1999

The Roth IRA Cuts Federal Revenues, with No Benefit to Taxpayers

Michael Waggoner
University of Colorado Law School

THE ROTH IRA CUTS FEDERAL REVENUES, WITH NO BENEFIT TO TAXPAYERS

*Michael Waggoner**

TABLE OF CONTENTS

INTRODUCTION

The Roth IRA,[1] despite its great popularity,[2] should be repealed prospectively because it will seriously reduce federal revenues while producing no substantial benefit that otherwise could not be made available to the taxpayer. Although the Roth IRA was enacted in part to increase federal revenues, the Roth IRA will increase federal revenues only in the short-run: in the long run, it is a disaster. And yet, oddly enough, in losing substantial amounts of federal income tax revenue, the Roth does not increase individual after-tax wealth.

The first part of this article briefly describes this nation's system of retirement savings. The second part shows how the Roth IRAs are like termites gradually weakening the federal income tax system. Part three suggests some ways to improve the tax-favored pension system based on the strengths and weaknesses of the Roth IRA.

---

* Associate Dean and Associate Professor, University of Colorado School of Law; A.B., Stanford University; LL.B., Harvard Law School.

1. The Roth IRA, named for its sponsor, the Republican senator from Delaware, is authorized by 26 USC § 408A. "IRA" is the commonly-use short-hand for "Individual Retirement Account." Senator Roth proposed extending the Roth IRA treatment to other forms of retirement saving such as thse authorized by 26 USC § 401 (k).

2. *See, e.g.*, Kathy M. Kristoff, *Time to Look at New Roth IRA*, L.A. TIMES (Jan. 6, 1998) <http://www.latimes.com/HOME/NEWS/WALLSTCA/rothira.htm>; Virginia Munger Kahn, *Roth I.R.A.s Giving 401(k)'s a Run for the (Retirement) Money*, N.Y. TIMES, Mar. 1, 1998, § 3 at 21; Eileen P. Gunn, *Sorting Out the Savings Plans*, FORTUNE, Aug. 17, 1998, at 121.

I. THE SYSTEM OF RETIREMENT SAVINGS

The retirement system in the United States might be described as a stool with three legs.[3]

One leg is the Social Security system of mandatory, tax-financed pensions (as well as disability and survivors insurance).[4] Some have expressed concern about this system's ability to fulfill its promise to future cadres of retirees; a variety of plans have been proposed to ensure the system's continued viability, ranging from changes in the tax or benefit structure to proposals of full or partial privatization.[5] Whatever reforms of Social Security may ultimately be implemented, it seems unlikely that Social Security alone will be adequate to provide fully for retirement.

A second leg is the system of tax-favored pension plans. For purposes of this article it is useful to divide our many systems of tax-favored retirement saving into two categories, the IRA[6] and traditional pensions[7] (hereinafter both are abbreviated "IRA") and the new Roth IRA[8] (hereinafter "Roth"). Both allow for tax-free accumulation of income. The difference is in the treatment of contributions and payouts. For IRAs, contributions are deductible and payouts are taxable; for the Roth, contributions are not deductible, but payouts are not taxable. These differences in tax treatment may be viewed as opposites of each other: The IRA provides tax benefits for contributions that the Roth does not enjoy; the Roth has tax benefits for payouts that the IRA lacks. These plans are discussed more fully in the next part.

The third leg is private savings, whether in the form of direct ownership of such tangible assets such as real estate, art, precious metals, or businesses,

---

3. *See, e.g.*, Michael J. Graetz, *The Troubled Marriage of Retirement Security and Tax Policies*, 135 U. PA. L. REV. 851 (1987); Nancy J. Altman, *The Reconciliation of Retirement Security and Tax Policies: A Response to Professor Graetz*, 136 U. PA. L. REV. 1419 (1988); Michael J. Graetz, *Retirement Security and Tax Policies: A Reply*, 137 U PA. L. REV. 1239 (1989).

4. *See, e.g.*, C. EUGENE STEURLE & JON M. BAKIJA, RETOOLING SOCIAL SECURITY FOR THE 21ST CENTURY: RIGHT AND WRONG APPROACHES TO REFORM (1994), *excerpted in* TAX NOTES, Mar. 14, 21, 28 & Apr. 4, 1994, at 1457, 1597, 1763, & 109.

