

# Roth IRAs: More Effective (and Popular) Than You Thought

**W**hen saving for retirement, millennials are choosing Roth IRAs over Traditional IRAs by a wide margin. According to recent T. Rowe Price customer data, investors under 34 years of age have over eight times more money in Roth IRAs than Traditional IRAs. And within that group,

investors between ages 18 and 24 have over 16 times more money in Roth IRAs than Traditional IRAs. The data was as of year-end 2013.

Why are millennials shunning the tax-deductions that they would have received with Traditional IRAs?

## HOW MUCH MORE SPENDABLE INCOME CAN A ROTH IRA OFFER OVER A TRADITIONAL IRA?

The study assumed investors retired at age 65 and contributed \$1,000 into a Roth IRA or a Traditional IRA at various ages. They are in a 25% tax bracket at the time of their IRA contribution. The \$250 tax deduction from the Traditional IRA is invested in a separate taxable account. An annualized 7% return is assumed for both the Traditional IRA and Roth IRA accounts, as well as the separate taxable account, during the years leading up to retirement. The assumed return drops to 6% for all three accounts during retirement. Additionally, a 25% tax is subtracted annually from the taxable account during the years leading up to retirement and then was taxed at the same rate as their income during retirement. The study also assumed that withdrawals were taken over a 30-year retirement.

CHANGE IN TAX RATE	AGE								
	25	30	35	40	45	50	55	60	65
10%	35%	34%	32%	31%	29%	27%	25%	23%	21%
9%	33%	32%	30%	29%	27%	25%	24%	22%	20%
8%	31%	30%	28%	27%	25%	24%	22%	20%	18%
7%	29%	28%	27%	25%	24%	22%	20%	18%	16%
6%	28%	26%	25%	23%	22%	20% <sup>≠</sup>	18%	17%	15%
5%	26%	25%	23%	22%	20%	19%	17%	15%	13%
4%	24%	23%	22%	20%	19%	17%	15%	14%	12%
3%	22%	21%	20%	18%	17%	15%	14%	12%	10%
2%	21%	20%	18%	17%	15%	14%	12%	11%	9%
1%	19%	18%	17%	15%	14%	12%	11%	9%	7%
<b>STAYS THE SAME</b>	<b>18%</b>	<b>17%</b>	<b>15%</b>	<b>14%</b>	<b>13%</b>	<b>11%</b>	<b>9%</b>	<b>8%</b>	<b>6%</b>
-1%	16%	15%	14%	12%	11%	10%	8%	6%	5%
-2%	15%	14%	12%	11%	10%	8%	7%	5%	3%
-3%	13%	12%	11%	10%	8%	7%	5%	4%	2%
-4%	12%	11%	10%	8%	7%	6%	4%	3%	1%
-5%	11%	9%	8%	7%	6%	4%	3%	1%	0%
-6%	9%	8%	7%	6%	4%	3%	2%	0%	-2%
-7%	8%	7%	6%	4%	3%	2%	0%	-1%	-3%
-8%	7%	6%	4%	3%	2%	1%	-1%	-2%	-4%
-9%	5%	4%	3%	2%	1%	-1%	-2%	-3%	-5%
-10%	4%	3%	2%	1%	0%	-2%	-3%	-5%	-6%

Roth IRA does better

Neutral

Traditional IRA does better

*This chart is shown for illustrative purposes only and does not represent the performance of any particular security. Investment returns will vary and may be higher or lower than in this example.*

(over, please)

“The benefits of tomorrow’s tax-free retirement withdrawals with a Roth IRA far outweigh the benefits of today’s tax-deduction and other possible benefits with a Traditional IRA,” says T. Rowe Price senior financial planner Stuart Ritter. “Even though the Roth IRA contribution doesn’t qualify for an income tax deduction, decades of compounding tax-free money can generate more spendable income in retirement.

“People used to use sulpha drugs to treat infections before World War II, but a far more effective solution came with penicillin. Likewise, the Roth IRA’s advent over 15 years ago offered a more effective way to save for retirement,” Mr. Ritter adds.

## **MOST INVESTORS SHOULD USE ROTH IRAS OVER TRADITIONAL IRAS**

Millennials in particular stand to benefit from the tax-advantages of Roth IRAs, because the longer their contributions have to compound tax-free, the more those contributions could be worth in retirement.

Additionally, younger investors may be in a lower tax bracket today than they will be later when they potentially earn higher salaries. This means that the income taxes they pay on their Roth IRA contributions are taxed at a lower rate today than any potential contributions later.

“It’s great that so many young investors are selecting the Roth IRA,” Mr. Ritter says. “While the benefits of Roth IRAs are more pronounced for millennials, our research shows the majority of investors would still be better off using a Roth IRA than a Traditional IRA.”

Indeed, T. Rowe Price customers in their 40s have almost twice as much money in Roth IRAs than they have in Traditional IRAs. A preference for Traditional IRAs emerges only when looking at investors over age 50.

To analyze the extent to which investors across different age groups may benefit from the tax advantages of Roth IRAs, Mr. Ritter conducted a study to see how much more spendable income in retirement an investor who used a Roth IRA would have compared with an investor who used a Traditional IRA.

The study assumed investors retired at age 65 and contributed \$1,000 into a Roth IRA or a Traditional IRA at various ages. They are in a 25% tax bracket at the time of their IRA contribution. The \$250 tax deduction from the Traditional IRA is invested in a separate taxable account.

An annualized 7% return is assumed for both the Traditional IRA and Roth IRA accounts, as well as the separate taxable account, during the years leading up to retirement. The assumed return drops to 6% for all three accounts during retirement.

