# The IRA opportunity: To Roth or not to Roth?

Vanguard research | July 2011

**Executive summary.** The year 2010, which may well go down in IRA history as the year of the Roth, saw three notable legislative changes in the Roth landscape:

- Income limitations on eligibility for Roth IRA conversions were lifted indefinitely. This opened the door for anyone, regardless of income level, to convert his or her traditional IRA to a Roth IRA.
- For individuals who converted in 2010, any taxable income resulting from the conversion could either be fully included in their 2010 tax return or deferred equally over tax years 2011 and 2012.
- As part of the Small Business Jobs Act that passed on September 27, 2010, retirement plans that offer Roth contributions may be amended to allow in-plan conversions. The provision is optional and is restricted to eligible participants.[1]

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1 For a more detailed discussion of in-plan Roth conversions, see Bruno, Tyson, and Kilroy (2010).

The obvious focus on Roth conversions as a result of the legislative changes has also continued to bring Roth IRAs to the forefront of retirement-planning topics. And although tax experts generally do not recommend accelerating the recognition of income taxes, a Roth conversion may provide significant benefits for some investors. This paper discusses major factors that investors should consider when deciding between a traditional and a Roth IRA, from both the contributory and conversion standpoints.

## The basics: Traditional IRAs versus Roth IRAs

With a traditional IRA, contributions may be tax-deductible, depending on both the individual's income and whether he or she participates in an employer-sponsored retirement plan, such as a 401(k). Earnings grow tax-deferred until withdrawals are made in retirement, at which point they will be subject to income taxes. In addition, account owners are required to take annual minimum distributions beginning at age 70½.

On the other hand, with a Roth IRA, contributions are not tax-deductible and earnings grow tax free (assuming withdrawals meet certain requirements).[2] In addition, Roth IRAs are not subject to lifetime required minimum distributions, so these accounts can benefit from additional tax-free growth.

From purely a mathematical standpoint, the decision of which type of IRA is more beneficial for a particular investor depends primarily on the investor's expectations of his or her future tax rate relative to his or her current tax rate. The tax-rate assumption is important because the after-tax dollars are equivalent whether the investor puts pre-tax dollars in a tax-deferred account or after-tax dollars in a tax-free account (assuming identical investment amounts and rates of return). This assumes that the after-tax contributions are identical for the traditional and the Roth IRA. In reality, because the maximum contribution amounts are the same for each type of IRA, an investor can often save more on an after-tax basis by investing up to the maximum amount in a Roth IRA.

Appendix **Figure A-1**, on page 10, compares key characteristics of traditional and Roth IRAs.

## Contribution decision and tax-rate expectations

An investor's tax-rate expectations are often noted as a key differentiator when deciding whether to contribute to a traditional versus a Roth IRA. It is important to note that the marginal income tax rate is more meaningful in these situations than an average tax rate. The U.S. tax structure is progressive, meaning that rates increase as income increases, but only in the incremental ranges (or brackets). See appendix **Figure A-2**, on page 11, for the 2011 federal income tax table.

*Note on risk: All investments are subject to risk.*

2 As we discuss later, earnings withdrawn before age 59½ and before the end of the five-year holding period may be subject to income tax and a 10% federal penalty tax.

**Rule of thumb for IRA contributions—Tax-rate expectation today versus future tax rate when making withdrawals:**

| | |
|---|---|
| Higher today: | Consider pre-tax traditional IRA. |
| Lower today: | Consider Roth IRA. |
| Uncertain: | Consider diversifying between account types. |

## Decoding the Roth conversion decision

The conversion decision is more complicated than the contribution decision. It is important to first consider whether the traditional IRA was funded with pre-tax contributions (that were tax-deductible) or after-tax contributions (in the case of a nondeductible traditional IRA).

### Traditional IRAs funded with pre-tax contributions

If a traditional IRA is funded with pre-tax contributions, the entire balance of the traditional IRA being converted will be taxed as ordinary income, so current versus future tax-rate expectations can be used as a guide, as follows.

