

To Roth, or Not to Roth?

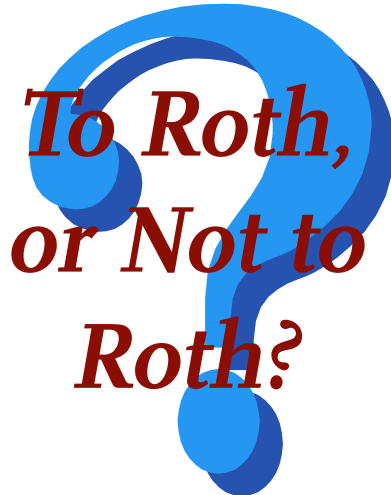
2006 marked the birth of the “**Roth 401(k)**” plan, but it was actually conceived by the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA) with a delayed effective date of January 1, 2006. Ten years later, the Roth 401(k) is not widely used but may be useful in some situations.

Contrary to the name, the “**Roth 401(k)**” is not a plan at all but an option within a 401(k) Plan. The Roth option allows you to forego the usual *tax-deferred* character of your regular 401(k) contributions and to designate them as *after-tax* money that grows *tax-free*. That’s right **tax-free money**. But is the *tax-free* allure of the Roth the best financial choice or should we just stick with the traditional *tax-deferred* 401(k)? **To Roth or Not To Roth?**, that is the question.

The 401(k) contribution limits for 2016 remain unchanged from 2015. In 2016, you can make 401(k) contributions up to the maximum limit of \$18,000. In addition if you are at least age 50 by the end of the year you can make an additional \$6,000 “catch-up”. The Roth is simply a re-characterization or designation of your 401(k) contributions as *after-tax* Roth contributions. This designation must be made at the time they are withheld so your payroll department can properly tax them.

We’ve had traditional Individual Retirement Accounts (IRAs) and Roth IRAs for years. Now we have traditional 401(k)s and Roth 401(k)s. Yes, the not-for-profit 403(b)s can also have the 403(b) option. Traditional 401(k) contributions are *pre-tax*. This means you get an initial *tax deduction* for your contributions, then the earnings grow *tax-deferred*; and finally you *pay taxes* on your contributions and the earnings when you make withdrawals in retirement. On the other hand, your Roth 401(k) contributions are currently *taxable*, but the earnings not only grow *tax-deferred* they are *tax-free when withdrawn* upon distribution after 5 years and age 59½.

No one likes to pay taxes, so the Roth allure of *tax-free* income is very appealing. This is the hook many salespeople are using to sell Roth IRAs. Savoring the sweet taste of the forbidden fruit of *tax-free earnings* may prove too irresistible. **However, for most Americans, traditional tax-deferred savings can be proven to be more valuable.**



We’ve coined two **Roth Axioms** based on a pure mathematical analysis to dispel several myths that have been published as to which is better - a Roth 401(k) or traditional 401(k). One such myth is that the length of time the funds are invested is critical to determine which is better. The first **Roth Axiom** will not only demonstrate that the period of time invested is inconsequential, but also, give us the first basic truism which may eliminate emotion and allow us to make a more logical choice.

Roth Axiom #1

Assuming constant tax rates, the Roth and traditional 401(k)s are precisely financially equivalent.

Did the hair on the back of your neck stand up on that one? Well, if it did, you’re not alone. Many alleged mathematical analyses have been published, similar to the one below, which incorrectly claim Roth 401(k)s to be superior. It’s easy to see why we were fooled. In 20 years the Roth accumulates to an amount over 10% higher than the traditional. Right? Wrong!

This analysis is flawed because the creators erroneously assume that the two options have equal financial outlays. They do not! The traditional 401(k)’s total amount invested is \$23,400. You would need to earn \$25,714 to be left with \$18,000 *after-tax* to fund the Roth 401(k) ($\$25,714 * 70\% = \$18,000$). Because the Roth starts with almost 10% more value, voila it ends up that way. The perceived advantage is just like the magician’s smoke-and-mirrors. A fair analysis must start with equal investments.