Additionally, the same 25% tax is subtracted annually from the taxable account during the years leading up to retirement and then is taxed at the same rate as their income during retirement.

The study also assumed that withdrawals were taken over a 30-year retirement. The withdrawal amount was calculated each year by dividing the projected year-end account balance by the remaining number of distributions years.

In this analysis, a 25-year old who used a Roth IRA and stays in the same tax bracket in retirement would have nearly 20% more spendable income in retirement than an investor who selected a Traditional IRA instead.

Young investors weren’t the only ones able to benefit, as the Roth IRA produced more spendable retirement income in most of the scenarios analyzed.

Most investors remain in the same tax bracket during retirement. However, if an investor’s tax bracket happens to drop by at least 9% and she is over 50 years old, the Traditional IRA becomes more valuable. A 65-year old would only need a 6% drop in her tax bracket for a Traditional IRA contribution to be more advantageous than the Roth IRA in retirement.

“A significant drop in tax rates between when the investor made her IRA contribution and began retirement withdrawals can often be offset by the power of tax-free compounding,” Mr. Ritter says. “But for investors nearing retirement, there isn’t enough time for the money to compound at a rate to counter the significant reduction in their tax bracket during retirement.”

Mr. Ritter adds, “Since most investors remain in the same tax bracket in retirement, the Roth IRA can generate more spendable income even for an investor who made their contribution at age 65.”

Additionally, there are other benefits to Roth IRAs beyond the ability to maximize income:

- **Roth IRAs give retirement savers more flexibility.** While it’s always best to leave IRAs untouched until retirement, investors can generally withdraw their contributions to a Roth IRA at any time without taxes or penalties to meet unforeseen expenses or other needs. However, any contributions withdrawn from a Traditional IRA would be subject to a 10% penalty if they’re taken before age 59 ½, with some exceptions, and are always subject to income taxes.
- **Roth IRAs give retirees more flexibility.** They enable retirees to withdraw large sums of money, whether for a medical expense or home repair, without worrying about potential tax consequences. Whereas large withdrawals from a Traditional IRA could move the retiree into a higher tax bracket, increase her Medicare premiums, and subject more of her Social Security benefits to taxes. Additionally, Roth IRAs are not subject to the required minimum distributions (RMDs) that Traditional IRAs are. So retirees are never required by law to withdraw their money if they don’t wish to and instead can maximize the compounded earnings growth.

## BEST TIME TO CONTRIBUTE

It seems that millennials may be making the right choice by not only starting young and frequently selecting Roth IRAs, but T. Rowe Price customer data also shows that investors under 34 years of age tend to make most of their Roth IRA contributions at the beginning of the year, allowing for greater compounding. This is consistent with the contribution patterns of other age groups.

January through April is the busiest time for Roth IRA contributions, with April being the busiest month. While T. Rowe Price is unable to say whether those Roth IRA contributions are for the current calendar year or the previous, making the previous year's Roth IRA contributions at the last possible moment is the worst time for an investor to contribute.

The more time money has to compound in a Roth IRA, the more spendable income it may generate in retirement. A T. Rowe Price analysis shows the benefits of making annual Roth IRA contributions at the beginning of the year.

The analysis compared three scenarios using rolling 3-, 5-, and 10-year periods of historic S&P 500 Index returns since 1950: a lump sum investment in January, monthly systematic investments throughout the year, and investing a lump-sum at the end of the same year. The study assumed reinvestment of all dividend and capital gain distributions.

All three investors contributed \$6,000 to their Roth IRA (current annual limits are \$5,500 for investors under age 50 and

\$6,500 for investors age 50 and older). This was divided into 12 contributions of \$500 each month for the investor who pursued the systematic approach.

The individual who invested a lump sum at the start of each year typically outperformed the one who invested monthly, as well as the one who invested at the end of the year. For instance, an analysis of 10-year rolling periods showed that investing a lump sum at the beginning of each year achieved a higher balance at retirement in 96% of the periods compared with investing a lump sum at the end of year.

Investing monthly also generated larger account balances in 98% of rolling 10-year periods when compared with investing a lump sum at the end of the year. But the systematic monthly investing approach did not perform as well when compared with investing a lump sum at the beginning of the year. In 91% of the 10-year periods analyzed, investing a lump sum at the beginning of the year outperformed the monthly systematic investment approach.

“Because markets generally tend to rise over the long-term, investing as soon as you can usually works best,” Mr. Ritter says.

“If an investor doesn't have the money to make her full Roth IRA contribution at the beginning of the year, she would likely do better systematically investing what she can each month rather than waiting to make a large lump sum later.”

### WHEN SHOULD INVESTORS MAKE ROTH IRA CONTRIBUTIONS?

(Compares S&P 500 Returns Over 3-, 5-, and 10-Year Periods Since 1950 as of December 31, 2013)	3-YEAR ROLLING PERIODS	5-YEAR ROLLING PERIODS	10-YEAR ROLLING PERIODS
Investing a lump sum at the beginning of the year outperformed monthly investing	82%	82%	91%
Monthly investing outperformed investing a lump sum at the beginning of the year	18%	18%	9%
Investing a lump sum at the beginning of the year outperformed investing a lump sum at the end of the year	87%	87%	96%
Investing a lump sum at the end of the year outperformed investing a lump sum at the beginning of the year	13%	13%	4%
Monthly investing outperformed investing a lump sum at the end of the year	89%	90%	98%
Investing a lump sum at the end of year outperformed monthly investing	11%	10%	2%

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