*Tax-rate increase expected:* Investors who expect higher future taxes should consider converting, with the intent to lock in lower taxes today and minimize taxes over the life of the portfolio. It is important to factor in how the additional taxable conversion income will affect the actual marginal income tax bracket, because the conversion may actually push the investor into a higher bracket. If this is a possibility, then the investor can consider making a partial conversion to limit the conversion to a level that would keep him or her in the same marginal income bracket for the tax year.

*Tax-rate decrease expected:* An investor with this view should consider maintaining the traditional IRA. A conversion would accelerate taxes at the current, presumably higher rate, resulting in lower after-tax balances in the future.

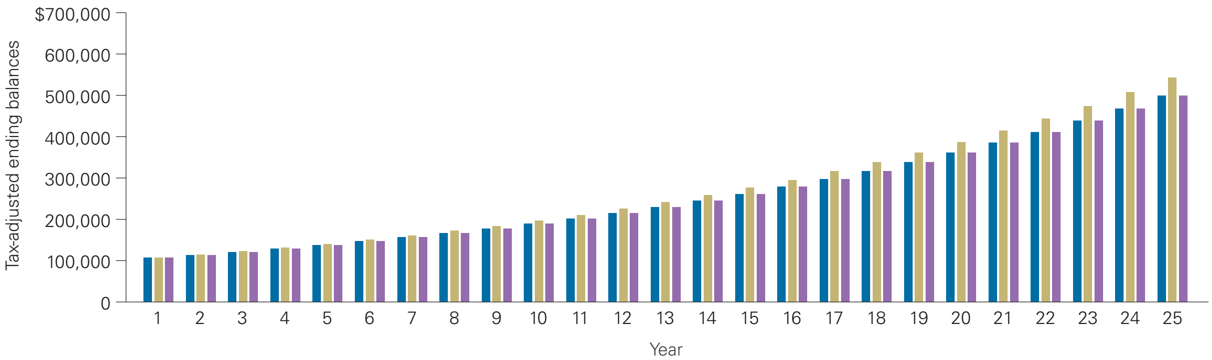
*Uncertain tax-rate expectations:* Investors with this view should consider a partial or full Roth conversion. There are tax-diversification benefits (which we discuss later) from holding different accounts, which reduce the risk to the investor of future tax rates going in any one particular direction. In addition, as we illustrate in the following example, even in the unlikely scenario of static income tax rates, the tax-adjusted balance of a Roth conversion will be greater if nonretirement assets are used to pay the conversion tax. And even if the tax is paid with IRA assets (assuming no pre-59½ withdrawal penalty), there is no expected difference between the future after-tax balances.

The hypothetical examples in **Figure 1**, on page 4, help illustrate the tax considerations. We look at three hypothetical scenarios: One with no tax-rate change, one with a tax-rate increase, and one with a tax-rate decrease. In each case, we assume that the investor is in the 28% marginal tax bracket, has $100,000 in a traditional IRA funded with pre-tax contributions, and has $28,000 in a taxable account (the amount sufficient to pay the tax due on the Roth conversion). Furthermore, for each scenario, we consider three options:

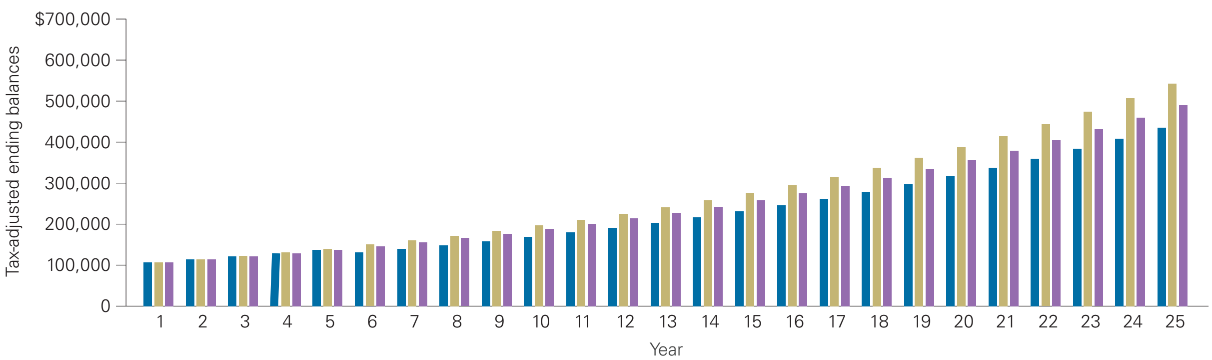
- Option 1: No conversion; the investor maintains the traditional IRA and the taxable account.
- Option 2: The investor converts to a Roth and uses the taxable account to pay the conversion tax; therefore only the Roth IRA remains.
- Option 3: The investor converts to a Roth and uses the IRA assets to pay the conversion tax. Thus, the initial Roth balance is reduced by the tax amount, and the taxable account remains intact.

