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### Risk Business

*Setting risk parameters is a vital first step for active traders*

By Teresa Lo

Over the past few years, interest in trading the short-term movements of the market has grown immensely. For most investors, making the adjustment to shorter timeframes can be difficult, because the nature and psychology of trading is very different from that of long-term investing.

The goal of trading is to maximize return on capital while minimizing risk. This means that traders need to know how to manage risk and measure reward. I believe that the more important aspect of these two goals is preservation of capital knowing how much capital to risk and when to cut losses.

First and foremost, savvy traders should be able to assess their risk of ruin. This is an estimate of the probability that a trader will eventually lose all of his trading capital. The more money a trader risks on any individual trade in relation to the capital in his account, the higher the risk of ruin will be.

While the concept of risk of ruin is fairly straightforward, the disciplined application of these principles is often a challenge for many traders. Traders often end their careers by focusing solely on the pursuit of extraordinary profits while risking too much capital in their accounts. They make a series of compounding errors, beginning with betting too much on a single position and then letting the losers become long-term investments in an effort to give the trade at hand time to become a winner.

Any individual trade, whether it is a winner or a loser, should have little effect on a trader's long-term performance, so long as the trade is made within appropriate risk and money management parameters. The long-term outcome of successful trading can be defined as consistent profitability, and the first step on the way to achieving this goal is to apply professional risk and money management techniques.

Understanding the psychology behind these techniques can be a critical first step. For the past twenty-five years, William Eckhardt, president of Eckhardt Trading Company, has demonstrated that following strict risk and money management rules can be the keys to a trader's survival. In *Market Wizards: Conversations with America's Top Trader's* (Harper Business, 1994), Eckhardt provided author Jack D. Schwager with some valuable insights into the common reasons why some traders fail:

*"One common adage on this subject that is completely wrongheaded is: You can't go*

*broke taking profits. That's precisely how many traders do go broke. While amateurs go broke by taking large losses, professionals go broke by taking small profits. The problem in a nutshell is that human nature does not operate to maximize gain but rather to maximize the chance of a gain. The desire to maximize the number of winning trades (or minimize the number of losing trades) works against the trader. The success rate of trades is the least important performance statistic and may even be inversely related to performance...The market likes to lull you into the false security of high success rate techniques, which often lose disastrously in the long run. The general idea is that what works most of the time is nearly the opposite of what works in the long run."*

So how can traders apply the rules of risk and money management? In his book, *Trader Vic II Principles of Professional Speculation* (John Wiley & Sons, 1998), Victor Sperandeo outlines a plan to preserve capital so that a trader needs to be correct only once in three trades to achieve profitability. According to Sperandeo, it is important to be adequately capitalized. Attempting to trade with a small amount of capital is not recommended, as the psychological pressure to perform will certainly force the trader into making trades that are long shots. Therefore, a trader first needs to establish a realistic account size, and make sure that this account is not commingled with long-term investments. Finally, it's important to define a clear set of goals and closely follow the rules of risk and money management.

