



# Fine-Tuning Your Money Management System

*Acknowledge the risks in trading the markets by making sure your money management system is sound.*

by **Bennett A. McDowell**

**W**

hen you hear of someone making a huge killing in the market on a relatively small trading account, more likely than not it was a fluke: The trader was not using sound money management techniques. The trader probably exposed his trading account to obscene risk due to an

abnormally large trade size. The trader may have just gotten lucky and experienced a profit windfall. Trading like this means it's just a matter of time before huge losses dwarf the wins, and the trader is devastated emotionally and financially.

Money management in trading involves specialized techniques combined with your own judgment. Not adhering to a sound money management program can find you exposed to a deadly risk of ruin, and, worst of all, most probable equity bust. Keeping this in mind, you may find a few essential money management techniques can make a big difference to your bottom line. (See sidebar, "Proven money management techniques.") Here are some things to remember when it comes to money management.

## CALCULATING PROPER TRADE SIZE

If you are trading the exact same number of shares or contracts on every trade, you may not be calculating the proper trade size for your own risk tolerance. Trade size can vary from trade to trade because your entries, stops, and account size are constantly changing variables.

To help reduce your risk exposure, the first step is for you to believe you need this sort of program. Usually, this belief comes from suffering a few large losses that make you want to change. This kind of experience can enable you to see how the wrong trade size and lack of discipline can sabotage your trading results.

Calculating proper trade size is a relatively simple process and can ultimately reward you with greater profits and more efficient risk control. You can determine maximum trade size by using the following formula. (In addition, see examples A and B later in this article.)

### TRADE SIZE FORMULA

$$\frac{\text{Risk amount} - \text{Commission}}{\text{Difference between entry \& stop}} = \text{Trade size (shares/contracts)}$$

$$\frac{\$500 - \$80}{\$1.50} = 280 \text{ shares}$$

Novice traders tend to focus on the trade outcome and therefore do not think about risk. In contrast, professional traders focus on the risk and take the trade based on their proven trading system. Thus, the psychology behind trade size begins when you believe and acknowledge that each trade's outcome is unknown at the time you enter the trade. Believing this makes you ask: *How much can I afford to lose on this trade?*

Once you've answered this question based on your own money management rules, you'll either want to adjust your trade size or tighten your stop-loss before entering the trade. In most situations, it is best to adjust your trade size and set your stop-loss based on market dynamics.

During drawdown periods, risk control becomes very important. Since experienced traders test their trading systems, they have an idea of how many consecutive losses in a row can occur before their losses become unbearable. Taking this information into account allows you to further determine the appropriate risk percentage for each trade.

## NOT EVERY TRADE WILL BE A WINNER

Even the best trading systems will only be right about 60% of the time. So for every 10 trades, you will lose an average of four times. Even trading systems or certain trading setups with higher rates of return nearing 80% usually fall back to a more realistic 60% return when actually traded. This is because the rates of return on most systems tend to regress to the mean.

If you're losing 40% of the time, you need to control risk. You can do so by implementing stops and controlling trade size. You never really know which trades will be successful, and as a result, you must control risk on every trade, regardless of how profitable you think the trade will be. If you end up with more winning trades than losing ones, you can do very well with a 60% win to loss ratio. In fact, with effective risk control, you can sustain multiple losses without devastation to your trading account and emotions.

By not controlling risk and by using improper trade sizes, however, traders can go broke in no time. It usually happens like this: They begin trading, get five losses in a row, don't use proper trade sizes, and don't cut their losses soon enough. After five substantial losses in a row, those traders do not have enough capital to continue. And it can happen *that* quickly.

## THE TRADER'S MINDSET

Just as important as controlling risk is having confidence in your trading system. You must keep in mind that even with a tested and profitable system, you could have numerous

losses in a row. This is usually referred to as *drawdown*. Being aware that this can and will eventually occur can prepare you to control risk and not abandon your trading system when drawdown occurs.

This confidence is an important ingredient in your mindset, one that you must develop in order to be consistently profitable. You are striving for a balanced growth in your trading equity curve over time. When you see that steady balanced growth, you'll know you've developed the mindset necessary to be a trader.

Acquiring the trader's mindset takes time and experience and generally occurs when you least expect it. Here's a partial list of the traits you should develop:

- Sense of calm when trading
- Ability to focus on the present reality and not how you would *like* reality to be
- Disregarding which way the market breaks or moves
- The feeling that the money is not the point
- Always looking to improve skills
- Open-minded, keeping opinions to a minimum
- Absence of anger
- Enjoyment of the process
- Trading one chosen approach or system
- No need to control or conquer the market
- No feeling of being victimized by the markets
- Taking full responsibility for all trading results.

### THE "2% PER TRADE RISK RULE"

The "2% per trade risk rule" will keep you out of trouble, provided your trading system can produce a win to loss ratio of 55% or more with an average win of at least 1.6 to 1, meaning wins are 60% larger than losses. This means that for every dollar you lose when you have a losing trade, your winning trades produce a dollar and 60 cents.

