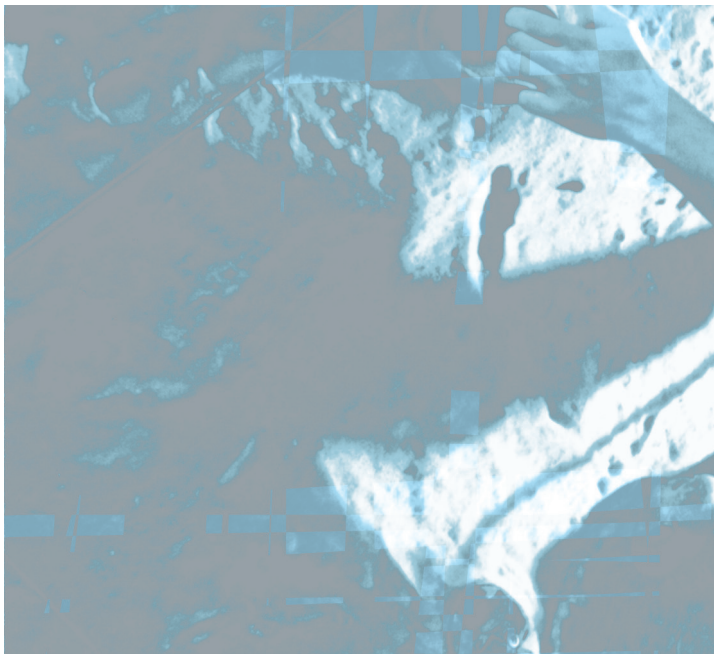


Trading Without Risk – Is it possible?



Risk doesn't play a big role at the beginning of a trading career. With interest and enthusiasm, the majority of traders focus on technical analysis or mechanical trading systems without paying much attention to risk. The first losses naturally change all that. It gradually becomes apparent that every trade is indeed connected with risk, otherwise money would not be lost. But risk is an abstract term that can hardly be managed with technical indicators.

■ The methods most traders use to attempt to avoid risk are diverse, but often they can be found within the realm of technical analysis. Through what is assumed to be appropriate methods, traders try to forecast the price of a security as accurately as possible. The thought is simple, if price can be accurately forecasted, then the chance of success increases and more trades are profitable. Then, the realised profit can be used to keep risk small.

At least the latter part of the above consideration leads in the right direction, because to be consistently profitable, risk must indeed be kept to a minimum. The first part, however, contains an unknown that so far has not been solved satisfactorily in the history of trading. Whatever method is applied, price forecasting remains unreliable and therefore cannot be used to reduce risk. How risk can, in fact, be effectively reduced is the subject of this article.

Control

Firstly, every trader must consider the components his mode of trading. The more components that can be controlled, the closer a trader comes to realising consistent profits. It helps to consider how the highest level of control can be exercised on a trade. Ideally, 100%

control is desirable, but in reality hardly practical. If it were possible to completely control all aspects of a trade, then it would also be possible to control, measure, and forecast the profit – an ideal scenario.

The components a trader should consider are the ones he can indeed control. These components are decisive for success. A trader must try to strike a healthy balance between opportunity and risk in his account if he wants to be successful (Figure 1). This balance can only be achieved with control, not in attempting to forecast the future course of prices.

Controllable Trading Parameters

Loss: Loss depends on many factors and must be calculated for every trade. Mainly, loss depends on account size, the volatility of the security to be traded, the security's price, the account's profit or loss for the period, as well as other individual parameters. A trade should only be opened if the possible loss can be calculated beforehand and also abided by. A sensible trading plan should also include provisions for the total allowable account risk to be spread among the positions to be traded. Loss is one of the parameters a trader can control, because he can limit the loss anytime during the trade by closing it.

Profit: This is also a parameter traders can control. However, similar to losses, it makes no sense to calculate profits exactly. Here, it is easy for a trader to fall into a mental trap, because if a trade fails to attain the predefined profit by just a few Euros or Dollars, then the position often stays open in an attempt to reach the desired profit goal even though the price move is long over.

As a result, the trader gives up part of the profit or even ends up with a loss, just because he wanted to reach the predefined profit target exactly. It is much more practical to define a certain profit area and to re-evaluate the trade once it reaches this area. If the re-evaluation results in a change of the reason for being in the trade, then profits can be realised and the risk of giving them back eliminated (see figure 2).

Profit to Loss Ratio: The P/L ratio also belongs to risk management and is determined before opening a position. Consistent profitability is first possible at a ratio of 2:1, i.e. when the potential profit is two times as great as the potential loss. There are many errors that can be made when calculating P/L ratios. Those seeking a closer look at this material should read works by author Van K. Tharp. Tharp however, does not go beyond the basics. In fact, most available literature deals only fleetingly with the subject, so anyone looking for a deeper understanding should seek the help of an experienced trader or coach who can help in the application of more advanced profit management concepts.

