

Should you convert a traditional IRA into a roth IRA?

Authors: Richard W. Kopcke, Francis M. Vitagliano

Persistent link: <http://hdl.handle.net/2345/bc-ir:104247>

This work is posted on [eScholarship@BC](#),
Boston College University Libraries.

Chestnut Hill, Mass.: Center for Retirement Research at Boston College, March 2010

These materials are made available for use in research, teaching and private study, pursuant to U.S. Copyright Law. The user must assume full responsibility for any use of the materials, including but not limited to, infringement of copyright and publication rights of reproduced materials. Any materials used for academic research or otherwise should be fully credited with the source. The publisher or original authors may retain copyright to the materials.

SHOULD YOU CONVERT A TRADITIONAL IRA INTO A ROTH IRA?

BY RICHARD W. KOPCKE AND FRANCIS M. VITAGLIANO*

Introduction

Beginning this year, people can convert all or a portion of their traditional IRA balances into Roth IRAs. Although this new allowance for conversions applies explicitly to traditional IRAs, it also applies indirectly to balances in 401(k) plans that workers hold with former employers. These old 401(k) balances can be rolled over, with no penalty, into traditional IRA accounts, which in turn can be converted to Roth IRAs.

This *brief* considers the merits of making such a conversion. People are likely to benefit if they expect their income tax rates to rise after they retire. People who expect their tax rates to fall also may benefit if they want to defer withdrawing money from their IRAs longer than the rules for traditional IRAs permit. In addition, a conversion can appeal to savers who wish to boost their total IRA balances more than the restrictions on their annual contributions will allow.

The first section of this *brief* sketches the principal differences between traditional and Roth IRAs. The second section describes the new allowance for conversions. The third section illustrates the benefits of conversion for people who expect their income tax rates to rise in retirement. The fourth section illustrates the potential value of the Roth IRA to those

who would like to delay taking their funds out of their retirement accounts. And the fifth section shows how savers can use conversions to increase their tax-exempt IRA balances. The final section concludes.

Traditional and Roth IRAs

Traditional IRAs were introduced in 1974 under the Employee Retirement Income Security Act to allow employees who are not covered by employer-sponsored retirement plans to establish their own retirement accounts with private financial institutions. Neither contributions to a traditional IRA nor the returns earned by the assets in the account are taxed until the funds are withdrawn from the plan.¹ Withdrawals from traditional IRAs before age 59 ½ are generally subject to a 10-percent penalty.² People must begin to withdraw their funds by age 70 ½, and their annual withdrawals must be at least as great as their minimum distribution requirement, which reflects life expectancy.³

Roth IRAs were created by the Taxpayer Relief Act of 1997. Unlike a traditional IRA, initial contributions to a Roth account are not deductible from

* Richard W. Kopcke and Francis M. Vitagliano are both consultants for the Center for Retirement Research at Boston College.

workers' taxable income, but no tax is paid when the money is withdrawn. Also, Roth IRAs do not impose any minimum withdrawal requirements on account holders. They do, however, impose a 10-percent penalty on those who withdraw funds less than five years after making their initial contribution or before attaining age 59 ½.

TABLE 1. LIMITS ON DEDUCTING CONTRIBUTIONS TO TRADITIONAL IRA ACCOUNTS FOR WORKERS COVERED BY A RETIREMENT PLAN AT WORK

Filing status	Modified adjusted gross income	Amount of deduction
Single	\$55,000 or less	Full deduction
	>\$55,000 and <\$65,000	Partial deduction
	\$65,000 +	No deduction
Married filing jointly	\$89,000 or less	Full deduction
	>\$89,000 and <\$109,000	Partial deduction
	\$109,000 +	No deduction

Source: Internal Revenue Service, Publication 590, Table 1-2.

Contributions to both traditional and Roth IRAs are subject to limits. For 2010, the total contributions that most individuals may make from their earned income to their IRAs cannot exceed \$5,000, plus an additional \$1,000 for people who are at least 50 years old. All workers can contribute to traditional IRAs, but those who earn substantial incomes and who actively participate in retirement plans sponsored by their employers might not receive the full tax deduction on their contributions (see Table 1). Workers earning substantial incomes cannot contribute to Roth IRAs (see Table 2).