Assuming that ratio, you can then proceed to calculate risk. The 2% per trade risk rule is calculated by taking the differ-

ence between your trade entry price and initial stop-loss exit price and multiplying it with your trade size (shares or contracts). This, in addition to your commission costs, will give you the dollar loss if you are stopped out. (See examples A and B later in this article.)

#### 2% PER TRADE RISK FORMULA

Account size x 2% = Risk amount

\$25,000 x 2% = \$500



**MONEY MANAGEMENT**

The loss must be no larger than 2% of the equity in your trading account. Keep in mind it has nothing to do with leverage. In fact, you can use leverage and still stay within a 2% risk of equity in your account. The 2% risk must include commissions and, if possible, slippage, if you can determine that.

If you do not add on to a current position but your stop moves up along with your trade, then you are locking in profits. When you lock in profits with a new trailing stop, your risk on this profitable trade is no longer 2%. Thus, you may then place additional trades.

**THE 2% PER SECTOR RISK RULE**

Since the markets are composed of many different sectors, it is important you use the “2% per sector risk rule.” This rule allows you to risk 2% per sector up to a total risk of 6%, maintaining proper diversification in your trading account.

For example, suppose you purchase shares of Microsoft Corp. (MSFT). If you want to take another trade while you are holding positions in MSFT, you will want to select a sector other than technology, such as chemicals or banking. This rule applies to options and futures. If you are trading futures, trade a different commodity. By using this rule you will be automatically diversified and won’t be as likely to take a huge hit if one sector of the market collapses.

In addition, if your risk on a given trade in one sector is only 1%, you may take additional trades in that sector until you reach a total of 2%. You should not exceed 6% overall among all sectors. The most trading account portfolio risk you should have at any given time *should not exceed 6%*. Using this technique will keep your risk in proportion to your trading account size at all times.

**FUNDING YOUR TRADING ACCOUNT**

Many traders either borrow money or use money they cannot afford to lose. Either will set you up for failure because you are subject to the market’s manipulation, which exploits your emotional need for a positive outcome on every trade.

Basically, you would be nervous about taking a loss. Therefore, each stop out you suffer would create more anxiety to the point where you may not be able to exit a trade and thus take a loss. It takes discipline to accept a trading loss and get out when your stop tells you to.

If you do not have enough capital with which to trade, begin paper-trading to improve your skills while you are saving up to begin trading with real money. This way, when you are ready to trade with real money, you will have practiced your trading skills and have a greater opportunity to be consistently profitable.

**SCALING OUT**

Scaling out of trades can be incorporated into your money management game plan since it is a component of risk control. The psychology behind scaling out is to reduce stress by quickly locking in a profit, which should also help you stay in trends longer with any remaining positions.

This technique can convert some losing trades into profit-

**PROVEN MONEY MANAGEMENT TECHNIQUES**

These techniques can make a big difference to your bottom line. These are simple points to remember, but they can make all the difference.

- 1 Always use stops.
- 2 Use a proven and tested methodology for calculating stops rather than an arbitrary figure.
- 3 Use a proven and tested trading system.
- 4 Pay close attention to your trade size for each trade and be sure you take into consideration the 2% risk rules.
- 5 Never exceed a 2% risk (of your trading account size) on any given trade.
- 6 Never trade more than a 2% risk (of your trading account size) in any given sector.
- 7 Never exceed an overall 6% risk (of your trading account size) at any given time.
- 8 Always trade with risk capital (money you can afford to lose).
- 9 Never trade with borrowed money.
- 10 Use scaling out of positions to boost your percentages.
- 11 In most cases, be sure your trading account size is not greater than 10% of your total net worth.
- 12 Develop the trader’s mindset.

—B.A.M.

able ones, reduce stress, and increase your bottom line. In turn, reducing stress enables you to focus on the trade itself and not be subject to emotions such as fear and greed.

Scaling is applicable for both long and short positions, and for all types of markets such as futures, stocks, indexes, options, and others. The initial position must be large enough to enable you to cover your profitable trade in increments without incurring additional risk from a large open position. For example, if you enter a long trade and the prices continue to move up, then exit a portion, say 30%, of your position after prices reach a certain point. Then scale out again after prices move up further, and exit your entire position when you think the trend will reverse.

Your initial trade size should follow the 2% per trade risk rule. There are two ways to do this. First, find a market that you can initiate a large-enough trade size with your current trading account based on a 2% risk if this initial position is stopped out. Second, add trading capital to your trading account that will allow for a larger position because 2% of a larger account allows for a larger trade size.

You could also use the leverage of options, but you must



be familiar with options, their time value decay, delta, and so forth. Using options would be considered a specialized or advanced technique, and if you are not familiar with how they work, use caution, since attempting to use this method with inadequate experience and knowledge could lead to increasing your stress.

If you're stopped out before you get a chance to scale out, your loss would only be 2%, which is acceptable from a risk of ruin standpoint. If, on the other hand, your trade is profitable, you can cover part of your position and liquidate enough contracts so that if you are still stopped out, you make a small profit. If the trade becomes even more profitable, you may want to liquidate more contracts to lock in more profit.

