SmartMoney

A Primer on Measuring Risk in Mutual Funds

By Rob Wherry |Rob Wherry Archive |Published: April 19, 2007

WARREN MCINTYRE, FOUNDER of VisionQuest Financial in Troy, Mich., has a checklist that he typically goes through when meeting with a new client. He'll get to know the person first and then move on to discuss their financial goals, whether it's paying for college or planning for retirement. Ultimately, though, the conversation turns to risk. "You have to know how they feel about it and how much they can stomach," he says.

Given the previous quarter you may be asking yourself the same things. The wild ups and downs of the market the last few months (after a 416-point drop, the Dow has regained what it lost, breaking new records this week) probably has you wondering what's on the horizon, whether it's a slowdown or more good times. And what would happen to your portfolio in either case.

Risk is certainly what is on the mind of the advisors we have been chatting with. Sure, that big drop helped bring the topic center stage. But recent academic studies have been exploring new ways to measure this unknown and what they have found isn't pretty: Conventional methods probably understate the risk exposure of a typical portfolio. While we'll explore some of these concepts below, you probably won't be able to implement any of them unless you invest through an advisor who uses powerful computer software. Don't worry, though, we'll start by giving you some easy ways to put your risk exposure into focus.

First, you need to weigh your tolerance for risk — and your risk capacity. Every investment has some level of risk, whether it's an ultra-aggressive junk bond that can blow up and take your money with it or the staid certificate of deposit that can cost long-term investors thousands of dollars since their money could have been put to better use if it was in something just a little more aggressive. And you actually need some risk, since beating the market depends on making a few bets on the fringes. The trick is to find a comfortable balance between the two — that's your risk tolerance. But you also need to ask yourself if you can afford to take risks. This will depend on your age, your family situation, your health — even the security of your job. McIntyre, for example, lives in a state where the auto industry is in dire straits. "Some people can't afford to lose," he says.

The best defense against too much risk is a well-diversified portfolio. By that we mean your portfolio has a large core holding in a low-cost S&P 500 or extended-market index fund complemented by a mix of small- and medium-size company funds along with growth and value offerings, too. That portfolio would also include investments overseas and in noncorrelated assets like real estate. As parts of the portfolio rise or decrease in value you rebalance quarterly, semi-annually or annually so that one investment doesn't have a big influence on the overall picture. "You want a mixture," says McIntyre.

To get a deeper sense of your risk, you can use Lipper screening tools on SmartMoney.com. For those of you looking to temper risk you can screen using two criteria — consistent returns and preservation — that can help you weigh just how risky some mutual funds are. For example, preservation reflects a fund's ability to avoid big losses regardless of the market conditions when compared with its peers over a time period like three, five or 10 years. The funds that score poorly might have roared ahead at one point, but the downside was probably ugly. (The top 20% of funds are scored a 1 while the worst 20% get a 5.) The consistent-returns metric looks at how smooth a fund's returns are vs. others in its category. So if you wanted to find funds with a low-risk profile you would screen on both criteria for those with top scores. **Oakmark Global** (OAKGX) fits that bill. However, the opposite works too if you can take some more risk. You could look for funds that have a 3, 4, or 5 preservation score and couple it with top consistent returns. In other words, you would probably be looking at the best of the highfliers in each category. **T. Rowe Price Science & Technology** (PRSCX) is a fund that pops up.

There are more sophisticated options, too. Standard deviation — a screen tool on both Morningstar and Lipper — measures how much a fund's returns vary from the mean. The larger the percentage deviation the more risk. Financial pros have also taken to studying something called value at risk. This metric looks at just how much value a portfolio could possibly lose over a given time period. It hinges on the person having a certain confidence level that will continue over the time period. Of course, the stock market doesn't always act like we think it will.

That's the problem. Value-at-risk doesn't always account for the trading days that fall outside of its parameters, those nasty 416-point drops. So now researchers are going a step further. To understand these new theories, think of a graph where the average return is in the middle and it is surrounded by varying degrees of strong and weak performance that tapers off to form a bell shape. A normal distribution of data means most returns will fall close to the average, or in the middle. The bigger drops — the anomalies, so to speak — are out on the edges of the bell shape. As researchers are getting a better idea of those worst-case scenarios — by combining historical data with more real-time information — they're starting to realize that many portfolios are more vulnerable than they thought. "It turned out the worst-case scenario might have been more likely than we thought," says Jeff Tjornehoj, senior analyst at Lipper.

Now large institutions, pension funds and consultants are delving into terms like "estimated short fall" and "fat tails" in an effort to give billion-dollar portfolios some bullet-proof protection from big drops. **Bryce** James, founder of **Smart Portfolios** in Seattle, Wash., has begun incorporating some of this risk research into his model portfolios. "Risk has been underestimated because of the method of calculation. When that whole nightmare happened in February we were sitting pretty," says James. "I want as much data as I can get on a stock [to measure its risk]. I want what is happening today but not lose yesterday. I want my cake and I want to eat it, too."

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