

 John Buerger

This is a follow-up to last week's post about the [10% Myth](http://bit.ly/RAFblg22) as we continue to investigate the world of investments.

How do you behave when you don't get what you expect? Some people can be very rude when reality doesn't match their expectations, especially when they're hungry (I could tell you horror stories from my restaurant days back in Newport, Rhode Island). But meeting (and exceeding) expectations are the lynch pin of both business and financial success. What is interesting is that many times, expectations can be completely out of line with reality. ♦ The facts (data) are staring you in the face. ♦ Your expectations were unrealistic, but you still are mad because those expectations were not met. ♦ Bathing suits and middle age come to mind.

This is especially true with investments.

The 10% Myth

Last week we refuted the [10% Myth](http://bit.ly/RAFblg22) of the stock market - The average rate of return over the history of the stock market is NOT 10 percent (as is commonly stated by stock brokers and the media pundits on the financial pornography outlets).

The average rate of return on equities is closer to 7% (including dividends). Now, a

7% historical return is pretty good. It allows you to double your money in about 10 years, quadruple wealth in 20 and wind up with 8 TIMES your starting wealth after 31 years. If you are in control of your cash flow and saving money throughout this time, you'll build wealth even faster (a little shameless plug for financial planning and cash flow management).</p><p>But what about the next two to three years? If the average rate of return for the stock market has historically been 7% per year, how likely is it that you'll see something near that rate of return on your investments in any one of the next few years? How likely is it that you'll see a result that is substantially different from average - a big gain or (worse yet) a huge loss?</p></div>

Average is Not Normal
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The answer is, "The big loss is more likely than the average return!"</p></div>

Why? Because annual returns for the stock market are highly volatile, even in time periods where everything else economically seems pretty quiet. We looked at the history of market returns since 1896 and plotted out those results in a distribution bar graph. Here is what we found:</p></div>

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click on picture for a larger image</p><p>The blue line represents all the times that returns for the year were average (between 4% and 8%). We saw average returns in less than 10% of the periods in the 112 years covered. A loss of 8% to 12% happened 8% of the time as did a gain of 16-20% or 24-28%.</p><p>You would think that the further away from average (the more to the right

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or left of the blue bar) the less often you would see that kind of result, but it doesn't work that way.

Now I have been an investor since I was in high school. Still after all those years (my kids would say "centuries") and after having seen the raw data and even the graph above, I still find it difficult to accept that normal returns for my portfolio will be anything BUT average. But it is true.

What's going on?

Fat Tails and the Human Brain

Human beings are pattern seeking creatures. In fact, our brains will see patterns where they do not exist. A number of experiments have been done where participants "identified" patterns in purely random number sequences. It's a quirk in our hard wiring and a wonderful coping mechanism that serves us well in many ways, just not in the investing world.

When we are told that the stock market has averaged a 7% rate of return over its history, our brains automatically imagine that the results next year will mostly be right around 7% with a very small chance that they will be out of the ordinary. We develop an expectation on that assumption. It does not matter that your recent personal experience has seen nothing but wild numbers (as we have seen), the brain still expects a lot of average results and a few outliers - what is referred to as a "bell shaped" distribution curve as represented by the gold line in the following graph:

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click on picture for a larger image

fat tails

