TRADITIONAL IRA vs. ROTH IRA

Paul Hahn, Professor Emeritus

Theology Department

University of St Thomas

Houston TX 77006

22 Oct. 2022

“IRA” stands for “individual retirement account.” By the 1970s companies were eliminating pensions. To help companies shift the cost of retirement to individuals, and to give individuals greater control over funding their retirements, Congress created the IRA in 1974 (as part of ERISA, the Employee Retirement Income Security Act).

With an IRA, you open an account with a financial firm (usually a mutual-fund company, but possibly a bank, brokerage house, insurance company, etc.). Into that account, you put money you want to save for retirement.

When IRAs went into effect in 1975, you could contribute $1,500 a year. But the cap on contributions is indexed to inflation, so as of 2023 you can put in $6,500 a year. (To encourage folks nearing retirement to hurry up and save, the law allows those 50 and older to make an additional “catch-up” contribution of $1,000, for a total of $7,500 a year.)

There are two common types of IRA, the traditional and the Roth.

traditional IRA

A traditional IRA has two basic aspects: tax deferral, and required minimum distributions.

*tax deferral*

The beauty of a traditional IRA is that your contributions are tax deferred.

In a non-tax-deferred account, the growth of your contributions is undercut. First, you have to pay taxes every year on the money you contribute (the principal), possibly leaving you less money to contribute. Second, you have to pay taxes every year on the money your contributions make (the earnings).

By contrast, a traditional IRA is tax deferred. You don’t pay taxes right away on the money you contribute, and your money grows tax free until you withdraw it in retirement.

*required minimum distributions*

In retirement, you will have to start taking out minimum amounts each year. These are called *required minimum distributions*, or “RMDs.” The owner of a traditional IRA must start withdrawing retirement money when he or she is around 70½. (You can, of course, take money out earlier. But if you take money out before 59½, the IRS will charge a penalty of 10% of what you took out. The IRS won’t charge you if the expense is deemed worthwhile: a first-time home purchase [up to $10,000], higher-education expenses, health insurance, etc. But try not to take the money out early. This is supposed to be *retirement* money, remember?)

You can withdraw RMD money monthly, quarterly, or annually, but the entire amount has to be withdrawn by December 31. There is one exception: for your *first* RMD, the IRS lets you wait until April 1 of the year after you’re 70½. (Technical details: If you turn 70 on June 30, 2020, then you turn 70½ on December 30, 2020; so the year after you’re 70½ is 2021, and you must have all of your first RMD withdrawn by April 1, 2021. But if you turn 70 on July 1, 2020, then you turn 70½ on January 1, 2021; so the year after you’re 70½ is 2022, and you must have all of your first RMD withdrawn by April 1, 2022.)

*Failure to withdraw the full RMD amount triggers a penalty of 50% of the amount not withdrawn*. If a person’s RMD last year was $10,000, but he only withdrew $5,000, the IRS will not only demand that he withdraw the additional $5,000, it will demand that he also pay a penalty of $2,500.

How much are RMDs each year? The IRS uses a formula. It looks at your IRA balance on December 31 of the previous year, then divides that balance by a number based on your life expectancy. (You have to look up this number in a table—it’s called a “distribution period factor” or “life expectancy factor.” Or just let your financial firm tell you each year.)

When Congress mandated RMDs in 1986, it intended that they increasingly deplete an IRA. For example, for 2019, a first RMD (around 70½) is 5.15% of the IRA balance. An RMD at age 80 is 9.8%; at age 90, 18.18%; at age 100, 34.48%. (By 100, your remaining life expectancy is down to 3 years; so you have to take out a third.)

Roth IRA

As with a traditional IRA, a Roth IRA has two basic aspects: no tax deferral, and no RMDs.

*no tax deferral*

The disadvantage of a Roth IRA compared to a traditional IRA is that you do not get a tax deferral. You have to pay taxes each year on the money you contribute. You do not get an immediate tax deduction.

*no RMDs*

On the other hand, with a Roth IRA there are no RMDs. You won’t pay taxes on the contributions you made (the principal) when you take them out; you paid those taxes when you put them in. Moreover—*and* *here is the beauty of the Roth IRA*—you won’t pay taxes on the returns your money made while invested (the earnings), either. In fact, you never pay taxes on the earnings!

traditional IRA vs. Roth IRA:

accumulation phase

At first sight the traditional IRA looks like the better deal: deferred taxes always look good. But to compare the two adequately, let’s invent two investors and follow them through time.

Imagine two identical twins, Martha and Mary. Both are aged 40; both make $40,000 a year; both invest 10% ($4,000) each year in an IRA ($333 a month). Martha puts her money in a traditional IRA; Mary puts hers in a Roth IRA.

