

Indeed, many traders do understand the importance of risk management, but they often think it's enough to learn just a few of the basics. That is a wide spread error I repeatedly encounter in my work with traders. It's not enough to simply use one percent of available capital or to place a stop loss where it looks good on the chart. You also won't find success by using just one contract in the futures market or 100 shares in the stock market.

The biggest mistake of all is failing to correlate a price chart with the trading account. Even the very basics in this area are ignored – no wonder so many accounts are in the red. Subsequently, our discussion will focus on fundamentals, giving traders the tools they need to better manage their account and still actively trade it.

# **Begin with the Account**

When looking for the right trade setup many traders rely on charts in an effort to forecast future market direction before opening their trades. This method causes errors and losses because prices cannot be controlled. Traders, however, must attempt to control as many parameters as possible. Table 1 shows a comparison of several controllable and uncontrollable parameters. Not all possibilities are shown, but this gives you a good idea of what is meant. You can see that price forecasting is not one of the controllable parameters so it plays only a minor role in profit attainment. More important are the parameters directly related to the account. The

#### T1) Parameter Choice and Controllability Parameter Controllable Not Controllable Success **Controllable** Chances **Price Forecast** Market T Participation Choice of î ٦ſ Volatility Number of Positions Indicators ⊥ (i.e. MACD, etc) The table shows a comparison of controllable and non-controllable parameters. Source: www.tradenetconsulting.com

trader can control account inflows and outflows, making them much more important than price forecasting.

Subsequently, the initial plan for any trade must be based on the account and not the price chart. In other words, you do not look at the chart first when you want to trade, but the account, because the account determines how the next trade should look. There are, of course, various strategies that can be used. What's important, however, is to bring account volatility under control by applying an appropriate money management model (there are eight basic models that, because of space considerations cannot be described in detail here), for instance the volatility of any new trades must be reduced during a loss series and vice versa.

If trade planning begins with the account, you avoid "gut-feeling" trades and in most cases your results will improve substantially. At worst you will learn to manage controllable parameters more successfully and your results will at least improve.

# Risk

Risk defines nothing more than an adverse open trade and its accompanying loss. A trader's job is to reduce the loss effectively along with the accompanying risk or eliminate it altogether if possible. The better a trader can accomplish this, the more likely he will produce consistent profits. That's probably nothing new to most traders. The question is how you reduce risk sensibly. It is also interesting to know how risk is created, how it's distributed, and why high risk can, in fact, be useful.

Dealing sensibly with risk means to first categorise it. The unique part of this process is that the grouping takes place in time units and not in loss categories.

A typically followed time unit as far as money flows are concerned is that of the month, which makes it suitable for an examination of risk. A normal month contains about 20 trading days, i.e. a trader has 20 days time to increase capital in his account. Subsequently, the risk contained in every trade shall initially be divided over this time frame. Risk is lowest on the first day of the trade because there are 19 more days left in the cycle. However, with every passing day risk increases because less and less time is available to produce a profit.

This applies to a linear profit curve where average profits are always around the same amount or a sideways account trend where hardly any profits are booked. It also applies to a linear loss curve in which losses always amount to around the same figure. Here too the risk of further loss increases with every passing day. Be aware that this is only a simple description of this procedure. In more complex scenarios risk depends on many factors and changes considerably in the course of several trades. In extreme cases risk can vacillate between 0% and 100%, however going into detail here would go beyond the scope of this article.

A large win or loss changes the risk profile immediately. If a trader profits, risk suddenly increases, effectively preventing a high number of further trades. This is a type of account security measure, preserving newly produced profits. It's similar to a football team that is leading by a score of 1:0 with 20 minutes left in the game. The coach will try to save the lead during the remaining 20 minutes by focusing more on defence. How would that work in account management if we produced a profit?



Firstly, you don't have to worry that trading stops from this point on. In fact, work continues normally, but because of the large profit that was attained, strategy changes. Now, instead of continuing to wait for a similar trade to present itself, the volatility of the traded security is assigned a higher weighting, taking on a greater meaning for the next trade. If for instance the preceding big profit came from a trade in the stock Google, a high volatility security, the trader might choose for the next trade a security like Boeing or General Motors, whose intraday movements are less unpredictable. Possible profits are smaller, but the risk of loss is also smaller and the latest profit is better protected.

