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The Trading Game: Playing by the Numbers to Make Millions

"If traders plan on making serious money in [the] markets, it will boil down to one thing: how they manage their money. Outside of sheer luck, no one will make a tremendous amount of money... without a proper money management strategy. This is the basis of this book." —from the Preface

Not a week goes by that investment experts don't offer us more "winning" trading methods and systems. Some work better than others, but they all seem to stop working sooner or later. To obtain—and maintain—an edge on a regular basis, savvy traders need an effective money/risk management plan. Based on sound trading principles, *The Trading Game* gives investors proven risk management techniques that are not only easy to understand and apply, but can lead to consistent and regular profits. Written by Ryan Jones, whose seminars on risk management are eagerly attended by traders nationally, this groundbreaking book shows you step-by-step how to increase your trading profits without necessarily increasing the performance of your trading system or method. By using the management techniques described, you can reap greater profits whether the method wins 25 percent of the time, 40 percent of the time, or 90 percent of the time. Unlike other books on risk management that tend to be loaded down with complicated formulas and technical jargon, *The Trading Game* presents the topic in a way that is clear, concise, and practical. Covering the why's, what's, when's, and how's, it walks you through the entire risk management process with complete details on everything from margin requirements and fixed fractional trading to market weighting and protecting profits. Along with a complete, workable method for making \$1 million in five years or less, you'll find straightforward guidelines on determining how many trades to place, analyzing what their maximum drawdowns should be, and combining different markets and different systems for diversification. You'll also learn to assess whether you're a conservative or aggressive trader, what your goals are, and the degree to which you're able to tolerate risk. An invaluable guide for every trader and sophisticated investor, *The Trading Game* offers a powerful array of solutions to one of the most puzzling problems in trading: how to keep losses small so that profits accrue.

Table of Contents

Why? What? Where? When? Who? How?

Why (Proper) Money Management?

Types of Money Management.

Practical Facts.

Fixed Fractional Trading.

Fixed Ratio Trading.

Rate of Decrease.



Portfolios.

Market Weighting.

Market Weighting through Money Management, Not before It.

Other Profit Protecting Measures.

Risk of Ruin.

The System.

Optimization.

Commodity Trading Advisors (CTAs) and Money Management.

Money Management Marriage.

Putting It All Together.

Index.

Excerpts

Note: The Figures and/or Tables mentioned in this sample chapter do not appear on the Web.

Chapter 1 WHY? WHAT? WHERE? WHEN? WHO? HOW?

Before deciding to read a book about playing a numbers game (otherwise known as money management), most people have to be convinced that the information is important enough to be worth their time and effort. After they accept that the reasons are compelling, they must understand what money management is and how this differs from what most traders believe money management is. The next logical question is where to apply money management principles. Are certain markets or methods unsuitable for money management? Do some work better than others do? The trader who knows why it is important, what it is, and where it needs to be applied, next asks, when do I start applying it? Now? Later? After there is a certain amount of profits? After the account enters into a losing time period?

Who should apply money management principles? Isn't money management for large accounts? Aren't money managers the only ones who can really use money management principles? Is it just for a certain type of trader? Are stock traders included? Finally, how to apply money management rounds off the basic questions traders most frequently ask about this subject. This chapter answers many of these questions generally; the rest of the book provides the specifics. Fasten your seatbelts, you are about to enter the money management zone!



WHY?

Why in the world do I want to persuade sane, intelligent readers to willingly spend a few hours learning about a subject that is believed to rival accounting in boredom? Why? Because money management is misunderstood it is far from boring; it truly is exciting. No other knowledge in the whole realm of trading or investing can ignite an account faster than money management. Look at the following numbers and judge for yourself.

A common goal among many traders is to achieve \$1 million in trading profits in their lifetime. It is a dream that most traders do not expect to actualize in less than 20 years (unless they are beginners, who think they can reach \$1 million in trading profits in a little over an hour). However, the following numbers are what you need to achieve \$1 million in profits with the help of the money management techniques in this book. These numbers are based on a conservative money management approach (as opposed to aggressive).

That's right; you don't need \$1 million to achieve \$1 million. You only need to build profits that total \$100,000 based on trading a set number of stocks or a single unit, contract, or option. What this means is that a person who trades a single contract, option, or set number of shares of stock and makes \$100,000 at the end of five years, instead could make \$1 million by implementing proper money management or increasing the risk on each trade. We can break this down into a five-year achievement goal:

1. \$100,000 in profits during the next five years.
2. \$20,000 profits per year for the next five years.
3. \$1,667 profits per month for the next 60 months.
4. \$384 profits per week for the next 260 weeks
5. \$75 per day on average for the next 1,320 trading days.