**Figure 1.** After-tax ending balances based on different tax-rate expectations, assuming IRA was funded with pre-tax contributions

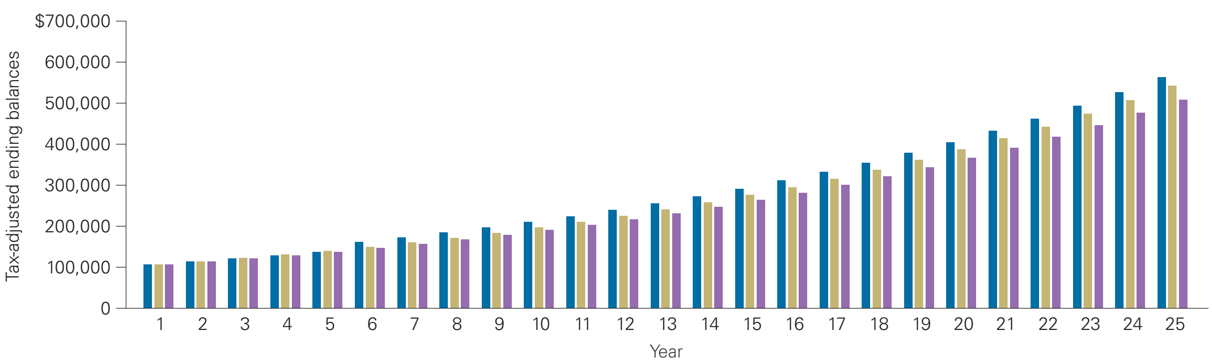
a. Your tax rate does not change




b. Your tax rate increases




c. Your tax rate decreases




- **Option 1:** Maintain the traditional IRA and taxable account.
- **Option 2:** Convert to a Roth; use taxable account to pay conversion tax.
- **Option 3:** Convert to a Roth; use IRA assets to pay conversion tax.

Note: This hypothetical illustration does not represent the return on any particular investment. Balances shown in the charts combine the IRA and taxable assets.

Assumptions:

- Investment return: 7% annually for both taxable and IRA accounts.
- Taxes: Current-year income tax rate is 28%, future income tax-rate increase is 38%, and future income tax-rate decrease is 18%. The current tax rate remains constant through year five, and switches to the future tax rate in year six and thereafter. Capital gains tax rate is 15%.
- For taxable account, 2.6% of the return is assumed to be from capital gains and 4.4% from income (this breakdown represents the historical relationship between capital and income for a balanced stock/bond portfolio). Income and capital gains distributions are taxed annually at the stated tax rates, and capital gains are taxed upon liquidation.
- IRA starting balance: $100,000, funded with pre-tax contributions. No penalties assessed on IRA withdrawals.
- Taxable account starting balance: $28,000.

Source: Vanguard.

As you can see in **Figure 1a**, which assumes constant tax rates, Option 2—converting the traditional IRA to a Roth, with conversion taxes paid from the taxable account—would be preferred because this option would result in the highest ending balances after taxes. Under Option 2, the entire $100,000 receives tax-free growth; under Option 1, the entire $100,000 balance receives tax-deferred growth, while under Option 3 only $72,000 receives tax-advantaged treatment. In either case, the $28,000 in the taxable account is subject to income and/or capital gains taxes annually. (In reality, the extent of the difference would depend on the tax-efficiency of the non-IRA investment as well as any capital gains tax incurred when those assets were liquidated.)