TABLE 2. LIMITS ON CONTRIBUTIONS TO ROTH IRA ACCOUNTS

Filing status	Modified adjusted gross income	Amount of contribution
Single	\$105,000 or less	Full contribution
	>\$105,000 and <\$120,000	Partial contribution
	\$120,000 +	No contribution
Married filing jointly	\$166,000 or less	Full contribution
	>\$166,000 and <\$176,000	Partial contribution
	\$176,000 +	No contribution

Source: Internal Revenue Service, Publication 590, Table 2-1.

Despite their apparent differences, traditional IRAs and Roth IRAs offer the same benefit to workers whose tax rates do not change in retirement. Suppose a worker contributes \$1,000 to a traditional IRA. If the assets earn a rate of return of r each year, the balance in his account will grow to $\$1,000 (1+r)^n$ in n years. If his tax rate is t , this initial contribution of \$1,000 provides $\$1,000 (1+r)^n (1-t)$ of income after taxes. If, instead, the worker contributes to a Roth IRA, he pays a tax on the contribution. So, he puts $(1-t)$ \$1,000 into the account, net of taxes. After n years, the balance in his account will grow to $(1-t)$ $\$1,000 (1+r)^n$ free of taxes. Consequently, for people who do not expect their tax rate to change in retirement, the traditional IRA and the Roth IRA provide the same amount of income after taxes:

$$\text{Traditional } \$1,000 (1+r)^n (1-t) = \text{Roth } (1-t) \$1,000 (1+r)^n$$

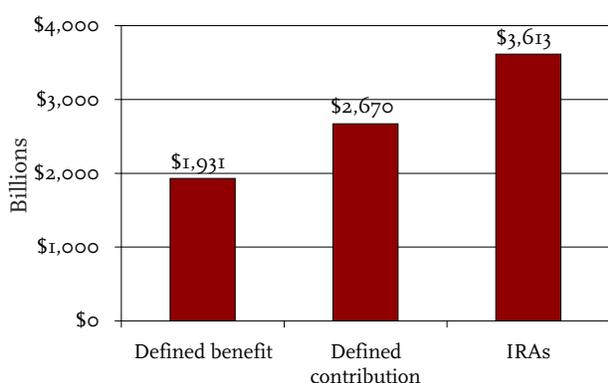
Workers who favor one type of IRA over the other do so because they expect their tax rates to change in retirement, they care about the timing of their withdrawals, or their income limits their ability to receive the full benefit of each type of IRA.

Converting Traditional to Roth IRAs

Before this year, workers could convert the balances in their conventional IRAs to Roth IRAs, provided their adjusted gross income was less than \$100,000. Beginning this year, the Tax Increase Prevention and Reconciliation Act of 2005 allows all workers with traditional IRAs to transfer all or part of their balances into Roth IRAs without restriction. People who have 401(k) plans with former employers can participate as well. The balances in 401(k) plans can be rolled over into traditional IRAs, without penalty or restriction, once people stop working for the sponsoring employer. Those who hold old 401(k) accounts can convert these balances directly into Roth IRAs, as provided in the Pension Protection Act of 2006.⁴ People who convert their balances must include the amount of their transfer in their taxable income. Those who make transfers in 2010 have the option of paying the tax entirely this year or including half the transfer in taxable income in 2011 and half in 2012. In the future, the tax must be paid entirely in the year of the transfer.

The potential for conversions is substantial. In 2008, the assets in IRA accounts totaled \$3.6 trillion (see Figure 1). These balances exceed, by significant margins, the assets held in defined benefit pension plans and in other defined contribution plans. Traditional IRAs account for more than 95 percent of total IRA assets. Most of the money in traditional IRAs is from rollovers from employer-sponsored plans, while the balances in Roth accounts originated solely from workers' direct contributions from their incomes.

FIGURE 1. PRIVATE RETIREMENT ASSETS, 2008



Source: U.S. Board of Governors of the Federal Reserve (2009).

Although all traditional IRAs can be converted to Roth IRAs, doing so would benefit mostly three types of people: 1) those who expect their tax rates to rise in retirement, 2) those who value the more flexible rules for withdrawals that Roth accounts offer, and 3) those who want to move non-IRA assets into IRAs.

