Fixed Ratio Money Management

Money management is often viewed as a dull, sophisticated idea best left to professionals. But this couldn't be further from the truth. Money management is an exciting concept that all serious traders need to understand.

In fact, money management alone can be the difference between modest returns, and phenomenal gains.

In this article, we'll review what money management really is, discuss different strategies for money management that can be used right away, and introduce one of the most powerful money management methods for maximizing returns for leveraged traders.

What is Money Management?

In the simplest terms, money management is a strategy for increasing and decreasing your position size, in order to manage risk while obtaining the greatest growth possible for your trading account. There are many ideas associated with the term money management. Before going any further, it's important to understand the difference between some key money management concepts.

- Risk Management - The amount of risk or predefined acceptable loss allocated to a trade.

Example = A trader with a $100,000 account that wants to use conservative risk management, might risk 1% of the total account ($1,000) on any given trade.

- Position Size - The number of shares or contracts traded in a single position.

Example = A trader that wants to use a stop loss of $10 and keep risk at $1000 will trade a position size of 100 shares ($1000/$10 = 100 shares).

Many traders will use the terms risk management, position size and money management interchangeably. However, it's easier to understand money management if you look at these concepts independently. Once you are familiar with different money management concepts, you'll see that risk management and position size are tools for implementing a money management strategy.

Types of Money Management

All money management strategies can be broken down into two fundamental methods: martingale and anti-martingale. Martingale money management strategies are based on increasing the risk and position size after losses, while anti-martingale methods will only increase risk and position sizes with profits. The goal with a martingale approach is to make up for losses by risking more money. The challenge with the martingale method is that there can be unrecoverable catastrophic losses, and it's almost impossible psychologically to apply this approach to a trading account over time. For these reasons traders should always consider anti-martingale methods.

The 2% Rule

One of the most basic and effective money management strategies is the 2% Rule. When using the 2% rule a trader will risk 2% of the total account on any given trade. If there are profits and the account is growing, the 2% risked will be a larger amount and larger positions will be traded. If there are losses, the amount risked and position size will be smaller.

The 2% Rule is perfect for stock traders because it provides a simple method for increasing and decreasing risk. It is anti-martingale by nature, and the real focus is on managing risk which is what stock traders and investors are ultimately looking to do.

Money Management for Leveraged Trading

Although simple, the 2% rule has its limitations and probably isn't the best method for traders that use leverage (like options, forex, and futures traders). This is for the following reasons:

- When trading leveraged markets, traders typically aren't risking the entire account. Instead they use a smaller percentage of the potential capital available to trade, and have the option of increasing position sizes quicker than traders who trade stocks.
- It can be difficult to adjust risk to 2% when trading futures and forex since price movements are based on ticks or pips, instead of penny increments.
- Leveraged markets are attractive to traders that are willing to be a little more aggressive, risking more to potentially make more. At times the 2% might be too conservative based on the goals of traders that are looking to be more active and risk more.

To address these issues above, there are two popular methods for futures and forex traders: fixed fractional and fixed ratio.

Fixed Fractional Money Management - Technically this is a concept that is similar to the 2% rule, but instead of 2% a larger percentage or fraction of an account can be used to determine the position size. For example, a trader using Fixed Fractional money management trading a $10,000 account might choose to trade 1 contract for every $5,000 in the account. Starting with $10,000 the trader would trade 2 contracts, and then increase the position size to 3 after $5,000 of profit is achieved.

Fixed Ratio Money Management - This strategy was first introduced by Ryan Jones in his book The Trading Game: Playing by the Numbers to Make Millions (1999). Fixed Ratio money management is based on a concept known as "delta". The delta is the amount of profit that needs to be achieved before increasing one's position size.

If a trader starts with 1 contract and uses a delta of $1,000, then the trader can increase the position size by 1 contract every time the delta is achieved. The best thing about Fixed Ratio money management is that a trader needs to "earn the right" to trade larger position sizes. However, since the right to trade larger positions is based on profits and not necessarily the actual account size, traders using Fixed Ratio money management can have quicker exposure to larger positions when trading is profitable. For this reason, Fixed Ratio money management is a great solution for traders that are trading smaller leveraged accounts.

Why is Money Management Important?

Let's consider the following two scenarios to show you just how powerful fixed ratio money management can be. Starting with a $10,000 account on March 1st 2013, let's assume a futures trader is only trading 1 contract and averages $200 a week for a year.

- Starting Equity = $10,000
- Profits = $10,400 ($200/week x 52 weeks)
- Account balance after 52 weeks of trading = $20,400

On March 1st, 2014 the trader has made $10,400 ($200/week x 52 weeks). Not bad at all! For a stock trader these types of returns are exceptional. However, whether or not these goals are realistic, many futures and forex traders actively trading the market have more ambitious goals.

NOTE: Keep in mind that leverage is a double edged sword and more aggressive goals means more risk as well.