In the case of a tax-rate increase (**Figure 1b**), the difference in ending asset balances is greater because the Option 2 investor is locking in the current lower tax rate while preserving the full retirement balance for future growth. With Options 2 and 3, respectively, either the investor's entire IRA balance ends up subject to the higher rate, or else the Roth account is opened with a lower balance.

Conversely, if future tax rates are lower (**Figure 1c**), the Option 1 investor comes out ahead by leaving the traditional IRA untouched. This is because a Roth conversion would lock in taxes on the retirement assets at the higher current rate. It is important to reinforce here that we are using hypothetical tax-rate changes to illustrate the point that outcomes are highly dependent on tax assumptions. For example, the greater the difference between the current and future tax rates, the more likely that it would be advantageous to maintain the traditional IRA. In situations where the tax decrease is small, a conversion could become advantageous.

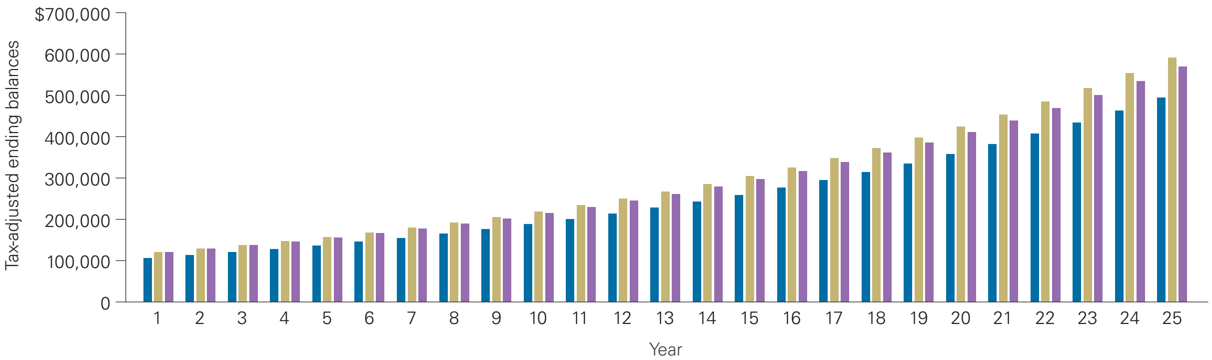
### Traditional IRAs funded with after-tax contributions (nondeductible traditional IRAs)

The preceding scenarios illustrated a conversion decision with a traditional IRA that was funded with pre-tax contributions—thus, we assumed the entire IRA balance would be subject to income taxes upon conversion. However, many investors have traditional IRAs that were funded with after-tax contributions, so these dollars would not be taxed again when converted. As we illustrate next, this can change the Roth conversion decision, since the taxable income resulting from conversion will be lower.

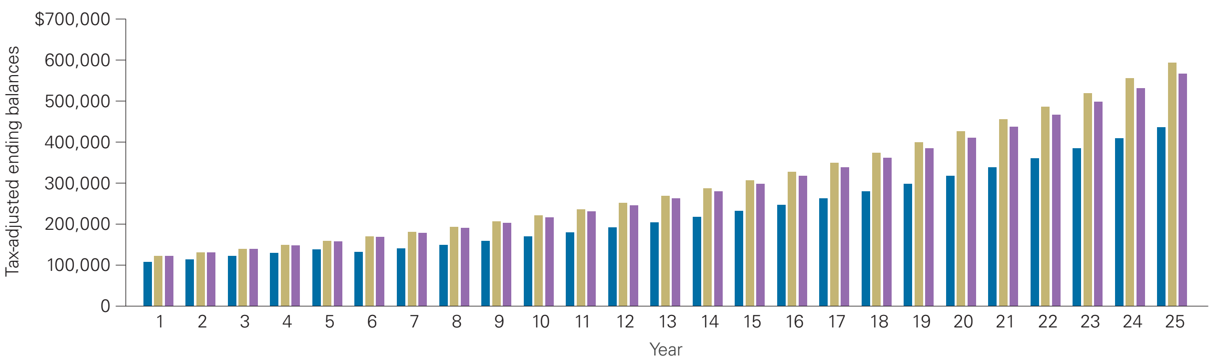
The scenarios in **Figure 2**, on page 6, use the same assumptions as before, except that we assume the $100,000 IRA balance was funded with $50,000 in after-tax contributions. Thus, the $50,000 would not be taxed at conversion, so the income tax due on the conversion would be $14,000 (that is, the $50,000 pre-tax IRA balance taxed at 28%). The outcomes of Figure 2's scenarios differ overall in two ways from those in Figure 1. First with all three of Figure 2's options, a Roth conversion would be beneficial since the after-tax balances were higher (in essence, every incremental dollar in the traditional IRA would be taxable if there is no conversion). Furthermore, even in the scenarios in which IRA assets were used to pay the conversion, a Roth conversion would result in a higher after-tax balance. This is because the conversion tax is lower and the Roth would benefit from tax-free growth (versus tax-deferred growth). Again, the benefit of a Roth conversion may be maximized by using nonretirement assets to pay any income taxes resulting from the conversion, since the entire balance in the traditional IRA transfers to the Roth IRA.