5. *See* REP. OF THE ADVISORY COUNCIL ON SOCIAL SECURITY, Jan. 6, 1997. *See discussion in*, e.g., Jackie Calmes, *Social Security Report Opens Debate*, WALL ST. J., Jan 7, 1997 at A2, (discussing the Advisory Council on Social Security's Report); and *Social Insecurity*, NEWSWEEK, Jan. 20, 1997, at 20-29. President Clinton in the 1999 State of the Union Address proposed investing a portion of the Social Security trust funds in the stock market. *See More Social Security or Less? Clinton Plan Faces Lots of Questions*, WALL STREET JOURNAL, Jan 20, 1999, at A1.

6. 26 U.S.C.A. § 408.

7. 26 U.S.C.A. §§ 401-04.

8. 26 U.S.C.A. § 408A.

or in the form of such intangible assets as annuities, savings accounts, stock or bond holdings, or mutual funds. Some of these investments may be tax-favored. The rules for depreciation, for example, are generally thought to be more generous than pure accounting or economics would dictate.[9] Analogously, the earnings in an annuity are free from tax until distributed.[10] In addition, both tangible and intangible assets may qualify for the reduced rate of tax on long term capital gains.[11] The tax favors for these types of investments are available regardless of the intended purpose of the savings, and are not focused on retirement. These savings can be used to start a business, pay for a medical emergency, recover from a natural disaster, buy a house, enjoy a luxurious vacation, pay for one's own or another's education, etc. Of course, they can also be used for retirement.

It may be necessary to consider a fourth leg of retirement: continued employment. With Social Security providing at best a meager living, those who are without adequate pensions and who have not saved enough may be compelled to continue working past normal retirement age. To put this matter in perspective, however, we should remember that retirement is a relatively recent innovation in this country, and retirement may or may not be good for one's health and outlook. For one whose social life, physical and mental activities, and sense of self is tied up with work, retirement may not be a good idea.

II. ROTH IRAS: TERMITES IN THE FEDERAL INCOME TAX SYSTEM

An income tax normally does not allow a deduction for saving. Instead, amounts invested create a basis which may produce tax benefits in the future. The yield of an investment is normally subject to the income tax. The IRA and the Roth each are governed by one of these rules and exempted from the other, but from different rules. The IRA investment is deducted (but its yield is still taxed). The Roth yield is tax exempt (but the investment is still not deducted).

Perhaps surprisingly, however, these dramatically different treatments produce the same results. A mathematical example will follow this textual explanation. Because of the deduction for IRAs, one can afford to contribute more and the greater accumulation will allow a greater payout after retirement so that after paying taxes one has the same amount to live on as with a Roth. With a Roth one invests less because of not having the tax saving from a

9. 26 U.S.C.A. §§ 167, 168.
10. 26 U.S.C.A. § 72.
11. 26 U.S.C.A. § 1(h).

deduction, but that lesser accumulation and payout are still adequate because the payout will be tax-free.

It is easy to demonstrate as a matter of mathematics that these two systems are the same as far as the investor is concerned, so long as the investor's marginal tax rates stay the same (a critical assumption). While one could use a very complicated example of many years contribution to a pension followed by many years of payments received from a pension, the essentials will accurately appear much more simply by looking over just one year's contribution and one year's payout. For example, suppose we have two taxpayers, Lewis and Clark, each having a marginal tax rate of 28%, willing to forego consumption of $1000 this year, able to invest at 9% per annum, and planning to use the proceeds for retirement forty years later.

Lewis chooses a Roth. He invests $1,000, and over forty years, it will grow to $32,000,[12] and that $32,000 will be available for consumption because it is free of federal income tax. To have the $1,000 to invest non-deductibly, Lewis would have had to earn $1,388.89, paid a 28% tax of $388.89, leaving the $1,000 to be invested. This $388.89 is all the tax that Lewis will pay on this cycle of $1,000 invested and $32,000 consumed.