This amounts to 3 ticks per day in the Standard & Poor's (S&P) Index, or less than 3 ticks per day in bonds, or \$ 3 ¼ in stock trading 100 lots per day, or 6 ticks per day in a currency market, or 2 ticks per day in the coffee market. You get the picture.

For those who trade a basket of currency markets such as Swiss franc, Japanese yen, British pound (SF, JY, and BP):

1. \$20,000 per year in profits for five years.
2. \$5,000 per market per year for the next five years.
3. \$416 per market per month for the next 60 months.
4. \$96 per market per week for the next 260 weeks.

This comes to a little over 1.5 ticks per day per market. For those who are well diversified across 10 markets:

1. \$20,000 per year in profits for the next five years.
2. \$1,667 per month in profits for the next 60 months.



3. \$167 per market per month trading 10 markets.
4. Less than \$40 per week per market.

Because we are dealing with math, the power of this type of money management is not limited to just futures and options. To accomplish the same goal trading 10 stocks of 100 lots each:

1. \$100,000 in profits over a five-year period.
2. \$20,000 each year for the next five years.
3. \$0.37 per stock, per week.
4. \$375 per week total from trading 100 lots.

Why is money management important? Because it can take an average or even less than average five-year return and produce more than enough profits to retire during that five years. Money management takes the trader past the point of no return. A trader who makes \$40,000 over the next two years and then loses the \$40,000 during the following two years has a return of \$0 (zero dollars) after four years of trading. Had the trader used proper money management, the \$40,000 could have grown to \$200,000 at the end of two years. Then, when the large losing period came, as much as \$100,000 could have been protected. After the trader made it to \$200,000, the account was in a position to withstand just about any size drawdown (as long as the trader applied money management) without going back down to zero. That is an account that is to the point of no return. The trader applying proper money management is up \$100,000, whereas the trader not applying proper money management is at \$0.

Why money management? Because it is responsible for 90 percent of the \$1 million in profits shown in the preceding five-year illustration. It isn't the system, it isn't the market being traded, it isn't the alignment of the moon and stars, it is sound, mathematically proven, money management techniques. That's why.

WHAT MONEY MANAGEMENT IS . . . AND IS NOT

Money management is 90 percent of the game. Money management is the most important aspect in trading when it comes to the bottom line. Larry Williams turned \$10,000 into \$1.1 million in one year. He states in his book *The Definitive Guide to Trading Futures* (Vol. II), "Money management [is] the most important chapter in this book." As a matter of fact, many successful traders rank money management as the highest contributor to their overall success in the markets. If money management is such a critical factor, then it becomes important to know exactly what money management is, and is not.

There are many more or less correct definitions of money management in the industry today. I am going to define the term as I use it and as you will learn it throughout this book. Although some traders insist that if you look up *boring* in the dictionary, you will find its definition is "money management," I have learned that it is one of the most fascinating elements of trading.

There are definitions of money management that relate to protective stops otherwise known as "money management stops," but this kind of definition is not used in this book. Money management, as defined here, is limited to how much of your account equity will be at risk on the next trade. It looks at the whole



of the account, applies proper mathematical formulas, and lets you know how much of the account you should risk on the next trade.

Money management can then be broken down into two different categories: *proper* and *improper* money management. Proper money management takes into account both risk and reward factors. Improper money management considers one or the other, risk or re-ward. Proper money management takes into consideration the value of the entire account. Improper money management only looks at certain account properties or characteristics such as winning percentages or win/ loss ratios. Proper money management discounts all factors that cannot be mathematically proven. Improper money management suggests that you can consider factors which cannot be mathematically proven. Proper money management says that if A and B then C. Improper money management says that if A and B then C . . . sometimes. Proper money management never dictates where to get in or where to get out of markets. This is better defined as "trade" or "risk" management and should not be confused with proper money management methods.

Nonetheless, some strategies, such as those listed in the previous paragraph, are often lumped into the money management category. And, we cover those strategies as well. For example, money management stops simply are telling you where to exit a market to cut your losses in any given trade. Even though this has a relationship to the money management definition, it is better defined as a "trade management stop" or "risk management stop." Proper money management never has anything to do with where you should enter or exit a particular trade. When placing a stop on any given position, you are determining where the trade will be exited. Money management and money management stops are two completely separate terms.

The trading method known as *pyramiding* also is frequently con-fused with money management. The trader using money management looks at the account as a whole. Pyramiding on the other hand is limited to a particular trade in a particular market regardless of the status of the account as a whole. Pyramiding says that as a particular trade is profitable, the trader may add positions to try to take advantage of the price moving in the right direction. The further the price moves in the direction of the trade, the more positions the trader adds, generally one at a time. Rarely will you see a pyramiding method that starts one contract and then adds on two more at one price level and three additional contracts at a higher level and so on. Generally, if one is traded in the beginning, each added position is with only one contract. These decisions to add onto positions are not based on the overall increase in the account, just that one position. Further, buying or selling another contract in this situation is based solely on price action.