**Figure 2.** After-tax ending balances based on different tax-rate expectations, assuming IRA was funded with a combination of pre-tax and after-tax contributions

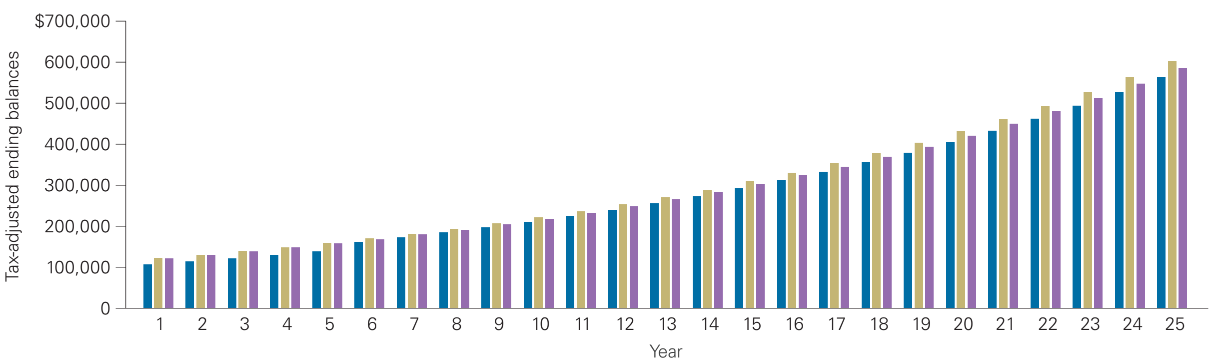
a. Your tax rate does not change




b. Your tax rate increases




c. Your tax rate decreases




- **Option 1:** Maintain the traditional IRA and taxable account.
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Note: This hypothetical illustration does not represent the return on any particular investment. Balances shown in the charts combine the IRA and taxable assets.

Assumptions:

- Investment return: 7% annually for both taxable and IRA accounts.
- Taxes: Current-year income tax rate is 28%, future income tax rate increase is 38%, and future income tax-rate decrease is 18%. The current tax rate remains constant through year five, and switches to the future tax rate in year six and thereafter. Capital gains tax rate is 15%.
- For taxable account, 2.6% of the return is assumed to be from capital gains and 4.4% from income (this breakdown represents the historical relationship between capital and income for a balanced stock/bond portfolio). Income and capital gains distributions are taxed annually at the stated tax rates, and capital gains are taxed upon liquidation.
- IRA starting balance: $100,000, funded with $50,000 nondeductible contributions. Taxable IRA balance with conversion is $50,000. No penalties assessed on IRA withdrawals.
- Taxable account starting balance: $28,000.

Source: Vanguard.

## Other considerations for Roth conversions

In addition to tax-rate expectations, several other factors should be considered when deciding whether to convert to a Roth IRA. Some of these have already been mentioned; however, they are described here in more detail, along with additional factors to review.