Clark chooses to invest in an IRA. Here the contribution would be deductible, so that Clark could invest $1,388.89, the deduction would save 28% of $1,388.89 or $388.89 in taxes paid, leaving Clark's current consumption reduced by only $1,388.89 - $388.89 = $1,000. Clark's investment would grow to $44,444.44 over forty years, but when it was withdrawn for consumption it would be taxable so that after paying a 28% tax of $12,444.44, Clark would have $32,000 available for consumption during retirement. On this cycle of $1,000 invested and $32,000 consumed, Clark would pay a tax of $12,444.44.

Although they have taken different paths, Lewis and Clark have started from a common point (reducing current consumption by $1,000) and reached another common point (having $32,000 available for future consumption in retirement). To them it is a matter of indifference which path is taken.

To the Treasury, however, the differences are great. In the preceding numerical example, total federal tax collections were $388.89 under the Roth, but $12,444.44 under the IRA.[13] The IRA taxes are thirty-two times greater

12. These calculations are based on the Rule of 72, under which the interest rate divided into 72 gives the number of years for the investment to double.

13. One might ask, "Why doesn't the government just invest the $388.89, and over 40 years it will grow to $12,444.44?" There are two answers. First, the government has a lot of current expenditures, so it needs current cash flow. Although some of these expenditures might be considered investments (education of the young and creation of national parks provide benefits far into the future), it is hard to compare their return to the cash flows of financial

than those for the Roth, because the Roth taxed only the contribution, whereas the IRA taxed the distribution which had grown to thirty-two times the contribution. Unlike the taxed Roth contribution, the IRA contribution was not taxed because it was deducted. Because of the wonders of compound interest and the long periods pension funds are invested, far more is paid out as pension than is paid in as contributions. Thus, taxes on distributions will be far greater than are taxes on contributions.[14] Thus Roths are like termites: Although they marginally increase federal revenues at the start, as people are diverted from deductible IRA contributions to non-deductible Roth contributions, in the long run Roths will greatly reduce future federal revenues as the substantial earnings from Roths are paid out tax-free. Much as termites gradually weaken trees and wood structures, Roths gradually weaken the federal revenue system.

I consider the prior paragraph a devastating critique of the Roth. However, the case is not made until other justifications for the Roth are considered.

Some would argue that it is a good thing to reduce federal revenues, that it is better to have less federal government and more private activity. Of course, others would disagree with that approach. Even for believers in that approach, however, the Roth vs. IRA issue should be troublesome. Almost all other questions of federal taxation and expenditure are questions of public vs. private. Here, however, there is no private loss in greater federal tax collections. Both Roth and IRA leave the individual the same amount of wealth for personal use in the year of investment; they also both produce the

---

investments. Second, there may be serious objection to the government participating in financial markets to a much greater extent than at present. "*Greenspan Sees Possible Threat in Clinton Plan,*" NEW YORK TIMES, Jan. 21, 1999, at A1.

14. This example used a period of forty years and rate of return of 9 percent. With different interest rates and different periods of time one would get different results. The following table gives the future value of one dollar at various interest rates for various time periods:

Interest Rate:		4%	6%	8%	10%	12%
Years	10	1.48	1.79	2.16	2.59	3.11
	20	2.19	3.20	4.66	6.72	9.65
	30	3.24	5.74	10.0	17.4	30.0
	40	4.80	10.3	21.7	45.3	93.1
	50	7.11	18.4	46.9	117	289.

For any reasonable interest rate and for any reasonable period of time, it is quite likely that the return will far exceed the contributions. And, because the dollar amount of growth increases for each year (although the rate of growth is constant), an extra year or two adds much more to the total that a year or two less costs.

same results in the year of consumption. The only difference is in the amount of federal revenues. The Roth dramatically reduces federal revenues. That means, at any particular level of government spending, other taxpayers must be taxed more heavily under a system of Roths than they would be taxed in a system of IRAs. Surely those who would restrain government would not, in choosing between two systems of equal government expenditure, choose the one with the higher tax burden. Yet the Roth picks the system with the higher tax burden.

With a traditional pension, the Treasury shares in the investment return, collecting more as more is earned. With the Roth the Treasury shares only in the investment, not the return. At present the Roth contributes to federal revenues since contributions are not deductible, and as traditional IRAs are converted to Roths at a cost of including (all but the non-deductible portion, if any, of) the traditional IRA in taxable income. Over the long term, however, the Roth will have a serious impact on federal revenues.

