Volatility is a Drag – Literally

A couple of years ago, with the NASDAQ crash fresh in our short-term memory, I recall a sense of astonishment when I read that the typical stock investor continued to expect high double-digit returns. In the past year, I have been encouraged by signs that investors are finally beginning to understand that such results are not sustainable or realistic.

I conducted an informal poll the past few days as I ran into people around town. I heard the consistent view that, yes, perhaps we had best get used to the single digits again. Figures in the seven to ten percent range seemed to make sense to my button-hole poll group.

No, I'm not writing yet another column imploring you to lower your expectations. I am turning my attention this week to the topic of risk. Not just any risk, but specifically the form of risk that is most widely reported by securities analysts and research firms like Morningstar.

This risk measure is called *standard deviation*. Standard deviation is a mathematical calculation that tells us how far from the *average* return we can expect year-to-year returns to be. For example, let's say the average stock return over some period of time is 12%. We all understand that stocks did not really pay exactly 12% each year; the actual numbers were all over the place and they *averaged* 12%.

Let's now say that stocks had a *standard deviation* of 16%. That means that we would expect that the returns in any given year to be in a range of 16 percentage points *above or below the average*. Technically speaking, we would expect about two-thirds of the years to fall in the range minus 4% to positive 28%. One-third of the years would be expected to fall beyond those highs and lows.

Now that investors seem to have the rational view that returns are likely to be about, say, 7%, I wondered whether they had considered what happened to the standard deviation. In poring over the historical databanks, I find that, while stocks go through varying periods of high and low returns, the amount by which those returns vary from year-to-year does not change much. The 16% number holds reasonably steady over extended market cycles.

Stick with me for one more technical bit. As time goes by, we do not really earn the average return on our stocks. How is that? *The standard deviation serves to drag our returns downward.* The more volatile our year-to-year returns, the less money we *actually have* at the end of a reasonable holding period. We call this the "volatility drag." I also like to call it the volatility tax. Volatility drag can be calculated through another bit of math from the standard deviation. A standard deviation of 16% results in a volatility drag of about 1.3 percentage points.

The effect of volatility drag is to reduce the expected return. An expected average return of 12% is lowered by 1.3%, to result in an actual expected return of 10.7%. This is the price we pay for seeking higher returns. We are familiar with the canard that you have to take risk to get reward. Well, my friends, that reward is not free. It comes with a cost – the volatility tax.

If you achieve those 12% average returns, a 1.3% volatility tax is the price you have to pay. Still, 10.7% after paying that price isn't so bad. The 1.3% drag eats up about one-ninth of your monetary gain.

However, let's see what happens if your expected average falls from 12% to a more rational 7%. The volatility tax is still the same: 1.3% – and it lowers the *actual expected return to 5.7%.* The 1.3% volatility drag now eats up almost *one-fifth* of your money.

If average returns fall, and volatility remains at its historic levels – and I have no reason to suspect that it won't – then investors are in for another round of disappointment. A cure for this ill – a tax dodge, if you will – is to position your portfolio so that it experiences *less volatility*. Even investors with a high tolerance for risk should consider taking less of it if they share my view that returns going forward will not be as high as in the past 20 years. A larger proportion of bonds might do the trick.

Risk is like a bed of nails. When there is a big thick mattress of high returns sitting over the nails, we can blithely ignore the risks. When that mattress shrinks to a thin little camping pad, those very same nails suddenly keep us awake at night.