### Tax-diversification benefits

Because the future of tax rates is unknown, investors stand to benefit by investing in both pre-tax and Roth accounts as a hedge, thus employing a tax-diversification strategy. Holding different account types will likely provide the most flexibility for tax-efficient withdrawals in the future.

### Availability of nonretirement assets to pay the conversion tax

In most cases, the benefit of a Roth conversion may be maximized by using nonretirement assets to pay any income taxes that result from conversion. Also, if the account owner is under age 59½, any proceeds withheld for taxes would likely be subject to a 10% early withdrawal penalty in addition to income taxes.

Assuming that sufficient nonretirement assets are used, cash reserves are typically a good source of funds to pay the conversion tax. Liquidating other types of holdings—stock or bond funds, for example—could result in transaction costs or capital gains taxes that may offset some of the benefit of the Roth conversion. With additional tax planning, there might also be a benefit to incurring capital losses to help offset the taxable conversion income.

### Impact of conversion on investor's marginal income tax rate

As stated earlier, another important consideration is how a Roth conversion would affect the investor's current tax situation, specifically his or her marginal income tax rate. Because the amount of the pre-tax assets being converted will be added to the investor's adjusted gross income, the conversion could push the investor into a higher marginal tax bracket. Investors in this situation may want to consider converting only part of the traditional IRA balance, estimating how much additional income could be recognized before moving into a higher tax bracket. Recall that only the portion of the income that falls into the higher marginal income tax bracket will be taxed at the higher rate, not all of the investor's income. And for those investors in the highest marginal income tax bracket, this point is not relevant, as all additional income is taxed at the highest rate.

For example, assume that a Roth conversion resulted in an additional $50,000 in taxable income and that the investor is at the top end of the 28% income tax bracket; therefore, the additional $25,000 in income would be taxed at 28% and the next $25,000 taxed at 33%. In this hypothetical example, the total tax on the conversion would be $15,250. Assuming the investor is in the 28% marginal income tax bracket in the following year, he or she would have saved $1,250 in taxes if the IRA were converted equally across two years, rather than implementing a full conversion in the first year.

### Pro-rata rule for determining taxable basis

Individuals with traditional IRAs that were funded with both pre-tax and after-tax contributions cannot convert only the after-tax assets to a Roth (with the desire of minimizing conversion income taxes). This is because of the IRS "pro-rata rule," which requires that all traditional IRAs be aggregated to determine the taxable Roth conversion basis. The aggregation rule applies to IRAs only (assets in employer-sponsored retirement plans are not included), and is particularly important to those who are contemplating a partial conversion.

### Holding-period requirements

Distributions from Roth IRAs are treated as being made in the following order:

- First, from regular *contributions* (no taxes or holding-period requirements).
- Second, from *rollover or conversions* (on a first-in-first-out basis). A 10% penalty tax may apply if the account owner is under age 59½ and the withdrawal is made within five years of the conversion.

- Last, investment *earnings*. Income tax and a 10% penalty tax may apply if the account owner is under age 59½ and the withdrawal is made within five years of conversion. If the account owner is over the age of 59½ and takes a withdrawal within five years, earnings may be subject to income taxes.

In determining early withdrawal penalties, a five-year holding-period requirement differs for contributory Roth IRAs versus converted Roth IRAs. For contributory IRAs, the holding period starts in the first taxable year the IRA is opened. However, a separate five-year holding period applies to each Roth conversion, starting on the first day of the tax year for each conversion.

### Required minimum distributions (RMDs)

Traditional IRAs and employer-sponsored plan accounts are subject to lifetime RMDs. In general, these rules require that annual distributions must begin when the account owner reaches age 70½. Roth IRAs, however, are not subject to RMD rules during the account owner's lifetime. Roth IRA assets can grow tax-free until the account owner's death, but beneficiaries are subject to RMDs (which are generally tax-free).