So far we have assumed that rates stay the same. If rates change, the picture changes. In general, one prefers to have tax benefits (such as a deduction or an exclusion from income) when one is in high tax brackets and tax detriments (inclusion of income or denial of a deduction) when one is in low tax brackets. For the traditional pension, it is better to make contributions and take deductions (to get a tax benefit) while in a high tax bracket and to report income (to incur a tax detriment) while in a low tax bracket. That is the traditional view of pensions, that they replace only a part of the income that was being earned before retirement. Put another way, a person who expects to be in a lower tax bracket after retirement should prefer an IRA to a Roth. With the Roth, it is better to make non-deductible (the non-deductibility is a tax detriment) contributions while in lower tax brackets and to get the income tax-free (a tax benefit) when in high tax brackets. This more-income-after retirement is becoming increasingly likely as defined contribution plans invested in equities have provided very high rates of return. (Of course, this rosy picture may change when the current booming stock market turns down, as history tells us it must.) Those expecting a higher tax bracket after retirement should choose a Roth.

To have these people with high Roth income pay no taxes seems undesirable on several scores. First, most people would likely agree with the principle that in general people who are receiving the benefits of government, and who are able to pay should pay something for those benefits. Those with high Roth incomes may benefit more than do citizens generally, because of the many programs the government provides to assist senior citizens. If we follow Justice Holmes's dictum, "I like taxes. They are the price we pay for civilization," seniors may be enjoying a lot of civilization because of the many benefits provided to seniors by federal, state, and local governments, as well as by businesses and other organizations. It is no adequate answer for the high-Roth-income person to note that long, long ago (several to many decades typically) a tax was paid on a very, very small part (in the hypothetical case of Lewis and Clark, on one thirty-second or 3.125%) of what is now being withdrawn. This high-Roth-income, low-tax person finds it particularly hard to justify this result if the increase in taxes is due to a national emergency such as we have had in the past during the Civil War, Great Depression, World War II, or the Cold War. One might think (perhaps over-optimistically, based on history) that we are now wise enough to avoid such problems in the future. Even if that were true, Congressional Budget Office projections suggest that current federal government surpluses may last only twenty years, to be replaced by seriously widening deficits in the next thirty years.[15]

Second, the history of encouraging provision for retirement through such programs as the mandatory Social Security system or through the tax-favored system of IRAs is based on fear that the retired will not have an adequate standard of living. But if people are in higher tax brackets when retired than they were when they were working, they do not need the favored treatment or subsidy.

Third, if one is trying to encourage those who do not presently save enough to begin to do more saving in the future, one must ask why they do not save at present. The reason is probably that (rightly or wrongly) they put a high value on the present and a low value on the future.[16] For such present-oriented, future-neglecting people, a benefit that occurs far in the future (the exclusion from income of the payout from a Roth) is likely to be less effective in encouraging saving than the immediate benefit of a deduction for an IRA would be.

I do not wish to weaken a strong case by over stating it. Federal revenues are derived in large part from activities having nothing to do with retirement: it is only the portion related to retirement to which the point made here applies, and even then it is only the investment in Roths that presents the problem.[17] It should be noted, however, that one may begin investing in a

---

15. Assuming that federal revenues remain at 20% of Gross Domestic Product ("GDP"), the national debt is projected to drop from 47% of GDP now to 17% of GDP in 2020, but then to explode to 206% of GDP by 2050. *See Government Debt: A Horror Story*, FORTUNE, Aug. 3, 1998, at 52-54 (discussing the Congressional Budget Office's recent study entitled *Long Term Bugetary Pressures and Policy Options*). Of course any such long-range projections have huge margins for error, based on likely changes in demographics, the economy, and the political system's ability to respond to such problems by measures such as tax increases and spending reductions.

16. *See discussion in* Deborah M. Weiss, *Paternalistic Pension Policy: Psychological Evidence and Economic Theory*, 58 U. CHI. L. REV. 1275 (1991).