Reducing Tax Rates on Retirement Income

Traditional IRAs allow workers to defer paying taxes on their contributions until they withdraw their funds in retirement. Those who expect their tax rate to fall after they retire would receive the most income, after taxes, in retirement by keeping their balances in a traditional IRA. But those who expect their tax rates to rise would tend to receive the most by converting their traditional IRA and their dormant 401(k) accounts to Roth IRAs.

Table 3 illustrates the results of a \$5,000 conversion for a worker whose tax rate is currently 28 percent and who expects to earn a 7-percent return, before taxes, on investments. The entries in the columns show the income after taxes provided by the original \$5,000. The first set of columns shows the results if the worker makes no conversion. By not converting, the worker pays the income tax on the \$5,000 when he withdraws the funds in retirement. The second set of columns shows the results if the worker converts the traditional IRA to a Roth account, using a portion of the funds withdrawn from the traditional IRA to pay the \$1,400 income tax liability that results from the conversion.⁵ As explained above, when the worker's tax rate remains constant, at 28 percent in the example, he receives the same amount of income after taxes whether he converts or not – \$7,082 in 10 years.

TABLE 3. AFTER-TAX VALUE OF A \$5,000 CONVERSION OF A TRADITIONAL IRA TO A ROTH IRA, ASSUMING A CURRENT 28% TAX RATE AND 7% INVESTMENT RETURN

Tax bracket in retirement	No conversion – traditional IRA		Conversion* net amount \$3,600 – Roth IRA	
	10 yrs.	20 yrs.	10 yrs.	20 yrs.
15%	\$8,360	\$16,446	\$7,082	\$13,931
25%	7,377	14,511	7,082	13,931
28%	7,082	13,931	7,082	13,931
33%	6,590	12,963	7,082	13,931
35%	6,393	12,576	7,082	13,931

Note: These illustrations assume the contributions to the traditional IRA are fully exempt from income taxes at the time of the contribution.

* The amount converted is reduced by the tax liability.

Source: Authors' illustration.

The income after taxes provided by the traditional IRA depends on the worker's income tax rate in retirement, while the income provided by the Roth IRA does not. If, for example, the worker's tax rate falls to 15 percent, \$5,000 in the traditional IRA provides \$8,360 in 10 years. If instead the tax rate rises to 35 percent, the traditional IRA provides only \$6,393 of income after taxes in 10 years. A Roth account provides the same \$7,082 of income whether the tax rate rises or falls.

Increasing Flexibility of Withdrawals

Because the rules for withdrawing funds from Roth IRAs are more flexible than those for traditional IRAs, some people may prefer to put at least a share of their retirement savings into a Roth account *even if they expect their tax rates to fall in retirement*. Roth accounts give retirees who have adequate financial resources more latitude for making withdrawals in the most favorable manner and for leaving a bequest to their spouses or other heirs.⁶

The earnings on assets in all IRA accounts accrue without current taxation. Consequently, workers who have substantial savings or substantial defined benefit pensions might prefer to draw down their IRA balances only as a last resort. Moreover, people with substantial IRA balances might not want to take the full withdrawal that is mandated by the minimum withdrawal requirements for traditional IRAs. In both of these cases, the conversion to a Roth IRA, which imposes no minimum withdrawal requirements, can be attractive.

As shown in Table 3, \$5,000 in a traditional IRA will provide \$7,377 of income after taxes in 10 years to a worker who expects his tax rate to fall from 28 percent to 25 percent in retirement. For a worker who is currently 60-years-old and has substantial savings, the mandatory distribution rules for traditional IRAs could require that he make this withdrawal in 10 years even though he would prefer to leave the money in his account. If the worker converts the \$5,000 to a Roth IRA, he can delay withdrawing these funds indefinitely. For example, if he plans to take the distribution in 20 years, the value of the withdrawal rises to \$13,931. This amount exceeds the sum that would be available to him in 20 years if he were forced to withdraw \$7,377 in 10 years and invested that amount in a taxable investment account for the remaining 10 years.^{7,8}

Boosting Tax-Sheltered Assets

When people convert traditional IRA balances to Roth IRAs and pay the income tax for the conversion from sources other than the traditional IRA, they can boost the total amount of tax-sheltered assets that they hold

in IRAs. If people pay the taxes from other taxable investment accounts, they are effectively transferring those assets into IRAs. If they, instead, pay the taxes from current income, they can exceed the annual limits on contributions to IRAs.