Trading only one or two contracts does not allow you to scale out of positions well. This clearly illustrates how larger trading accounts have an advantage over smaller ones. In addition, some markets are more expensive than others, so the cost of a trade will also determine trade size.



### CRUCIAL LIQUIDITY

Liquidity is crucial when you are selecting a market to trade. Make sure there is sufficient market liquidity to execute scaling out of positions in a meaningful way. Poor fills due to poor liquidity can adversely affect your using this technique.

Determining sufficient market liquidity depends on two factors: the market and the time frame you are trading. Different markets have varying levels of liquidity; for instance, the Standard & Poor's 500 futures market traditionally has a high level of liquidity, whereas a penny stock has a comparatively low level of liquidity. Your job is to know the market you are trading and to monitor its liquidity level.

Simply put, your slippage will be directly related to liquidity. If you are an investor and plan to hold a position for a lengthy period of time, having greater slippage may not be as much an issue for you as it would be to a daytrader who is counting on getting in and out quickly to make a profit.

Liquidity is a fluctuating factor, and the key is for you to know the market you are trading and determine the proper level of liquidity. Work toward developing your own personal formula given your chosen time frame and your chosen market.

### MONEY MANAGEMENT EXAMPLES

Here are some actual money management examples, giving us a clue about what to do (and what not to do):

#### EXAMPLE A: USING 2% PER TRADE RISK RULE

- Trading account size: \$25,000
- 2% of \$25,000 (trading account size) = \$500  
(Assuming no slippage)

**Make sure there is sufficient market liquidity to execute scaling out of positions in a meaningful way.**

On any given trade, you should risk no more than \$500, which includes commission and slippage.

#### EXAMPLE B: USING 2% PER TRADE RISK RULE AND DETERMINING TRADE SIZE

- Trading account size: \$25,000
- 2% risk allowance: \$500
- MSFT trade entry value: \$60 per share
- MSFT initial stop: \$58.50 per share
- Difference between entry & stop: \$1.50
- Commission: \$80 round trip
- Maximum trade size: 280 shares

Your trading system says to go long now at \$60 per share. Your initial stop-loss is at \$58.50 and the difference between your entry at \$60 and your initial stop-loss at \$58.50 is \$1.50 per share.

How many shares (trade size) can you buy when your risk is \$1.50 per share and your 2% account risk is \$500? The answer is:  $\$500 - \$80$  (commissions) = \$420. Then, \$420 divided by \$1.50 (difference between entry and stop amount) = 280 shares.

Do not buy more than 280 shares of the stock MSFT to maintain proper risk control. Obey the 2% per trade risk rule. If you trade futures contracts or options contracts, calculate your trade size the same way. Note that your trade size may be capped by the margin allowances for futures traders and for stock traders.

#### EXAMPLE C: USING LEVERAGE WITH 2% PER TRADE RISK RULE

- Trading account size: \$50,000
- Amount of margin: 150%
- Trading account size (using margin): \$75,000
- 2% risk allowance: \$1,000
- IBM trade entry value: \$91.49 per share
- IBM initial stop: \$90.23 per share
- Difference between entry & stop: \$1.26
- Commission: \$51.22
- Initial purchase of 753 shares @ \$91.49 = \$68,891.97 IBM
- Actual dollar amount of margin @ entry: \$18,891.97
- Maximum trade size: 753 shares

## MONEY MANAGEMENT

The 2% per trade risk rule takes into consideration the entry price, the initial stop-loss exit price, commission cost, and the dollar amount of the trading account. Therefore, it is possible to use leverage (margin) to produce the maximum trade size based on this rule.

For example, if we entered an IBM stock trade @ \$91.49 and our initial stop-loss is set @ \$90.23, then our maximum trade size would be 753 shares based on an account size of \$50,000, a commission cost of \$51.22, using 150% margin. Our actual dollar margin amount would be \$18,891.97, but our risk on the trade, if stopped out, would be \$1,000, or 2% of \$50,000. Here, we are using margin while keeping the trade risk within 2%.

### CONCLUSION

You must acknowledge the risks in trading the markets. For traders to blindly enter the markets and trade simply because they are thinking positive thoughts is to ignore the full spectrum of what is possible. On the other hand, to live only in fear of losing will cause you to trade the financial markets with fear, anxiety, negativity, and aggression, which is equally destructive.

Instead, acknowledge both sides of the coin. React to market activity with full awareness and pay close attention to risk control. Then and only then will you create a positive reality with a feeling of abundance and good will. Only by acknowledging both the good and the bad of what could happen and by fine-tuning your money management system will you be on your way to greater prosperity.

*Bennett McDowell is president and founder of TradersCoach.com. He trades full time and is known for creating the Applied Reality Trading home-study course and ART Charting software. He can be reached at 858 695-0592 or via email at [Bennett@TradersCoach.com](mailto:Bennett@TradersCoach.com).*

### SUGGESTED READING

McDowell, Bennett A. [2004]. *Survival Guide For Traders: How To Set Up And Organize Your Trading Business*, 2nd ed., TradersCoach.com.

S&C