17. Senator Roth has proposed expanding the Roth. First, he would increase the annual

Roth at a very young age, as soon as one has earned income, and that a long history of the relatively small contributions allowed to a Roth can through tax-free compounding of interest yield a very generous income in retirement. That Roth income, were it instead from an IRA, might all be exposed to relatively high rates of taxes.[18] While I do not yet have revenue estimates, it is reasonable to assume that the amounts involved will be large.

III. INSIGHTS FROM THE ROTH ON IMPROVING IRAS

For example, although the Roth is fatally flawed, there are features of the Roth that may be desirable if incorporated into an IRA. For example, although both the Roth and IRAs are nominally subject to the same annual limit of $2,000 on contributions, the effective Roth limit is higher, because the Roth will be producing a tax-free pension. To equate them, the IRA limit should be increased so that (1 – Tax Rate) x (Limit) = $2,000. Using the mathematical example above of Lewis and Clark, if Lewis is allowed to invest $2,000 in a Roth, Clark would need to be allowed to invest $2,777.78 to earn the same pension (after taxes). This point would suggest, not that taxpayers be forced to do all these calculations, but that the limit on IRAs be raised, a step long overdue as true economic growth and inflation have pushed average incomes far above what they were when the $2000 limit was set. For example, if the limit for Roths is $2,000, then a $3,000 limit for IRAs would be appropriate for those in the 33 1/3% tax bracket, roughly the 28% or 31% in which most members of the middle class are found. Similarly, the Roth has high income limits on contributions[19] not based on whether one is an active participant in a pension plan. The problem with the "active participant" limit

---

contribution limit from $2,000 to $5,000 ($7500 for those over 50 years old). Second, he would allow Roth treatment for § 401(k) and § 403(b) plans, and he would increase the contribution limit for these plans by fifty percent, from roughly $10,000 annually to $15,000. If changes like these are enacted, the revenues at stake may become much more substantial. *See* CCH TAXES, PARADE, July 15, 1999, at 3.

18. The well-advised would invest in a Roth in their low tax bracket years and in an IRA in their high tax bracket years, or invest in a IRA to eliminate a year's highest-taxed income, then invest in a Roth up to the applicable limit for that year. Ideally the IRA payout in retirement would in part not be taxed because of the personal exemptions and either the standard deductions or itemized deductions, then the rest would be taxed in the lowest tax brackets. The Roth payout would be free of tax even to a taxpayer in a high marginal tax bracket. The proposed increases in the Roth contribution limit and the extension of Roth treatment to § 401(k) and § 403(b) plans (discussed in the prior footnote) increase the potential rewards for tax planning in this area.

19. On a joint return, full Roth contributions are allowed (although never are they deductible) up to adjusted gross incomes of $150,000. *See* 26 U.S.C.A. § 408A(c)(3)(c)(ii)(I) (West Supp. 1999).

is that even a tiny pension disqualifies one from an IRA at fairly modest income levels,[20] and also that many covered persons receive little or no pensions because frequent job changes prevent their rights from fully vesting. A related inequity is presented in a defined benefit plan, where the pension is based on one's final years' compensation and ones length of service. Those who frequently change jobs will be multiplying most of their years of service by their relatively low salaries in their early and mid years, whereas the people who stay with the same employer will multiply all their years of service by the later higher paid years. While the long-term employee's pension may be high enough that an IRA may not be appropriate, those frequently changing jobs may have inadequate pensions and need IRAs.

Third, one may contribute to a Roth after reaching age 70½, and the Roth has no mandatory distributions, both unlike an IRA. There is much to commend the Roth's liberality. A person at 70½ may still be able and willing to work, and may not yet have built up adequate retirement savings. A cautious investor may want to leave his retirement savings intact until needed, particularly if the savings are slim compared to retirement needs.

The IRA limits seem to be motivated by two concerns. One concern is fear that the IRA will be used for estate planning rather than for retirement, but this fear may be overblown. First, the IRA is likely to be included in the owner's taxable gifts or estate, and rates under the estate and gift tax can rise as high as 55%, far above the top income tax rate. Second, the payments will also be subject to income taxation. In a life-time gift, the donor will have to include the IRA payments in income. After death of the IRA owner, payments will be taxed to an heir or devisee because of Section 691, income in respect of a decedent. The combination of estate ir gift tax liability and income tax liability suggest that IRAs have limited potential as estate planning tools.

