Ruminations on Roth vs. Traditional IRAs

Many tax comparisons are incorrect because they don't start at the beginning and go all the way to the end. To perform a proper analysis, it is important to start with "Pat earns a dollar" and go all the way to "Pat spends the proceeds." If the comparison starts with "Pat puts $X in the accounts," or stops with "the account values are $X," the conclusions are probably erroneous.

We will start with a mathematical comparison of a Roth IRA (RIRA) vs. a traditional (deductible) IRA (TIRA). The same logic would also apply to Roth vs. traditional versions of 401(k) and 403(b) plans, but for simplicity I will just refer to RIRAs and TIRAs. In all of these scenarios, we will assume a 25% marginal income tax bracket that is the same throughout Pat's life.

Scenario 1:

- Pat earns $1,000.
- $250 in income taxes is paid on it.
- The remaining $750 is invested into a RIRA.
- The investment grows until it doubles to $1,500.
- Pat takes it out and spends the $1,500.

Scenario 2:

- Pat earns $1,000.
- Pat invests it in a TIRA (no taxes because it is tax deductible).
- It also doubles and thus becomes $2,000.
- Pat takes it out and pays 25% ($500) in taxes.
- Pat spends the remaining $1,500.

As you can see, there is no difference between the two vehicles under those assumptions. Here are the confounding factors:

1. If the marginal tax bracket is lower in retirement, it will favor the TIRA option; if it is higher, it will favor the RIRA option.

2. The analysis above assumed that Pat did not max out the IRA. If Pat contributes the maximum, it will favor the RIRA. Because the RIRA takes after-tax funds, and the limits are the same, Pat can essentially get more earnings into a RIRA. An example may clarify this:

   Using the same assumptions as above, assume Pat will save pre-tax wages of $8,000 while the maximum contribution level is $6,000 (to keep the math simple).

   Scenario 1:

   - Pat earns $8,000.
   - Pat pays taxes on it ($2,000 in the 25% bracket).
   - Pat invests the remaining $6,000 in a RIRA.
   - It doubles to $12,000.
   - Pat withdraws the funds and gets to spend $12,000.

Scenario 2 – TIRA Portion:

- Pat earns $8,000 and invests $6,000 in a TIRA, (no taxes on that portion).
- The $6,000 in the TIRA doubles to $12,000.
- Pat withdraws the funds paying $3,000 in taxes.
- Pat gets to spend $9,000.

Scenario 2 – Remaining Portion:

- Pat pays $500 in taxes on the other $2,000 (of the original $8,000).
- Pat invests the remaining $1,500 in a taxable account.
- It doubles but has some drag due to taxes (see below).
- At withdrawal, the after-tax amount available to spend is less than $3,000.

The $1,500 in the taxable account will do less than double because of taxes on dividends, interest, and turnover; but even if we assume it did double, it would be $3,000 with a basis of $1,500. At a 15% capital gain rate, the taxes would be $225. So, even with a perfectly tax-efficient investment, Pat would have only $2,775.

Adding the $2,775 to the $9,000 proceeds from the TIRA is $11,775 which is less than the $12,000 from the RIRA. Really, the difference would be somewhat greater. (Note: If very efficient investments like an index fund or ETF that has little turnover and small distributions are used *and* it is held until death, since it receives a step-up in basis to your heirs, and the overall effect is similar to a RIRA. The higher the turnover and distributions, the more inefficient it becomes.)

3. Some people with access to a qualified plan may still be able to do a RIRA even though their earnings are too high to deduct contributions to a TIRA.

4. Behavriorally, investors may invest more with the RIRA than the TIRA. Many (most?) people would invest the $6,000 maximum above in *either* the TIRA or the RIRA but many would not proceed to save the remaining $1,500 of tax savings if they did the TIRA. Thus, people frequently save more when using the RIRA option

5. A major assumption is the tax rate in the future. This depends not only on the taxpayer's financial situation but also on tax policy at that time. There has been a long-term trend toward lower marginal rates on a broader tax base. While anything can happen in the short run, due to modern understanding of the Laffer Curve, rates will probably not rise to the levels many fear they will. In addition, the deduction for a TIRA happens now, while the RIRA is merely a future promise. I am skeptical of government promises, and while it may seem inconceivable that RIRA proceeds will incur taxes, at one point it was also inconceivable that Social Security benefits would someday be taxed.