Suppose a worker is considering converting \$5,000 from a traditional IRA to a Roth account. Part of the \$5,000 in the traditional IRA represents the taxes the worker will pay in the future. At a 28-percent income tax rate, the tax-free balance in this account is only \$3,600. If, however, the worker converts the \$5,000 in the traditional IRA to a Roth IRA and pays the \$1,400 in taxes from assets in a taxable investment account, the Roth IRA will hold \$5,000 in tax-free balances. This gain of \$1,400 equals the reduction in the balance in his investment account. In this case, the conversion to a Roth account effectively allows the worker to transfer \$1,400 from his taxable investment account to the tax-free balances in his IRA accounts.

The entries in Table 4 on the next page show the income after taxes provided by the combined balances in the IRA and the investment account after

Conversions help those who expect higher tax rates in retirement and/or want more flexible distribution options.

the worker converts \$5,000. The first set of columns shows the results if the worker makes no conversion.

The entries equal those shown in Table 3 plus the balance in the investment account. The second set of columns shows the results if he makes the conversion and pays the tax from the funds in his traditional IRA. Under this approach, as in Table 3, conversions benefit workers whose tax rates rise in retirement and hurt those whose tax rates fall.

The third set of columns in Table 4 show the results if the worker pays the tax for the conversion from funds in the investment account. In this case, his income after taxes in retirement is higher when he makes the conversion, provided his tax rate exceeds 15 percent. For example, by converting \$5,000 at a tax rate of 28 percent, the worker pays taxes of \$1,400 from his investment account and transfers the entire \$5,000 to a Roth IRA. In 10 years, this Roth account would provide \$9,836 in income after taxes. If the worker had not made the conversion, the combined balances of the traditional IRA and the investment account would provide only \$9,371 when his tax rate remains unchanged at 28 percent in retirement. The higher the tax rate in retirement, the greater the gain from allowing earnings to accumulate free

TABLE 4. AFTER-TAX VALUE OF A \$5,000 CONVERSION OF A TRADITIONAL IRA TO A ROTH IRA, WITH A TAXABLE INVESTMENT ACCOUNT, ASSUMING A CURRENT 28% TAX RATE AND 7% INVESTMENT RETURN

Tax bracket in retirement	<i>No conversion</i>		<i>Conversion*</i>		<i>Conversion**</i>	
	\$5,000 traditional IRA, plus \$1,400 investment account		\$3,600 Roth IRA, plus \$1,400 investment account		\$5,000 Roth IRA, plus \$0 investment account	
	10 yrs.	20 yrs.	10 yrs.	20 yrs.	10 yrs.	20 yrs.
15%	\$10,856	\$20,894	\$9,577	\$18,379	\$9,836	\$19,348
25%	9,712	18,407	9,417	17,826	9,836	19,348
28%	9,371	17,674	9,371	17,674	9,836	19,348
33%	8,804	16,465	9,296	17,432	9,836	19,348
35%	8,578	15,985	9,266	17,340	9,836	19,348

Notes: These illustrations assume contributions to the traditional IRA are fully exempt from income taxes at the time of the contribution. All illustrations assume that the worker's tax rate on the returns in the investment account equals the tax rate in retirement.

* The amount converted is reduced by the tax liability.

** The investment account is used to pay the tax liability on the amount converted.

Source: Authors' illustration.

of taxes. Moreover, the amount of this gain increases with the length of time the balances remain in the Roth IRA. Comparing the results in the second and third sets of columns, a conversion yields the most income in retirement for those who pay the tax from an investment account rather than from the traditional IRA.

Conclusion

Beginning this year, people can convert all or a portion of their traditional IRA balances into Roth IRAs. This allowance also applies indirectly to balances in 401(k) plans that workers hold with former employers. These conversions will appeal to people who expect their tax rates to rise after they retire. Moreover, these conversions will appeal to those who are likely to find that the mandatory distribution rules for traditional IRAs force them to withdraw their balances too soon. Roth accounts give retirees who have adequate financial resources more latitude for making withdrawals in the most favorable manner. In addition, Roth IRAs allow retirees the opportunity to leave a more substantial bequest to their spouses or other heirs. This option should be particularly valuable to people who expect their IRA savings to provide retirement income for dependents. Conversions of traditional IRAs to Roth accounts also can be attractive for people who wish to relax the limits on their annual contributions to tax-exempt IRA accounts.