Martha gets a tax deferral on her $4,000. If her taxes on the $4,000 would have been $1,000 (a 25% marginal tax rate), then in effect she’s saving $1,000 up front. Mary, on the other hand, not only has to set aside $4,000 to invest, she also has to come up with an additional $1,000 to pay taxes on the $4,000.

Since Martha has, in effect, an extra $1,000 each year in tax savings, she can invest that too toward retirement. So imagine: Martha puts $5,000 in her IRA year after year, while Mary only puts in $4,000. Obviously, over time Martha’s account will be bigger.

And that’s just the principal (the contributions). Since the contributions are not just savings but are investments, they earn returns. How much they earn will depend on which investments the sisters choose, on how the economy fares, and so on. But let’s keep it simple. Since 1926, the stock market has averaged a gain of about 10% a year. So let’s suppose both IRAs earn 10% a year. How will the accounts compare when the women retire at age 67?

|  |  |
| --- | --- |
| Martha | Mary |
| *age* | *balance* | *age* | *balance* | *age* | *balance* | *age* | *balance* |
| 40 | $5,000 | 54 | $158,862 | 40 | $4,000  | 54 | $127,090  |
| 41 | $10,500 | 55 | $179,749 | 41 | $8,400  | 55 | $143,799  |
| 42 | $16,550 | 56 | $202,724 | 42 | $13,240  | 56 | $162,179  |
| 43 | $23,205 | 57 | $227,996 | 43 | $18,564  | 57 | $182,397  |
| 44 | $30,526 | 58 | $255,795 | 44 | $24,420  | 58 | $204,636  |
| 45 | $38,578 | 59 | $286,375 | 45 | $30,862  | 59 | $229,100  |
| 46 | $47,436 | 60 | $320,012 | 46 | $37,949  | 60 | $256,010  |
| 47 | $57,179 | 61 | $357,014 | 47 | $45,744  | 61 | $285,611  |
| 48 | $67,897 | 62 | $397,715 | 48 | $54,318  | 62 | $318,172  |
| 49 | $79,687 | 63 | $442,487 | 49 | $63,750  | 63 | $353,989  |
| 50 | $92,656 | 64 | $491,735 | 50 | $74,125  | 64 | $393,388  |
| 51 | $106,921 | 65 | $545,909 | 51 | $85,537  | 65 | $436,727  |
| 52 | $122,614 | 66 | $605,500 | 52 | $98,091  | 66 | $484,400  |
| 53 | $139,875 | 67 | $671,050 | 53 | $111,900 | 67 | $536,840 |

As you can see, Martha ends up with $671,050; Mary ends up with $536,840. Martha begins retirement $134,210 ahead. In chart form:

traditional IRA vs. Roth IRA:

decumulation phase

Martha and Mary are now in retirement. They are in the “decumulation” phase. (*Collins English Dictionary*: “decumulation” means “a decrease in amount or value.”)

There are two big differences here. Martha will soon be facing RMDs (at around 70½). But Mary won’t: Roths don’t have RMDs.

Also, Martha has yet to pay taxes on her retirement money. When will she pay? Whenever she takes retirement money out. She will have to pay taxes on the contributions as she takes them out, and she will have to pay taxes on the earnings as she takes them out.

But Mary won’t: she already paid taxes on the contributions (year by year, as she put them in). And—*mirabile dictu!*—*she never has to pay taxes on the earnings!*

If we factor in Martha’s RMDs and taxes, how do the accounts compare? Again, let’s keep it simple. Martha and Mary, let’s say, are frugal widows. Their houses and cars are paid off; they no longer commute to work; they’re not interested in travel; they have no children (must be a genetic defect). Consequently, they find that they can live entirely off their Social-Security benefits. How do the accounts compare if they are left completely alone?