This is important because the optimal P/L ratio changes with every trade. Tharp maintains that the P/L ratio remains constant, but this author does not agree. The control function is always subservient to the account traded. It is from here that all a trader's efforts to attain profit are focused. If the account changes, and the volatility of profits flowing to and losses flowing from the account changes then the control parameters of the next trade must also change. A good trader needs to be able to attain a balance with these parameters. The P/L ratio especially must be precisely controlled. That requires experience and is not easy to learn on your own.

Volatility: In a big way, a security's volatility determines the account's position mix and the correlation of the various individual

positions. The amount of volatility chosen depends on desired risk and determines the speed of any changes to the account. Without properly gauging volatility, any type of systematic approach to profit realisation will be limited to a pure game of chance.

Volatility also determines position size. As an example, we will use an account that was just opened and awaiting its first trade. If a high volatility security is chosen for the first trade, or even a future, then you must assume a relatively high risk right from the start. Because of the high risk, the position size must automatically be reduced, otherwise the effect is magnified. Let's assume this first trade leads to a profit of \$500. In this case, an increased volatility has been purchased for the second trade because risk can be transferred in part to realised profits. In practice, this means the increased risk of a second position is partially compensated by the realised profit of the first trade. For example, the new position could be closed if half of the first trade's profits are lost.

Alternatively, the trader could choose lower risk and let the new position run longer against the profits of the first. The time advantage keeps the trader in the position long enough so that it is still open when it finally begins producing profits. You can see that playing with the swings of a position will produce varying results for the account and risk can be controlled exactly.

Position Size: Position size is the determining factor of every portfolio. Those who control position size precisely have the best chance at success; those who only touch on or ignore it completely will rarely see consistent profits. In any case, it's not adequate to simply trade a fixed percentage of the account or a predefined lot size because that doesn't correlate with the market and the changing volatility of the traded securities. Technical analysis here especially shows enormous deficits and gives no indication about correct position size, leaving the trader alone in the search for a solution. She may try to forecast price, but position size is often not considered thoroughly and is either too small or too large. For example if a position is opened when the market opens, it could result in a large profit or loss. If the same position is opened during the lunch hour, then you would have to expect a smaller profit or loss. This shows that the same position size is not always right for every trade. Controlling position size correctly is a major key to success.

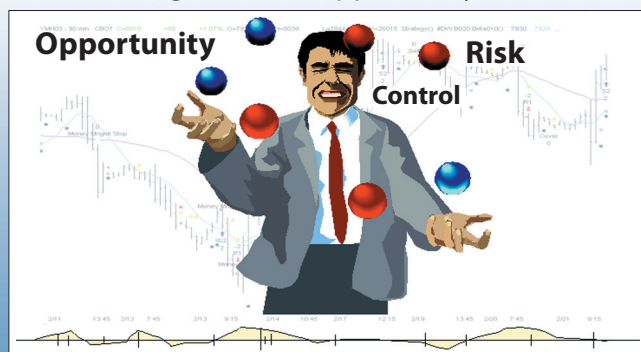
Holding Time: The holding time of a trade depends on the size of the position. Generally speaking, the larger the size, the shorter the holding time because of the increased risk. If the position is reduced, holding time can be increased.

Correlation: This is also one of the parameters a trader can control directly. There are various types of correlations that can be used to control an account, for example industry correlation when a portfolio contains stocks of the same industry or sector.

Another form is the profit/loss correlation in which incurring losses are calculated against available profits when both securities have similar volatilities.

Position Hedging: Risk can be reduced significantly by placing positions against one another. If the account contains a long position,

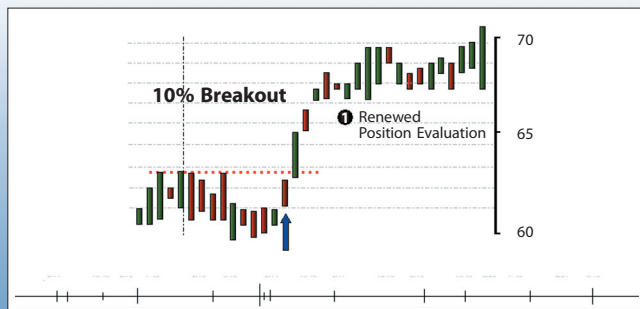
F1) Balancing Risk and Opportunity



It's important to find the balance between risk, opportunity and control.

Source: www.tradenetconsulting.com

F2) Position Evaluation



Instead of setting a simple stop, each position in the profit should be examined again and the correlation to the account be computed again.

Source: www.tradenetconsulting.com

a short position can be placed against it. This initially keeps an account delta neutral and is a very good tactic during sideways markets until the direction of an eventual breakout becomes clear. When the breakout occurs, the losing position is closed.