Another common practice in trading states that you should only take trades after X number of losers in a row. This method is claimed to increase the winning percentage of trading systems. However, it cannot be mathematically proven. In fact, I mathematically disprove the notion that it can increase the winning percentage of trades. This brings in a totally different category of trading though. It does not have to do with how much to risk on the trade. It does not have anything to do with where a trade will be entered or exited. Taking trades only after X number of losers in a row answers whether to take a trade, when to take trades, and when not to take trades. This does not have to do with how much to risk on the next trade. In addition to the X number of losers in a row strategy, another strategy that answers whether or when to and when not to take trades is trading according to the x day moving average of the equity curve. This theory requires creating a moving average of the equity curve. Once the actual performance of the equity dips below that average, new trades should not be entered into until after the equity moves back above the



moving average. Since this is a strategy that determines when to stop taking trades rather than how much to risk on the following trades, it does not fall under our definition of money management.

Regardless, neither the X losers in a row nor the average equity curve trading method can be mathematically proven to improve trading results. In the chapters dealing with these methods of trading, I examine both the benefits and risks of implementing such methods. Further, I show why you cannot rely on these methods mathematically to improve trading results.

Therefore, the definition of proper money management states that it must take into consideration both risk and reward, it must take into consideration the entire value of the trading account, and it must be proven mathematically. This is a narrow definition and there are only two main methods that comply with it: the Fixed Fractional trading method and the Fixed Ratio trading method. All the methods mentioned in this chapter are thoroughly examined in this book.

WHERE?

Money management principles should be applied to short-term trading, long-term trading, options, stocks, futures, spreads, real estate, and mutual funds. This book, however, deals with the application of money management to leveraged instruments only. Therefore, this is not a book of money management for mutual fund traders. It is also not for stock investors who simply buy and hold for years on end although it does apply to stock traders who use margin. It applies to all types of options and obviously to every market in the futures and commodities group. There is no type of trading for which money management is not applicable. Some traders mistakenly think that money management is only for system traders, or system traders believe that money management is only for those who trade by the seat of their pants. The money management principles in this book should be applied to every form or non form of trading: day trading, seasonal trading, option spread trading, synthetic options, long term, trend following, breakout the list goes on and on and on. Further, it is especially applicable to any combination of these methods simply because each method or market will either produce a loss or a profit. That loss or profit is not discriminated against according to which market or strategy it came from when applied to the equity curve. Therefore, it simply does not matter.

Inevitably, when I speak at a seminar and try to make this point as bluntly as I possibly can, someone will still come up afterward and ask if this is applicable to the British pound. For clarification, if you take a trade, you should address money management, period, end of story . . . that's all she wrote.

WHEN?

When should a trader start applying money management to trading? In a word, yesterday. Money management planning should be a conscious part of preparation even before taking the first trade. Every single trader who has ever made a trade of any kind has one thing in common with every other trader they all made a money management decision when they decided how many contracts or options or markets or risk to place on the very first trade. Further, with every single trade, the trader is making a money management decision even when unaware that this is the case. You are, right now, applying some sort of money management decisions to your trading. My goals are, first, to make you aware of these decisions;



second, to convey that they should be your top priority in trading; and, third, to give you the proper money management techniques to make the most out of your trading.

If you have already started trading, it is time to reorganize and replan the strategy from here on out. It matters not whether you are trading one contract or one option or whether your account size is \$5,000 or \$5 million. You need to apply proper money management strategies now.

If you haven't started trading, you may be tempted to shove money management aside for now. Don't! Many believe money management is just an after-the-fact, or after-money-is-already-made scenario. The following story illustrates this attitude. Several years ago, a trader was excited about the potential effect of money management on the outcome of his trading. He called me up and bought my Performance I money management software program. A year later, I received a call from the same man. I got on the phone with him and he said to me, "Ryan, I am ready to use the money management program now, could you help me get started"? A bit baffled, I said, "Sure, but why did you wait a year to start using the program?" He replied that he wanted to make sure that the method he was going to trade worked first. I said, "Fair enough" and proceeded to help him out. Toward the end of the conversation, I asked, just out of curiosity, how much he had made without applying money management. He answered that he had made about \$70,000 based on trading a single contract! After I got off the floor, I told him that had he used money management from the beginning, he could have easily produced in excess of \$600,000 instead of \$70,000. When? *Now!*

WHO?

