footnote continued in next column.)

government can borrow at 3 percent by assumption, so that the conversion in cases like Table 3 both increased the government debt — involuntarily, without budget or control — and more than doubled the annual interest cost of that debt.

We should presume that conversions made by taxpayers from regular plans to Roth plans are those that increase the government cost of debt. The cases in which the government is simply bearing its usual cost of interest because the rates are constant and the plan invests in zero-risk government securities (as in Table 1) are also cases of taxpayer indifference between Roth and regular plans, so that the taxpayer is unlikely to convert. When tax rates are expected to go up, however, or when the taxpayer has access to extraordinary returns, he will convert, and the conversion will cause the government to bear more interest than it needs. The Roth conversions are indeed a fine example of government waste, because the government is bearing more interest than it has to.

d. New contributions. The ability to convert regular 401(k)s and IRAs into Roth plans can also be expected to increase the amount of money put into all qualified plans. Any expansion of a qualified plan needs to be scored not from a baseline of the regular IRA, which does not reduce the pretax return from the investment, but from the baseline of ordinary income on the investment. The exemption of investment income that was previously exempt has to be scored entirely as a revenue loss by the amount of the tax that disappears. The appropriate measure of the revenue loss is the tax rate of the taxpayer times the revenue from within the Roth plan.

The conclusion Congress reached in 2005 that conversions would increase government revenue was a relic of bad accounting methods. The extra cash that the government would receive in the 10-year window was just borrowed cash, and it would have to be paid back in future years with interest. In the cases in which taxpayers rationally convert because they expect an increase in tax rates or expect high returns from the qualified plan, the government borrowing rate is wasteful, that is, higher than it needs to be.

C. Proposal

The proposal would repeal the tax exemptions under Roth IRAs and 401(k)s for contributions made after the bill proposing the repeal is offered to Congress.

Assets already in Roth plans could continue as tax-exempt plans, but they would have to be distributed, under a constant payment assumption, over the earlier of life expectancy or the next 25 years. Withdrawals from the Roth would be tax free, however, even if made before retirement, except for application of the current limited antiabuse rule. Under current law, distributions from a Roth are not tax-free if the taxpayer has converted from a regular plan within the prior five years.

So long as a Roth account remains undistributed, however, the proposal would reduce interest deductions claimed by the taxpayer for 2010 and thereafter under the cost-avoided logic. It is assumed that the taxpayer could have always withdrawn from the Roth plan to liquidate debt. The rational action in the absence of tax considerations would be to liquidate debt with the highest interest rate. Thus, the proposal would disallow the deduction of interest to the extent of the account balance of the Roth plan, with the highest interest incurred by the taxpayer disallowed first. As a simplification matter, taxpayers would be able to elect to pay tax on their Roth plan income annually. Since most upper-income taxpayers carry debt, ending the arbitrage or mismatch of debt deductions and Roth exemption for the revenue would effectively end the value of Roth plans immediately.

If Roth plans are continued despite the proposal, they should be narrowly focused on retirement security. Distributions would be subject to a 10 percent penalty if made before retirement for reasons not allowed for regular qualified plans, and the penalty would be measured not by taxable amounts, but by distributions. Roth plans would be required to distribute their assets over the beneficiary's expected life, starting at retirement, so that tax exemption would not be misdirected toward the enhancement of an estate.

SUBMISSIONS TO TAX NOTES

Tax Notes welcomes submissions of commentary and analysis pieces on federal tax matters that may be of interest to the nation's tax policymakers, academics, and practitioners. To be considered for publication,

articles should be sent to the editor's attention at taxnotes@tax.org. A complete list of submission guidelines is available on Tax Analysts' Web site, <http://www.taxanalysts.com/>.