The case for no lifetime RMDs can be very appealing for some individuals, particularly for those who do not need the distributions to meet spending needs in retirement or if a higher tax bracket is expected once distributions are mandated at age 70½. A few things to consider:

- A partial conversion will reduce future RMDs.
- IRA owners over the age of 70½ must satisfy the RMD before or at the time of conversion. The IRS does not allow RMDs to be converted, and doing so may subject the IRA owner to additional taxes and penalties.
- For those who are receiving Social Security benefits, Roth distributions do not factor into the calculation of whether benefits are taxable. (The income from the conversion would affect the calculation for the year when the income is recognized.)

## More strategic factors to keep in mind

Beyond the considerations already discussed, other factors can influence the Roth conversion decision. Because the factors are specific to each individual's situation, we discuss general guidelines.

### 'Backdoor' Roth IRA for those who do not qualify to make contributions

The elimination of the income limit for Roth conversions provides an opportunity for individuals who cannot contribute outright to a Roth IRA because their income exceeds the eligibility limits. They can contribute to a nondeductible traditional IRA each year and then immediately convert to a Roth IRA (little or no tax impact should result from the conversion). (Please note that if there are other traditional IRAs, all IRAs must be aggregated for the purpose of determining taxable basis, even if not all of the IRAs are actually converted.) Given the opportunity to fund a backdoor Roth IRA, a nondeductible traditional IRA generally does not add financial value since there is no current-year tax deduction and earnings are ultimately subject to income taxes when withdrawn. If a backdoor Roth IRA strategy cannot be implemented, then a better alternative over a nondeductible traditional IRA would be to invest tax-efficiently in a nonretirement account.

### Estate planning

For investors who consider wealth transfer a priority and have assets that would be subject to estate taxes, a Roth conversion may provide additional benefits.[3] The value of either type of IRA would be included in the estate; however, with a conversion, the estate (and associated estate tax liability) would be reduced by the amount of the income taxes paid on the conversion. In effect, the investor would be prepaying taxes at income tax rates, which are currently much lower than estate tax rates. Further, the beneficiaries would not have to pay income taxes on the Roth distributions. On the other hand, for those who are charitably inclined, converting a traditional IRA to a Roth IRA may not maximize the value of the transfer, because assets that pass to a charity are not subject to income taxes. Clearly, the estate-planning considerations can be complex, so investors concerned about wealth transfer should consult with a tax professional before converting.

### Recharacterizations and reconversions

Investors should be aware that they can elect to reverse a Roth conversion by moving the converted assets back to the original account type; this is known as a recharacterization. This recharacterized amount will be adjusted for any gain or loss incurred while invested in the Roth IRA, but will otherwise be treated as never having been converted. The deadline to recharacterize a Roth IRA conversion is the tax-filing deadline for the year of conversion, plus any extension.

There are several situations in which a recharacterization might become a viable option for some. For example, an investor might find that his or her tax situation has changed since converting, or the investor might not have sufficient nonretirement assets to pay the tax on the conversion. In other instances, a market downturn may have reduced the converted account balance, so the investor may want to recharacterize to avoid paying taxes on the original, higher balance.

Once an investor recharacterizes a Roth conversion, he or she may subsequently "reconvert" the traditional IRA back to a Roth. However, there are time constraints, so the process must meet both of the following conditions:

- The new conversion cannot be in the same year as the original conversion.
- The new conversion cannot be made within 30 days of the date of the completed recharacterization.

Tax reporting for recharacterizations can be complicated, so an investor should review this strategy with a qualified tax advisor to ensure proper reporting.

## Conclusion

One of the simplest ways to maximize the tax-efficiency of an investment portfolio is to make full use of tax-advantaged retirement accounts. This may be achieved through investing in IRA accounts in addition to employer-sponsored retirement plans, through a traditional IRA or a Roth IRA, or a combination of both.

Although tax experts generally do not recommend accelerating the recognition of income taxes, a Roth conversion may provide significant benefits for some investors.

## References

Bruno, Maria A., and Alisa M. Shin, 2010. *Estate Planning Opportunities with Roth IRA Conversions*. Valley Forge, Pa.: The Vanguard Group.

Bruno, Maria A., Wendy A. Tyson, and John Kilroy, 2010. *In-Plan Roth Conversions: An Overview*. Valley Forge, Pa.: The Vanguard Group.