Even though this answer has been indirectly answered through the answers to the other questions, let me be direct and to the point. You. If you are even contemplating trading a leveraged instrument, whether it be stocks, commodities, options, or whatever other lever-aged market, you must address the money management issue. If you are already trading, you are running late and behind, but late is better than never. You need to apply these techniques. It doesn't matter where you went to school, your age, sex, color, race, or religion. Whether you are a mother, father, brother, sister, cousin, nephew, niece, aunt, or uncle, it matters not. Am I getting the point across? Numbers have no respect for humans. They just are.

HOW?

This is probably the only question that I cannot automatically assign the same answer to everyone. How you apply these principles to your trading is going to be different from how someone else views and applies them. How you apply these techniques will depend on several factors including but not limited to how conservative or aggressive you are, your goals as a trader, and your tolerance for risk.

The basic principles of this book apply to all traders. Whether aggressive or conservative, every trader applies the same principles and mathematically proven money management techniques. Questions such as when and who should be aggressive or conservative are answered in the following chapters.

I hope this chapter has convinced you to read on. The numbers alone are convincing enough. If you have never consciously addressed money management in your trading, you may need to go through this book a



bit slower than those who have. But if you take the necessary time and stay the course, this will be one of the most beneficial books you will ever read in your trading career.

'Fixed Ratio' Money Management

by: [Cynthia Macy](#)

Money management is the most important and overlooked subject in trading!

In my opinion, the best money management system for Forex/Futures traders is outlined in great detail in Ryan Jones' book *The Trading Game: Playing by the Numbers to Make Millions*. In this book, he teaches 'Fixed Ratio' money management. This method, he argues, will help any trading system as long as it is profitable over time.

This is how to put the fixed ratio money management system into practice:

1. Start with the total number of dollars in your trading account. For example let's say it's 1000 USD.
2. Now pick how many pips profit you need to achieve before you trade with more lots. Let's say 200 pips (10 pips/day for 20 trading days in a month average).
3. Now start trading .1 mini lots (which is profit/loss 1 USD). You would only increase to .2 lots after gaining 200 pips. When you gain 200 more pips profit you would trade .3 lots etc...
4. Here is an example of how fixed ratio trading would work:

Month 1: $\$1000 + (200 \text{ pips} \times .1 \text{ lot} = \$200)$ Total: \$1200

You start with \$1000 in your trading account and after 1 month of trading you gain 200 pips profit trading .1 lots. You now have \$1200 in your trading account. You are now at the next level. If your account balance falls below \$1200 then you will go back to trading .1 lots.

Month 2: $\$1200 + (200 \text{ pips} \times .2 \text{ lots} = \$400)$ Total: \$1600

You now start month two with \$1200 and gain 200 pips profit trading .2 lots. You now have \$1600 in your trading account. You are now on the next level. If your account falls below \$1600 then you will go back to trading .2 lots.

Month 3: $\$1600 + (200 \text{ pips} \times .3 \text{ lots} = \$600)$ Total: \$2200



You now start month three with \$1600 and gain 200 pips profit trading .3 lots. You now have \$2200 in your trading account. You are now on the next level. If your account falls below \$2200 then you will go back to trading .3 lots.

Month 4: $\$2200 + (200 \text{ pips} \times .4 \text{ lots} = \$800)$ Total: \$3000 You now start month four with \$2200 and gain 200 pips profit trading .4 lots. You now have \$3000 in your trading account. You are now on the next level. If your account falls below \$3000 then you will go back to trading .4 lots.

Month 5: $\$3000 + (200 \text{ pips} \times .5 \text{ lots} = \$1000)$ Total: \$4000

You now start month four with \$3000 and gain 200 pips profit trading .5 lots. You now have \$4000 in your trading account. You are now on the next level. If your account falls below \$4000 then you will go back to trading .5 lots.

RESULTS:

Month 6: $\$4000 + (200 \text{ pips} \times .6 \text{ lots} = \$1200)$ Total: \$5200 Month 7: $\$5200 + (200 \text{ pips} \times .7 \text{ lots} = \$1400)$ Total: \$6600 Month 8: $\$6600 + (200 \text{ pips} \times .8 \text{ lots} = \$1600)$ Total: \$8200 Month 9: $\$8200 + (200 \text{ pips} \times .9 \text{ lots} = \$1800)$ Total: \$10000 Month 10: $\$10,000 + (200 \text{ pips} \times 1 \text{ lot} = \$2000)$ Total: \$12000

Notice that gaining an average of 10 pips a day, along with fixed ratio money management helps your equity grow asymmetrically. Your \$1000 turned into \$12,000 in 10 months!

Notice that your trading system doesn't have to always hit a home run, you simply need to average 10 pips/day in this example.

If you wanted to be more conservative than the above example, you could simply add more pips profit in the formula. For example you could only increase number of lots traded after gaining 400 pips instead of 200 pips like in my example. This would mean slower growth. Try setting up a fixed ratio money management plan before you start your next live trade!