The other concern is to force people to use employer-wide pension plans by limiting private retirement savings. An employer plan must be available to all employees without discrimination.[21] The policy underlying the non-discrimination requirement seems to be to offer attractive tax benefits to the highly-paid executives, who are most likely to appreciate the tax benefits, because they already have substantial cash incomes, are in high tax brackets, and are nearing retirement. These benefits are available only at the price of the executives coercing the corporation's other employees (typically younger and less well-paid and, hence, less appreciative of tax benefits for retirement) into also having pensions. This system has failed to make pensions the norm

---

20. On a joint return, the IRA deduction for active participants in pension plans begins to be phased out at adjusted gross incomes of $50,000 in 1998, gradually rising to $80,000 in 2007. *See* 26 U.S.C.A. § 219(g) (West Supp. 1998).

21. *See* 26 U.S.C.A. § 401(a)(5) (1999).

in our society. It seems much more likely to direct the form of savings for those already inclined to save, than to encourage those who would not otherwise save to begin saving.

Perhaps the country should consider a system of mandatory pensions. One should of course be reluctant to require businesses to go to the expense of establishing a defined-benefit pension, particularly for part-time or temporary or short-term employees. It would be dramatically less intrusive to require defined contribribtion plans.[22] Mechanism like those used to collect FICA and withholding taxes could be used to reduce costs of maintaining small individual retirement accounts. Once the accounts had grown to reasonable size, they might be turned over to private pension managers such as banks or mutual funds or insurance companies.

Finally, a problem common to both IRAs and Roths is how much to restrict access to the investment. Too tight restrictions may discourage people from investing in these vehicles; too loose restrictions may allow the investment to be dissipated and leave too little for retirement. The current restrictions allow both to be used for such purposes as to pay for education for oneself, spouse, child or grandchild, or to buy a first house, or if one is disabled. Once one has reached 59½, there are no limits on withdrawals. A person over age 59 ½ might be more inclined to withdraw investments from a Roth than from an IRA, because the Roth withdrawal will be tax free, where the IRA withdrawals are taxable, and taxes often deter the taxed activity.

It might be better to reconsider these limits. At least a core of one's retirement saving might be limited to providing for retirement, with no withdrawals before retirement or disability and only periodic withdrawals thereafter. Additional amounts of retirement savings might be more readily available for other purposes. For example, contributions of up to a certain dollar amount ($1,000?) or percentage of income (5%?) might be the core until the accumulation was large enough so that it, together with conservatively estimated future contributions and earnings, would at retirement age be able to cover 70% of average recent (5 years?) income (adjusted for projected inflation?). Larger contributions, or larger earnings, even from minimum contributions, could be spent more freely under provisions like those in the law now.

Similarly, greater restrictions might be placed on allowable investments for the core than for additional retirement saving. For example, the core might

---

22. President Clinton in the 1999 State of the Union Address proposed additional incentives for low income people to save for retirement, although he stopped short of mandating such saving. *See* "*Unbowed, Clinton Presses Social Security Plan*," NEW YORK TIMES, Jan 20, 1999, at A1; "*More Social Security or Less? Clinton Plan Faces Lots of Questions*," WALL STREET JOURNAL, Jan 20, 1999, at A1.

be invested in stock or bond index mutual funds. Presumable the portion in stock funds would be higher for the young, with the portion in bond funds rising as retirement neared. Investments beyond the core would be subject to the more generous provisions for qualified plans under existing law.

Under this suggested approach, people would be more inclined to save for retirement, because their savings could be used, not only for retirement, but also for other purposes. Yet they would be more likely to have adequate funds available for retirement, because the core of their savings could be used only for retirement.

CONCLUSION

The Roth clearly has some good features. These features, however, could be made available in IRAs. With no otherwise unavailable benefits, the Roth's potentially adverse impact on federal revenues suggests that it be repealed prospectively. Existing Roths should retain their favorable tax treatment, but no additional Roths or additional contributions to existing Roths should be allowed.