

We live in unpredictable times, with unpredictable markets. We are constantly making forward-looking decisions with only rear-view mirror indicators called "past results" for guides. And, as we all know, the fine print always reminds us that those past results do not predict future performance.

Standard deviation is a statistical measurement of mutual fund performance that is analyzed by investors in an attempt to predict a range of returns for various mutual funds. Used in conjunction with a "mean" (or average), the standard deviation narrows the likely range of returns over a given time period (typically three years) to a continuum that corresponds reasonably to the investor's risk tolerance.

Using the chart below as an example, suppose that a mutual fund had an average rate of return of 5% over the past three years, represented by the green line. If that same fund had a standard deviation of 15.0, then you would calculate that the fund should have 3-year average rates of return between:

- -10.0% to 20.0%---66.8% of the time (1 std dev), or
- -25.0% to 35.0%---95.4% of the time (2 std dev)

Add/subtract the deviation to/from the mean to get the two extremes. So 5 plus and minus 15 equals 20 and -10. Add/subtract another 15, and you get 35 and -25.

In this example, then, we would say that our hypothetical fund should have a 3-year average between -25 and positive 35, 95.4% of the time.

It is self-evident, then, to realize that, as investors, we seek large "means" and small standard deviations, which coupled together would indicate positive and relatively stable results. The lower the standard deviation, the more predictable the fund's returns should be.