Incorrect Comparison		
Plan Type =>	Traditional 401(k)	Roth 401(k)
Contributions	18,000	18,000
Tax Savings	5,400	N / A
Accumulation of Tax Savings	14,057	N / A
Accumulation of 401(k) Account	69,654	69,654
Withdrawal Value of 401(k)	48,758	69,654
Total After-Tax Value	62,815	69,654

Assumptions: \$18,000 to each account, combined federal and state tax of 30%, and 7% per year earnings for 20 years.

Starting with two equals, it is very easy to prove the first **Roth Axiom**. To correctly compare a \$18,000 traditional 401(k) to a Roth, you must use a Roth contribution of \$12,600 at a 30% tax rate, the same out-of-pocket cost of the traditional 401(k) (18,000 - 5,400). Therefore assuming constant tax rates, the financial value of the traditional 401(k), of *deferring* tax now but being taxed on distribution, is financially equal to the Roth 401(k), of paying taxes now and getting *tax-free* earnings. Although we used a 20 year accumulation period, the equality holds true for any number of accumulation years, assuming constant tax rates.

Correct Comparison		
Plan Type	Traditional 401(k)	Roth 401(k)
Gross Wages	18,000	18,000
Tax Savings (Paid)	N/A	(5,400)
Contributions	18,000	12,600
Accumulation of 401(k) Account	69,654	48,758
Withdrawal Value of 401(k)	48,758	48,758

Applying **Roth Axiom #1** is easy. If you'll pay less taxes later, *defer paying the tax* today and opt for the traditional 401(k); however, if your tax rate will be higher in retirement, pay the tax now by opting for the Roth 401(k) and reap *tax-free* earnings during your retirement years. It is all driven by the relative tax rates now compared to in retirement.

Generally speaking, without trying to predict future tax changes, the tax rate for most people will be less in retirement than their current *marginal tax rate*. Your *marginal tax rate* is the percentage you pay on your last dollar of income (i.e. your highest tax rate). Because you contribute to your traditional 401(k) "*off-the-top*", your *marginal tax rate* determines how much taxes you defer. In your retirement years, because you have more exemptions and usually somewhat lower income, your *marginal tax rate* is usually lower. On the other hand, very highly compensated employees will probably pay about the same taxes now as in retirement.

Therefore, for most retirement plan participants, the answer is **Not to Roth!** For very highly compensated employees, Roth Axiom #1 provides no guidance. I'm sure this is not what Hamlet meant when he said, they must, "...suffer the slings and arrows of outrageous fortune." But wait, **Roth Axiom #2** may let them "... sleep, perchance to dream."

Roth Axiom #2

Designation as after-tax Roth contributions leverages your tax advantaged savings by the current taxes paid.

As we saw above, a \$18,000 traditional 401(k) contribution is identical to a \$12,600 Roth contribution at a 30% tax rate. Using a 40% tax rate, to more closely reflect the actual very highly compensated employee's *marginal tax rate*, the equivalent Roth 401(k) contribution would be \$10,800. Consequently, if you contribute \$18,000 to a Roth 401(k), it's financially equivalent to a \$30,000 traditional 401(k) contribution. Of course a \$30,000 401(k) contribution is not allowed, but this illustrates the dramatic leveraging advantage of a Roth. The Roth effectively raises the 401(k) contribution limits. For the very highly compensated employees who can afford to pay the tax in addition to the contribution, **Roth Axiom #2** provides a clear answer – **To Roth!**

As a last note, there are some formalities. Your employer must adopt an amendment to their plan to allow for the Roth designation of 401(k) contributions. Roths must be accounted for separately. The preferential income *tax-free* treatment of earnings is only available if distributions are made after 5 years and after age 59½, disability or death.

To Roth, or not to Roth?...that is the question.

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