FIXED RATIO EXAMPLE

Starting with $10,000 on March 1st, 2013, let's assume a futures trader begins trading 1 contract. However, instead of keeping the position size at 1, the trader uses fixed ratio money management and a $1,800 delta. If the trader was to average $200 a week we would see the following progression:

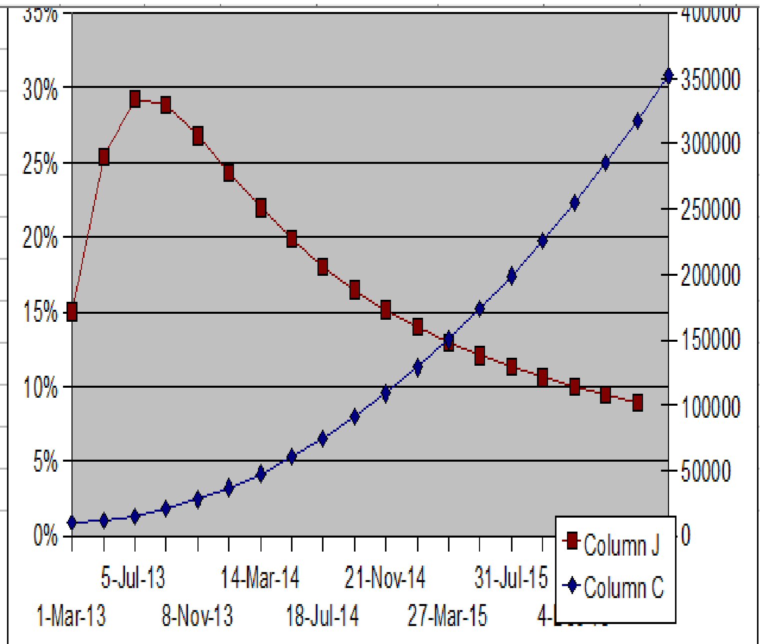
Week 1 = $200 profit, account balance = $10,200
Week 2 = $200 profit, account balance = $10,400
Week 3 = $200 profit, account balance = $10,600
Week 4 = $200 profit, account balance = $10,800
Week 5 = $200 profit, account balance = $11,000
Week 6 = $200 profit, account balance = $11,200
Week 7 = $200 profit, account balance = $11,400
Week 8 = $200 profit, account balance = $11,600
Week 9 = $200 profit, account balance = $11,800

*** ***Up until now there is no difference between the two examples, but here is where things get interesting***. ***

Going into week 10 there is $1,800 in accumulated profits. At this time a trader using fixed ratio money management with a delta of $1,800 would add a second contract. The trading method and strategy doesn't change, and the same profits that we assumed in the first example are still necessary, but instead the trader is trading with 2 contracts. If the same $200 a week is averaged per contract, the trader is now making $400 a week (2 contracts x $200 = $400). This continues until the delta of $1,800 per contract traded is reached again.

To make it easy, let's look at the spreadsheet below...

Starting Equity	$10,000.00	
Start Date	3/1/2013	
Margin	$2,000.00	
Delta	$1,800.00	
Max DD	$1,500.00	per contract
$ Goal/week	$200.00	per contract
Max Delta levels in DD	0	
Trading Days to next level	45	
Trading Weeks to next level	9	



Date at next level	From	To	Contracts	Margin	Check	Drop in Draw-down to level	Min Equity	Dip
1-Mar-13	10000	11799	1	2000	OK	1	8500	15%
3-May-13	11800	15399	2	4000	OK	2	8800	25%
5-Jul-13	15400	20799	3	6000	OK	3	10900	29%
6-Sep-13	20800	27999	4	8000	OK	4	14800	29%
8-Nov-13	28000	36999	5	10000	OK	5	20500	27%
10-Jan-14	37000	47799	6	12000	OK	6	28000	24%
14-Mar-14	47800	60399	7	14000	OK	7	37300	22%

After another $3,600 in profits has been accumulated (2 contracts x $1,800 delta) it's time to add a 3rd contract. This continues every time a delta has been achieved. Now look ahead to the bottom row of the spreadsheet. If a trader using fixed ratio money management and a delta of $1,800 averages $200 a week per contract, on March 14, 2014 the trader would be trading 7 contracts and would have made $37,800 in profits.

- Starting Equity = $10,000
- Profits = $37,800
- Account Balance after 54 weeks of trading = $47,800

The great thing about fixed ratio money management is that the trader can decide just how aggressive or conservative a trader wants to be. If the delta is lower the trader is more aggressive, if the delta is higher the trader is more conservative.

Now of course this example is based on profits and consistency. Money management can't turn a losing strategy into a winning one. What happens if you're not able to achieve week to week consistency? With fixed ratio money management you're not going to be able to increase you position size if you're not making money.

Fixed Ratio Money Management is a powerful method for traders that have access to leverage and are showing consistency. With money management traders don't need to go after the big windfall profits and "home runs", but instead can focus on small conservative goals. Money management can't turn a poor strategy into winning one, but it can make a good strategy GREAT.