3 For a more detailed discussion of estate-planning considerations with Roth conversions, see Bruno and Shin (2010).

## Appendix

**Figure A-1.** Characteristics of traditional and Roth IRAs

| | Traditional IRA | Roth IRA |
|---|---|---|
| Tax advantage | Tax-deferred earnings. | Tax-free earnings. |
| Eligibility* | • You must have earned income equal to or greater than your contribution.<br>• You must be under age 70½.<br>• There is no maximum income. | • You must have earned income equal to or greater than your contribution.<br>• Your modified adjusted gross income must fall within the limits prescribed by the IRS. |
| Maximum contribution allowed by law | • $5,000 for tax-year 2011 ($6,000 if you are aged 50 or older). | • $5,000 for tax-year 2011 ($6,000 if you are 50 or older).<br>• Maximum Roth contribution depends on your income. |
| Tax deductibility | • If you are not covered by an employer-sponsored retirement plan, contributions are federally fully deductible regardless of income.<br>• If you are covered by an employer-sponsored retirement plan, your federally deductible amount depends on your income. | • Contributions are federally nondeductible. |
| Taxes on withdrawals | • Ordinary income tax on earnings and deductible contributions.<br>• No federal tax on nondeductible contributions.<br>• State tax may apply. | • Distributions from contributions are federally tax-free.<br>• Distributions from earnings are federally tax-free if you are over age 59½ and have owned your Roth IRA for at least five years. If you are under 59½, distributions are tax-free if you have owned the Roth IRA for at least five years and the distribution is due to your death or disability or for a first-time home purchase (with a $10,000 lifetime maximum for the latter).<br>• State tax may apply. |
| Penalty for early withdrawal** | • 10% federal penalty tax on withdrawals before age 59½ unless an exception applies. | • Distributions from contributions are penalty-free.<br>• 10% federal penalty tax on withdrawals of earnings before age 59½ unless an exception applies. |
| Required minimum distributions | • After age 70½. | • None. |
| Contribution deadline | • Generally, April 15 of the following year for any given tax year. | • Generally, April 15 of the following year for any given tax year. |

Note: For more detailed information on traditional and Roth IRAs, see www.vanguard.com/ira.

*If you are married and filing a joint income tax return, your nonworking spouse may also contribute to an IRA. The total contribution for both spouses cannot exceed the income of the working spouse for the contribution year.

**Distributions received before you reach age 59½ may not be subject to the 10% federal penalty tax if the distribution is for a first-time home purchase (lifetime maximum of $10,000), postsecondary education expenses, substantially equal periodic payments taken under IRS guidelines, certain medical expenses exceeding 7.5% of your adjusted gross income, an IRS levy on the IRA, health insurance premiums (after you have received at least 12 consecutive weeks of unemployment compensation), or your disability or death.

Source: Vanguard.

**Figure A-2.** 2011 federal income tax rates

| 2011 taxable income | Marginal income tax rates |
|---|---|
| Single: Over \$379,150<br>Married filing jointly: Over \$379,150 | 35% |
| Single: \$174,401–\$379,150<br>Married filing jointly: \$212,301–\$379,150 | 33% |
| Single: \$83,601–\$174,400<br>Married filing jointly: \$139,351–\$212,300 | 28% |
| Single: \$34,501–\$83,600<br>Married filing jointly: \$69,001–\$139,350 | 25% |
| Single: \$8,501–\$34,500<br>Married filing jointly: \$17,001–\$69,000 | 15% |
| Single: \$0–\$8,500<br>Married filing jointly: \$0–\$17,000 | 10% |

| Capital gains tax rates | |
|---|---|
| Long-term capital gains<br>(10% and 15% tax brackets) | 0% |
| Long-term capital gains<br>(All other brackets) | 15% |
| Short-term capital gains | Taxed as ordinary income |

| Dividend tax rates | |
|---|---|
| 10% and 15% tax brackets | 0% |
| All other brackets | 15% |

Note: Table reflects current IRS tax code.

Sources: Vanguard, based on IRS tables.

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