#### **Trade is Closed with High Profit**

Figure 1 shows the relation between profit, risk and applied volatility. In this example, a large profit is attained on the fifth trading day reaching the trader's monthly goal. On the same day, the risk for any further trades increases to 100% because every additional trade could create a loss, reducing the already-booked profit. The example also shows that starting on the sixth day, securities with less volatility must be traded because only these securities can effectively reduce risk. However, it doesn't mean that trading must cease, just that the attained profit be controlled by the trader. If trades continue to be profitable then risk can even be reduced, because part of the profit can be used again as risk capital. In this way losses are taken from profit and not from the substance of the account.

### **Profit Increase Slowly and Steadily**

Figure 2 shows a scenario of relatively constant profit increases. Profit increases slowly but steadily and risk increases in the same way. The monthly goal is reached on the 15<sup>th</sup> trading day. Profits remain at that level and risk does too, but only for a short time as it begins to decrease as the month's end approaches.

As profits and risk increase, volatility falls and conserves profit. This inverse relationship of increasing risk and decreasing volatility is always present, but in varying degrees.

# **Gradual Losses**

How does this look when losses occur? The situation is about the same, but now remaining capital in the account must be preserved. Risk



increases again, however, not as strongly as in a profit situation since the trader must continue to trade in order to win back lost capital. Two other trading components must now also change - the volatility of the next trade and the position size, which of course must be reduced. Indeed, risk increases when losses are incurred, but despite the higher risk, market participation must continue. The only solution to this dilemma is the utilisation of a component that until now has not been associated with the account; namely time. Since in a loss situation the trader cannot increase position size and may not consider higher volatility securities, the only remaining option is to increase the component of time. That means the trader must allow more time to attain the same profit as would be the case if he were in a win situation.

Many traders fail on this point because it's counter to human nature. In order to regain a loss, most traders try either to increase position size or try to trade more often. Both increase losses and not profits.

Figure 3 shows the correct procedure. As losses increase, risk increases though at a somewhat slower pace as in a profit scenario. Simultaneously volatility quickly decreases and remains at a very low level for the rest of the month.

This is evidence of the time component. Because of the lowered volatility the trader now requires more time to regain the incurred loss. And he should definitely take the time.

## Sudden Losses

Finally, figure 4 shows a case of high and sudden loss. Since the month's loss limit is already reached on the fifth trading day, risk increases quickly. Simultaneously volatility decreases to a minimum and remains there for the rest of the month. Profit can now only be attained by increasing the time factor. All other components must remain constant and not be changed.

# **Sideways Account Trend**

From the previous paragraphs it is easy to see that in the case of sideways trend in the account, risk nevertheless increases because less time remains in the remaining trading days to attain the monthly profit goal. Simultaneously with increasing risk, target volatility decreases.

#### **Monthly Consideration**

How do you proceed when you've closed the month with a loss, and start the new month in the red? The only reasonable solution here is again the time component. If you cannot give trades time, you will hardly have a chance to recoup losses.

#### **Positive Pyramiding**

At this stage let's take a quick look at the world of gambling. If a player in a game such as roulette doubles his bet each time he losses, he is using a so-called Martingale strategy. This doubling of the bet with each loss means that the first win to occur will recoup all previous losses and gain one unit of profit.

Theoretically the Martingale strategy works, but in practice it can hardly be recommended. It always leads to loss for two reasons; first, the player must actually be capable of doubling his bet every time in a long loss series. If you theoretically play it through, you quickly see that the capital needed play even after a few losses becomes so high that most players, even if they are wealthy, cannot keep up financially. Often, after just a few rounds, the account or the player's cash reserves are too small to continue.

Not only that, there are table limits at casinos that cannot be violated. For example, tables that allow a maximum bet of 100.00 Euro or others that allow a maximum of 1000.00 Euro. The amount of any one bet is limited. If a player gets near this limit, he can no longer double his position and would no longer be capable of recouping previous losses with one big win using the Martingale strategy. This leads inevitably to loss.

Reversing the Martingale strategy, however, can be effective. In this case, positions are increased only when a win occurs. This is referred to as an Antimartingale strategy a technique that can be very profitable. The strategy also involves holding bets constant during a loss series. This keeps losses small whilst maximising winning phases. There are some very complex methods describing how positions should be increased. The important thing to remember is that bets remain at one small size during a loss series, and are increased only in the case of profits.

Back to trading and our examination of risk. Successful traders have learned to build dynamic positions in a profit situation also