|  |  |
| --- | --- |
| Martha | Mary |
| *age* | *balance* | *age* | *balance* | *age* | *balance* | *age* | *balance* |
| 67 | $671,050 | 84 | $1,609,738 | 67 | $536,840 | 84 | $2,713,442 |
| 68 | $738,155 | 85 | $1,651,012 | 68 | $590,524 | 85 | $2,984,786 |
| 69 | $811,971 | 86 | $1,687,350 | 69 | $649,576 | 86 | $3,283,265 |
| 70 | $860,567 | 87 | $1,717,622 | 70 | $714,534 | 87 | $3,611,591 |
| 71 | $910,936 | 88 | $1,740,689 | 71 | $785,987 | 88 | $3,972,750 |
| 72 | $962,850 | 89 | $1,755,259 | 72 | $864,586 | 89 | $4,370,025 |
| 73 | $1,016,240 | 90 | $1,761,455 | 73 | $951,045 | 90 | $4,807,028 |
| 74 | $1,070,914 | 91 | $1,758,178 | 74 | $1,046,149 | 91 | $5,287,730 |
| 75 | $1,126,526 | 92 | $1,744,465 | 75 | $1,150,764 | 92 | $5,816,504 |
| 76 | $1,182,796 | 93 | $1,718,961 | 76 | $1,265,841 | 93 | $6,398,154 |
| 77 | $1,239,665 | 94 | $1,683,052 | 77 | $1,392,425 | 94 | $7,037,969 |
| 78 | $1,296,405 | 95 | $1,636,044 | 78 | $1,531,667 | 95 | $7,741,766 |
| 79 | $1,352,889 | 96 | $1,577,392 | 79 | $1,684,834 | 96 | $8,515,943 |
| 80 | $1,408,561 | 97 | $1,506,788 | 80 | $1,853,317 | 97 | $9,367,537 |
| 81 | $1,462,804 | 98 | $1,424,095 | 81 | $2,038,649 | 98 | $10,304,291 |
| 82 | $1,514,953 | 99 | $1,332,626 | 82 | $2,242,514 | 99 | $11,334,720 |
| 83 | $1,564,295 | 100 | $1,233,252 | 83 | $2,466,765 | 100 | $12,468,192 |

Source: http://www.themoneyalert.com/rmd-tables/, accessed 2019-08-17

Notice a tipping point in Martha’s account. Her balance grows until age 90 (because until then 10% annual earnings outweighed the RMDs). But then her balance goes into a permanent decline (because the RMDs now outweigh 10% annual earnings).

So given time, the Roth greatly outperforms the traditional IRA: Martha Mary

 age 71 $911,000 $786,000

 75 $1.1 million $1.2 million

 80 $1.4 million $1.9 million

 85 $1.7 million $3.0 million

 90 $1.8 million $4.8 million

 95 $1.6 million $7.7 million

 100 $1.2 million $12.5 million

Even if you only live to age 80 (currently the typical life expectancy), you still come out a half a million ahead.

Over time, Roth IRAs are *much* better than traditional IRAs. The secret is: *earnings are never taxed*.

employer-provided retirement plans

Most larger employers provide retirement plans for their employees. In for-profit businesses, these plans are usually called 401(k)s. (In nonprofits, they are 403(b)s; in government organizations, 457 plans.)

401(k)s have a much higher cap on contributions than IRAs. For 2023, instead of $6,500 a year ($7,500 if you’re 50 or older) for IRAs, the cap for 401(k)s is $$22,500 ($30,000 if you’re 50 or older). That means a 50-year-old who maxes out both his IRA and his 401(k) can sock away $37,500 a year in tax-advantaged plans. Do that for 15 years, and you will have just shy of half a million dollars. And that doesn’t include all the earnings your money will have made during those years.

Like IRAs, 401(k)s etc. come in two flavors, traditional and Roth. One difference between 401(k)s and IRAs is that all 401(k)s, traditional or Roth, are subject to RMDs. (So, to avoid forced withdrawals in retirement, you should, as soon as you retire, “rollover” [convert] your Roth 401(k) into a Roth IRA.)

With a traditional 401(k), you get a tax deferral but have to pay taxes upon withdrawal. With a Roth 401(k), you pay taxes up front, but earnings grow forever tax-free. The huge advantage of a Roth IRA over a traditional IRA—earnings are never taxed—is also the huge advantage of a Roth 401(k) over a traditional 401(k). I strongly urge everyone to sign up for (or switch to) a Roth 401(k) rather than a traditional 401(k). I also urge them to convert their traditional accounts to Roth accounts, as soon as possible, to take advantage of tax-free growth.

conclusion

The time has come: you now must die. You can leave your retirement account to your kids, or to charity, or to both.

If you leave your account to charity, it will no longer be an IRA (charities aren’t individuals). But charities aren’t subject to RMDs or to taxes. Your money can go a long way toward helping lots of people.

If you leave your account to your kids, then whether you leave them a traditional IRA or a Roth, they can let the money grow tax free for a decade. After that, the inherited account will become subject to RMDs. It will be subject to the same RMD rules detailed above for a traditional IRA.

And leaving them $12 million instead of $1 million will, I suspect, be noticed. So leave them a Roth. Your account will become their own comfortable retirement, supplementing what they themselves will have saved. A comfortable retirement is a nice way to say, “Goodbye.”

☕ ☕ ☕

Lastly, a personal note. I retired almost a decade ago. That same year, I stopped paying income taxes.

I didn’t stop because I’m an Idaho survivalist, or because I wanted to spend my retirement years in prison. (Although come to think of it that would be free room and board . . .)

No: I stopped because it’s perfectly legal not to pay income taxes for the rest of your life. All you have to do is retire with all your money in a Roth IRA.