6. If the funds are likely to be left to heirs, their tax bracket may be the relevant one for the comparison. In addition, keep in mind the SECURE act now requires inherited retirement plans to be distributed over a ten-year period. A large TIRA balance left to an heir may increase their marginal tax bracket sufficiently during that short distribution period that a RIRA is more advantageous from an inter-generational perspective even if the original IRA owner is likely to be in a lower tax bracket in retirement.

An example may help. Suppose a taxpayer and all the heirs are in the X% bracket, but the heirs are right at the top of the bracket while the taxpayer still has some room before hitting the next level. The inheritance of a TIRA, with forced distributions over 10 years, will cause tax at greater than X% while RIRA contributions and conversions would only be taxed at X%.

7. Despite the preceding points, given future uncertainty, a TIRA should probably be the default choice. If Pat (or Pat's heirs) achieve more financial success and are thus in a higher tax bracket, using a RIRA will have been preferable. In less favorable scenarios, the TIRA would be superior because the tax bracket upon withdrawal is modest. Optimizing the good scenarios is not as important as mitigating the less favorable futures, thus favoring the TIRA.

8. If Pat desires to leave funds to charity upon death, a TIRA will give a tax deduction now for that future contribution. In other words, a tax deduction is received for putting funds into the TIRA. A charity may be named as beneficiary (or contingent beneficiary) thus essentially receiving a tax deduction for that future bequest. Not so with the RIRA. Conversely, since charitable deductions that are limited by adjusted gross income (AGI) may only be carried forward for five years or until death (whichever occurs first), doing a conversion to create taxable income and thus avoid losing the deduction may be prudent.

9. If Pat has a taxable estate, a RIRA is more advantageous since the income taxes paid upfront will no longer be in the estate, though there is an offsetting deduction to heirs upon recognition of the IRD so this issue is smaller than many assume. This factor is more important to the extent that heirs will stretch out their distribution and/or have state or local estate taxes since there is no offsetting deduction in those cases.

Thus, when both a TIRA and RIRA are available, RIRAs are superior when:

- Tax rates will increase in the future (either because of the taxpayer's personal situation or because tax rates in general change).
- The investor is trying to save more than the limits (or has other taxable investments to pay the taxes).
- There is a taxable estate.
- RMDs after age 72 are unwanted.
- There is belief that the tax-free treatment of RIRAs will continue in the future.
- The funds will not be left to charity.
- Heirs are in a higher income tax bracket (or will be with the additional distributions).

Thus, when both a TIRA and RIRA are available, TIRAs are superior when:

- Tax rates will decrease in the future (either because of the taxpayer's personal situation or tax rates in general change).
- The investor is not trying to save more than the limits (and doesn't have other taxable investments available to pay the taxes).
- There are no estate tax issues.
- The funds will need to be withdrawn to live on in retirement anyway.
- There is doubt that Congress will leave the tax treatment of RIRAs unchanged.
- Funds will be left to charity.
- Heirs are in a lower income tax bracket.

Roth conversions may be analyzed in exactly the same manner as above, and will frequently be advisable to the extent the taxes on conversion can be paid out of funds that are not currently tax advantaged, and the conversion will not place the individual in a higher income tax bracket. It may be advisable to perform "opportunistic conversions" by converting the maximum amount each year that will not cause migration into a higher marginal income tax bracket.

Finally, a *non*-deductible TIRA is inferior to both the deductible TIRA and the RIRA but there are two exceptions: 1) It should be compared to a taxable account where, given a very long time-horizon or very tax-inefficient investments, the TIRA has advantages, and 2) if only a non-deductible TIRA is available and it can be converted to a RIRA both soon and efficiently, it may be better than a taxable account. However, because of the lack of flexibility (early withdrawal penalties), more difficulty harvesting losses, ordinary income rather than capital gains tax treatment, and loss of the step-up in basis on death, it usually (but not always) makes sense to choose a taxable account over a non-deductible TIRA.

Notes:

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