

UNDERSTANDING ACCEPTABLE TRADING RISK

By Leon Wilson

We automatically assume that 2.0% is compatible with our trading ability when this may not be the case, especially for those traders who are relatively new to the market. Combining our limited ability with a low success rate system while also applying 2.0% risk management without question to its relevance and we may be contributing to our own demise not long term survival. The chapter is too extensive for full inclusion:-

Total trading capital:- \$12000.00
Maximum single position size:- \$3000.00
Profit/loss ratio:- 30:70
% Risk to trading capital (2.0%):- \$240.00
Brokerage each way:- \$30.00 x 2 = \$60.00
Total down per unprofitable trade:- (\$240.00 + \$60.00) = \$300.00
Total losses incurred for unprofitable trades :- (\$300.00 x 7 losing trades) = \$ 2100.00
Average \$ profit to break even (per trade):- (\$2100.00 / 3) = \$700.00
Average % profit to break even (per trade):- ((\$700.00 / \$3000.00) x 100) = 23.33%

Let's have a look at some basic number crunching here for ten completed trades. We will say that you have the minimum required trading capital suggested and you have found a system that consistently produces profitable signals on average, 30% of occasions. We have intentionally kept the examples very simplistic as it's the concept we are attempting to portray:-

In order for you just to break even over ten trades you will need your three profitable trades to be in profit by \$700.00 or 23.33% on average. You are still yet to turn a profit at this point as all you have achieved so far is to recoup all of your losses associated with your seven losing trades. The lower the success rate of your system the greater the profit must be on your profitable trades to offset the associated costs in order for the system to remain viable. If you experience a notable gap down in price action that goes well beyond your acceptable down side limits then you are in serious trouble. Downward gaps are more common and usually more severe as panic is more influential over price action.

For people to claim that the profit/loss ratio is irrelevant and it's only the draw down that counts is somewhat misleading to say the least if we fail to put things into context. We must also take into account the required upside to offset this consistent draw down being generated by our system. Experience indicates that the average profitable trade is around 10.0% therefore any system that requires a greater than average upside in order to retain the status quo positions us beautifully for inescapable failure. The higher the profitability required from the system to remain viable the quicker the inevitable will occur. Low success rate systems need to be offset by reduced exposure and risk in order to minimise the effects of the constant draw down.

The disparity between the success rate of any system and the profits required to render the system profitable reflect directly on the systems long term sustain ability.

The interesting point with trading is that the sums reverse once your system reaches a 50.0% success rate. Profits become more regular than losses, therefore your losses can be marginally larger than your profits and you will still retain in business.

*Total trading capital:- \$12000.00
Maximum single position size:- \$3000.00
Profit/loss ratio:- 70:30
% Risk to trading capital (2.0%):- \$240.00
Brokerage each way:- \$30.00 x 2 = \$60.00
Total down per unprofitable trade:- (\$240.00 + \$60.00) = \$300.00
Total losses incurred for unprofitable trades :- (\$300.00 x 3 losing trades) = \$ 900.00
Average \$ profit to break even (per trade):- (\$900.00 / 7) = \$128.57
Average % profit to break even (per trade):- ((\$128.57 / \$3000.00) x 100) = 4.29%
Average profit (10.0%):- \$300.00 x 7 = \$2100.00
Max draw down in one trade and still break even:- ((\$2100.00 / \$3000.00)*100) = 70.0%*

If we are to break even over our ten trades then our seven profitable trades will need to be in profit by an average of 4.29%. If our average profit per profitable trade is 10.0% then you can not but make money with this system. The primary reason is that the balance of probability has shifted therefore tipping the scales in favour of the trader. Once a system is profitable more than 50.0% of the time then you can afford to experience the odd severe pull back in price action and still remain viable. You would be able to endure a price collapse of 70.0% below your exit value once every ten trades and still break even if your profit/loss ratio was 70:30. If you experienced this degree of negative movement prior to exiting with a low success rate system then you are crippling yourself financially.