Endnotes

- 1 The treatment of IRA contributions and withdrawals is not necessarily the same under state tax law. All descriptions of income taxes in this *brief* pertain only to federal income tax regulations.
- 2 Withdrawals are not subject to the penalty in the event of disability or death, or when the funds are used to pay for higher education or a first-home purchase.
- 3 Internal Revenue Service (2009).
- 4 See, for example, Investment Company Institute (2009, 2010). These conversions are not subject to the limits that apply to annual contributions. Workers can make conversions in any amount, up to the entire balance of their 401(k) plans, after they stop working for the employers who sponsor their plans.
- 5 If the owner of a traditional IRA is younger than 59 ½, he must pay the 10-percent tax penalty in addition to normal income taxes on any funds withdrawn from the account that are used to pay income taxes on the conversion. For simplicity, the numbers in the tables assume the worker is at least 59 1/2; otherwise, the conversion costs another \$140 in taxes.
- 6 The ability to leave a more substantial bequest can be especially valuable to workers who wish to provide for dependents, who have significantly longer life expectancies.
- 7 The ability to wait to receive \$13,931 instead of receiving \$7,377 10 years earlier represents an annual rate of return after taxes of 6.56 percent, $(13,931/7,377)^{1/10}-1$, which is higher than the 5.25 percent after-tax return on investments outside of an IRA.
- 8 The value of delaying withdrawals from IRAs is much less important to people who expect their tax rates to fall substantially in retirement. For example, in Table 3, \$5,000 in a traditional IRA will provide \$8,360 of income after taxes in 10 years to people who expect their tax rate to fall to 15 percent. Even if a traditional IRA forces them to take this sum earlier than they would like, they can invest these funds in a taxable investment account for 10 years and receive more than the \$13,931 provided by the Roth account. Investing \$8,360 at a return of 5.95 percent after taxes $(.07*(1-.15))$ yields \$14,901.

References

- Board of Governors of the Federal Reserve System. 2009. *Flow of Funds Accounts of the United States*. December. Available at: <http://www.federalreserve.gov/releases/z1>.
- Internal Revenue Service. 2009. "Publication 590 (2009), Individual Retirement Arrangements (IRAs)." Available at: <http://www.irs.gov/publications/p590/index.html>.
- Investment Company Institute. 2009. "The Evolving Role of IRAs in U.S. Retirement Planning." *Research Perspective* 15(3): November.
- Investment Company Institute. 2010. "The Role of IRAs in U.S. Households' Saving for Retirement, 2009." *Research Fundamentals* 19(1): January.

CENTER FOR
RETIREMENT
RESEARCH
AT BOSTON COLLEGE

About the Center

The Center for Retirement Research at Boston College was established in 1998 through a grant from the Social Security Administration. The Center's mission is to produce first-class research and forge a strong link between the academic community and decision makers in the public and private sectors around an issue of critical importance to the nation's future.

To achieve this mission, the Center sponsors a wide variety of research projects, transmits new findings to a broad audience, trains new scholars, and broadens access to valuable data sources. Since its inception, the Center has established a reputation as an authoritative source of information on all major aspects of the retirement income debate.

Affiliated Institutions

The Brookings Institution
Massachusetts Institute of Technology
Syracuse University
Urban Institute

Contact Information

Center for Retirement Research
Boston College
Hovey House
140 Commonwealth Avenue
Chestnut Hill, MA 02467-3808
Phone: (617) 552-1762
Fax: (617) 552-0191
E-mail: crr@bc.edu
Website: <http://www.bc.edu/crr>

The Center for Retirement Research thanks AARP, Invesco AIM, Bank of America, MetLife, Nationwide Mutual Insurance Company, Prudential Financial, State Street, TIAA-CREF Institute, and T. Rowe Price for support of this project.

© 2010, by Trustees of Boston College, Center for Retirement Research. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that the authors are identified and full credit, including copyright notice, is given to Trustees of Boston College, Center for Retirement Research.

The research reported herein was supported by the Center's Partnership Program. The opinions and conclusions expressed are solely those of the authors and do not represent the views or policy of the partners or the Center for Retirement Research at Boston College.