Abstaining: If there is no position then there is no risk. This is not as strange as it sounds. For example, it makes little sense to open a new position one half hour before the market closes if the market has been in a sideways trend all day. Here, it is often much better to stay out of the market and wait for the following trading day.

Profit Hedging: Managing risk with open profits can reduce the risk factor to zero. Proper application of this concept though is difficult and is not covered well in current literature, making it difficult to learn. The method involves securing an open profit in the account (a position that has moved into profit but has not yet been closed) in a way that part of the profit is used for new positions. The new positions indeed have individual risk, but this risk has no effect on the trader's account, because it is compensated in part by the open position. These types of positions change dynamically and stops must be continually adjusted. That's why it makes sense to use stop chains to secure them, which are either manually executed or placed automatically by the trading software.

This is a complex technique, because stops are set using a number of the previously discussed parameters that must be weighed individually.

Diversification – is it always the right choice?

Spreading risk over several positions is often suggested as a way to reduce risk in general. The idea is to reduce individual trade risk. This can be problematic however because it is based on a false premise, namely that risk stems from the movement of price i.e. the chart. Actually, though, it does not exist in the price of the security but in the account of the trader.

This can be easily illustrated. If a trader opens two positions instead of one, there are three basic scenarios for the trades. Both positions

F3) System Development



At the point X3 a loss would have developed, although the analysis and the entry were long at the point E. This shows the meaning of the exit.

Source: www.tradenetconsulting.com

can move into profit together. In this case, the trader has increased his profit potential substantially with these two positions. In the second scenario both positions show losses. Here the loss potential has been doubled. This becomes problematic because the pre-calculated maximum allowable loss could be reached within a very short period of time, stopping the trader out of his positions too quickly. In the third scenario, position 1 moves into profit whilst position 2 ends up showing a loss. This case is neutral, keeping risk and profit potential in balance.

The amount of the profit or the loss is increased by the second position. But this increase only occurs in the account and not on the respective charts. That's why diversification without correlation to the account should be avoided.

Technical Analysis

In our work with new traders I've noticed that exposure to technical analysis can be one of the biggest problems for newcomers. This is illustrated in figure 3.

Assuming technical analysis generates a buy signal and the trader follows it, opening a long position at point A. There are three basic possible outcomes that can change the value of the traders account. If the position is closed at point X1 then a profit is made. If the position is held too long and is instead closed at point X2 it results in neither profit nor loss. If the trader closes the position at point X3 then a loss is incurred. If we analyse the three possibilities, it is easy to see that only one results in profit. Entry was predetermined by the buy signal that the trader followed. The exit must be re-evaluated and depends on a number of factors. It is important to understand that the trade results in profit in only one case, not in the other two. The position must also be closed while still showing a profit, before it turns into a loss.

That requires an active decision on the part of the trader. The point is, making this decision has nothing to do with the original analysis of the security. Profit can only be realised if the position is closed, which has nothing to do with entry. So it is not necessary to overly concern yourself with entry.

Technical analysis has absolutely nothing to do with realising profits, even though it receives most of the attention. This incongruity

causes many traders to fail. It is much more important to deal with exits as opposed to entries. The right or wrong entry increases or decreases the hit rate of the trades but has no influence on profit or loss.

Averaging Down

Many traders believe increasing position size when a loss incurs decreases risk because on a purely mathematical basis, the entry price is improved. However, there is a hitch to this theory. It's only true if the increased position does not continue to move against the trader. Since after increasing position size the trader can neither guarantee a profit nor hinder further loss. Continually adding to the position automatically increases the risk, but not the chance of making a profit. If an open position shows a loss and you increased its size, then in no way has the chance of success been increased, only the risk. It may work for a while until an increased position suddenly turns against you. The loss multiplies more quickly, erasing profits from earlier profitable transactions. This can devastate an account very quickly. The culprit here is the acceleration factor caused by the increased size. Since the acceleration factor takes effect when a loss has incurred, it comes to play at exactly the wrong time. Trading approaches that succeed use acceleration factors only in the case of profits, never in the case of a loss. The only sure way to avoid risk in the case of a loss or at least to reduce it is to close the position.

Conclusion

Anyone who trades actively should utilise measures to reduce risk. To this end, controlling each trade is indispensable. There are a series of parameters that can be determined and set by the trader that allow controlling individual trade risk.

In any case, a trader must maintain control over his account and cannot allow himself the cardinal error of always trying to forecast price. Only control will lead to long term profits. If you want to improve your trading style and the efficiency of your profit taking, you must closely examine the control of the above discussed trading parameters. The best way to do this is to enlist the help of an experience trader or trading coach who can explain the various parameters in a live trading environment.

Detlef Wormstall

After several years working in the stock market, Detlef Wormstall started to trade US stocks and futures in 1996. Since then, he has specialised in money and risk management. In addition to writing articles for several websites, he runs the portal www.tradenetconsulting.com, where many of his articles can be found. He can be contacted at info@tradenetconsulting.com.