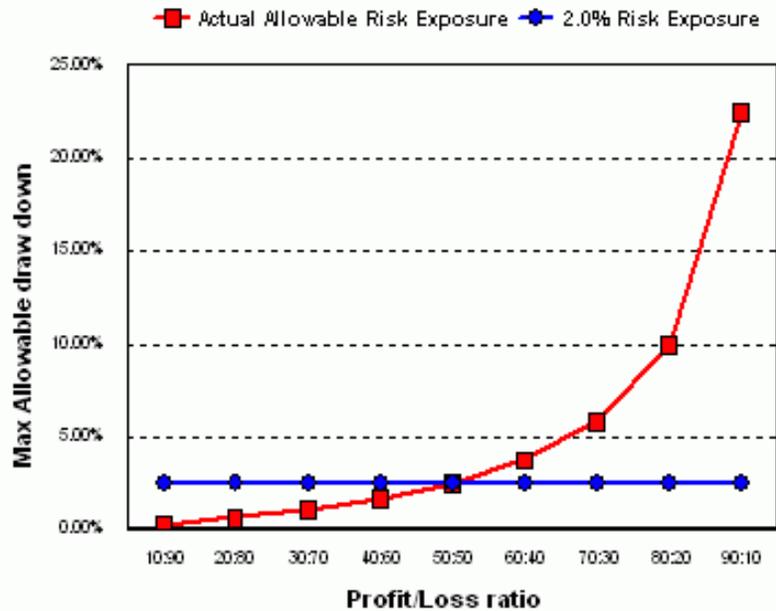
The turtle traders apparently traded a system that experienced little more than a 40.0% success rate. While the system is a closely guarded secret, what little information has leaked out to the general trading public would indicate that the key to the system is the trailing stop and risk management. The discipline required to trade a low success rate system is significant and the required discipline increases exponentially as the success rate of the system declines, this generally proving to be beyond the application of the average trader. Position sizing and risk management must be tailored to suit the specifics of the system.

Total trading capital:- \$12000.00
Maximum single position size:- \$3000.00
Average profit per trade:-(\$300.00)
% Risk to trading capital (generally accepted @ 2.0%):- \$240.00
Brokerage each way:- \$30.00 x 2 = \$60.00
Total down per unprofitable trade:- (\$240.00 + \$60.00) = \$300.00

I have always advocated that a system should have a minimum success rate of 50.0%. Not that lesser systems are necessarily less profitable but rather the psychological impact of experiencing consistent losses can prove an impenetrable barrier for most. A dominant number of losses makes us feel as though we are unsuccessful in our field of endeavour. We will continue with our initial sample account balance. This time we will adjust the maximum allowable draw down per ten trades in order to break even. By doing this you will get some idea of the effects of a low success rate system.

# Profitable Trades per 10 Completed Trades	# Losing Trades per 10 Completed Trades	Total \$\$ Draw Down Per 10 Trades	Total \$\$ Profit Per 10 Trades	Maximum \$\$ draw down each Trade	Maximum % Risk each Trade
1	9	\$2,700.00	\$300.00	\$33.33	0.27%
2	8	\$2,400.00	\$600.00	\$75.00	0.62%
*3	*7	\$2,100.00	\$900.00	\$128.57	1.07%
4	6	\$1,800.00	\$1,200.00	\$200.00	1.66%
5	5	\$1,500.00	\$1,500.00	\$300.00	2.50%
6	4	\$1,200.00	\$1,800.00	\$450.00	3.75%
7	3	\$900.00	\$2,100.00	\$700.00	5.83%
8	2	\$600.00	\$2,400.00	\$1,200.00	10.00%
9	1	\$300.00	\$2,700.00	\$2,700.00	22.50%

This time we have added brokerage to the equation. We have a maximum of 2.0% risk with any one trade yet brokerage has lifted the exposure to 2.5% and we have only used a nominal value of \$30.00. Some full service brokers still charge brokerage out at 1.5% or a minimum cost of approximately \$60.00 to \$80.00 each way. Recalculate the effects of brokerage and you can see why most people go broke before they learn the necessary skills of survival.



The reality of the situation is that if your system only produces profitable signals 30.0% of the time then your maximum allowable risk drops from the generally accepted level of 2.0% to 1.07%. With all small accounts it is often necessary to over expose a position to risk in order for it to remain viable. This is not an ideal situation but some times it's unavoidable. Mix this requirement with a low success rate trading system and you are on a certain path to destruction.

EXPECTANCY

Expectancy tells you the net profit or loss that you can expect over a large number of single unit trades. Expectancy is = (probability of winning x average win) - (probability of losing x average loss)

Expectancy and probability of winning are not the same thing. People have a bias to want to be right on every trade or investment. As a result, they tend to gravitate towards high probability entry systems. Yet quite often these systems are also associated with large losses and lead to negative expectancy. As a result, always take your risk in the direction of the expectancy of your System. The impact of expectancy is discussed in Dr Van Tharp called **Trade Your Way To Financial Freedom. Trade Your Way To Financial Freedom by Dr Van Tharp.**