### **Putting your rules to the test**

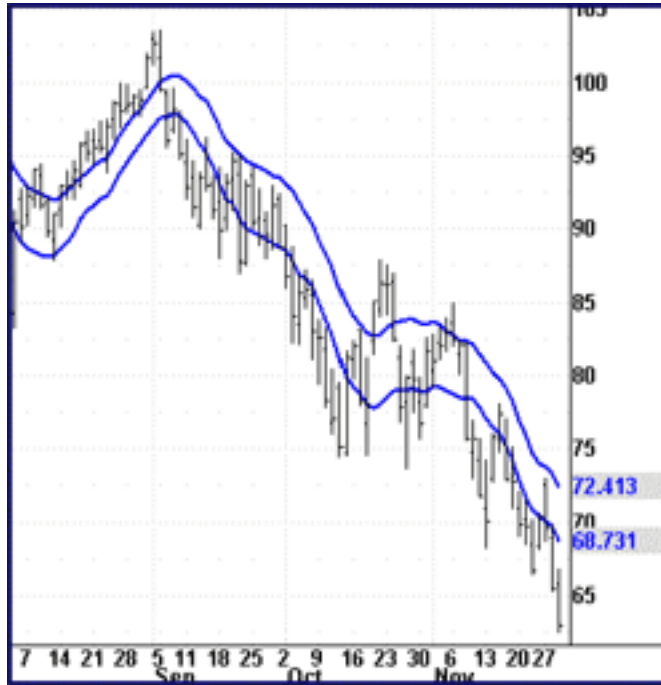
Let's look at a hypothetical example. Jane Doe has been a successful investor over a period of years, and now she wishes to take a small portion of her funds to set up an account for the purpose of short-term trading. She defines a short-term trade as one that seeks to take advantage of fluctuations in price lasting anywhere from several days to several weeks. She will only trade stocks that have high liquidity, meaning that millions of shares are traded each day. Under no circumstance will any of the trades made in this account become long-term investments. She will initiate a trade if the odds point to a potential reward twice that of the maximum risk.

Trader Doe opens her account with \$50,000 of risk capital. According to her own money management rules, she will risk no more than 3% of the account on any given trade before she cuts her losses. This means that, when the account is valued at \$50,000, she will liquidate any trade when it is wrong by \$1,500. If the account grows to \$55,000, the amount she will risk on the next trade rises to \$1,650. If the account shrinks to \$45,000, the amount she will risk on the next trade is \$1,350. Since she is not "day trading," and will hold this position for a few days or a few weeks, she will need to decide on the size of the trade that is appropriate for the account, according to her risk management rules.

In this hypothetical example, Trader Doe decides to take a position in XYZ Widget Company. To quickly calculate the appropriate position size while taking into account recent volatility, she simply uses the average trading range of the stock over a recent time period.

Trader Doe plots a 10-day moving average of the daily high and low prices of XYZ Widget Company. For this example, the 10-day moving average of the daily highs is \$72.413. The 10-day moving average of the daily lows is \$68.731. The difference between \$72.413 and \$68.731 is \$3.682.

### Chart of hypothetical company, XYZ Widget Company



Given that Trader Doe will risk 3% of the \$50,000 in her account, the number of shares of XYZ Widget Company that she will trade can be calculated as follows:

$$\begin{aligned} \$50,000 \times .03 &= \$1,500 \text{ capital at risk} \\ \$1,500 / \$3.682 &= \text{Approximately 407 shares} \end{aligned}$$

Trader Doe believes that there is a 2:1 reward to risk ratio in buying XYZ if it can reverse course. She decides that if XYZ exceeds today's high of \$66.75, she will buy it tomorrow at \$67.00. If her order is filled, she will then enter a protective stop loss order at \$3.682 below the price at which her buy order was filled:

Buy 400 Shares XYZ at \$67.00 = \$26,800 before commission.

- Initial protective stop loss order is entered at  $\$67.00 - \$3.682 = \$63.318$

If she is wrong, Trader Doe's protective stop loss order will likely be filled at approximately \$63.25. The result would be:

Sell 400 shares XYZ at \$63.25 = \$25,300 before commission.

- $\$26,800$  (buy order) less  $\$25,300$  (sell order) =  $\$1,500$  loss before commission.

$\$50,000$  (initial capital) -  $\$1,500$  (loss before commission) =  $\$48,500$

$\$48,500 \times .03 = \$1,455$  capital at risk for the next trade.

This is a hypothetical illustration of professional risk and money management rules. It is designed to avoid catastrophic losses and does not require extraordinary gains to

achieve consistent profitability. While these methods are not foolproof, the principles behind them are solid and the formulas can be adjusted to suit an investor's own risk profile. Individual results may vary.

Teresa Lo is a technical trader and has extensive experience trading equities, index/equity options, and futures. Her web site, [www.intelligentspeculator.com](http://www.intelligentspeculator.com), is an educational resource for traders and investors, and is not affiliated with Fidelity Investments.

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