**Why does the guidance of 4% Rule differ so much from FIRECalc and my spreadsheet?** I can’t recreate any of the conclusions from the Rule (stated spending rate and its years of no chance for depleting) in FIRECalc or my spreadsheet. Why?

Here is what I suspect:

**1. You can get too cute with the choice of investment Mix (the mix of types of stocks or types of bonds.)** This is in line with the thoughts of the author of FIRECalc: “… don’t fall into the trap of measuring something with a micrometer when you’ll be cutting with an axe.”

The 4% Rule (if you follow the details) is for an investment mix that, in my opinion, gets too cute by unrealistically overweighting certain kinds of stocks and bonds. For example, the stock mix in the 4% Rule works out to 65% Larger Company stocks and 35% Smaller Company stocks. Their true weight in the market is 80% and 20%. So the Rule uses a big overweight for Smaller Company stocks.

Overweighting Smaller Company stocks emphasizes their meteoric rise in the period of many of the horrible sequences of return (those starting in the mid-1960s.) The meteoric rise for Smaller Company stocks began in 1975; an amount then compounded 7.8-fold over the next nine years. The overweighting adds more years for no chance of depletion. This March 18, 2018 post addresses the issue of whether it is wise to overweight smaller company stocks: <http://www.nesteggcare.com/total-market-stocks-rather-just-sp-500-stocks/>

If you hunt hard, this same effect occurs if you hunt and overweight a specific kind of bonds. The 4% Rule solely uses US Government Intermediate bonds; I find those returns are only available from the one data source. The other two publicly available sources use a more general definition of Bond returns. No RWC I find builds its sequences of returns using this narrow focus for bonds.

**2. You can ignore Investing Cost.** FIRECalc is the only publicly available Retirement Withdrawal Calculator (RWC) that has an explicit assumption for Investing Cost. And it allows you to change its default. Most all other RWCs totally ignore Investing Cost. Ignoring Investing Cost will add some time to the time before one reaches the point of depletion. I suspect the 4% Rule ignores Investing Cost, since there is no statement on it’s effect on the resulting conclusions.

**3. You can get a bit confused on the math.** A simple, but illogical change to my spreadsheet can add more years of no chance of depletion: take the withdrawal for spending at the END of a year rather than at the START of the year. All horrible sequences have very bad starts but improve returns over time. Taking the withdrawal at the end of the year magnifies the pattern of good returns in later years and can add years to the result.