

# All you ever need to know about placing a stop loss

By Tom Hougaard

# Are Stops Necessary?

I imagine this is going to be my least popular article ever. It deals with stop-losses!!!

If you are a typical retail home trader, you might think stop-losses are unnecessary, but no professional trader with proper supervision will be able to trade without an exit strategy of some sort. If you want to trade like a professional, you are forced to consider the possibility you are wrong about the trade. Your job depends on it.

This article is not about why you should use a stop-loss. Rather it is where you should place the stop loss.

## WHAT QUESTIONS DOES ARTICLE ANSWER?

During a trip around Denmark I gave talks about trading and investing. I came face to face with both traders and investors. I discovered that investors are lousy risk managers. They have an attitude of invincibility. They think because they invest for the long-term they don't have to use money management.

Up in Aalborg I came face to face with a particularly ignorant investor who said he didn't need stop losses. He bought for the long-term. asked him about his most recent purchase. He had bought Novo Nordisk at 310. It was now at 290. I asked him if he would hold it if it fell to 270. He said he not only would hold it, but he would buy more. What if it fell to 250? He said he would consider it cheap, so he would probably buy more. What if it fell to 200? He said if it got to 200, he would get out. That would have been too much for him.

Bottom line, the man DID have a stop-loss. He just wasn't aware of it until he came face to face with a big loss. Everyone has a stop if you go through this mental exercise before your trade or your investment. I imagine that his stop loss could have been at a better place than at losing 33% and adding to the losing trade.

This article will focus on the techniques for placing stops on your positions. Before we come to that, there are some DO's and some DO NOT's when it comes to stops:

### **Stops don't come natural – so you have to train yourself to use them**

Everyone knows that placing a stop-loss is like admitting the possibility that you could be wrong. As no one knowingly goes into a position with the thought they might be wrong, placing a stop-loss is not a natural action. However, if you learn to place your stop-losses well, you might end up enjoying the process. At least consider it as natural and as necessary as the surgeon her their hands before operating on you.

## **Your capital is your life blood – stops keeps you alive**

I seem to have taken a step into the medical metaphors so why not stay there for a moment. Your trading capital is your life blood. If you don't protect it, you will die. All stops do is to protect you.

### **DO place stops when you are thinking straight**

DO place stop-loss when you are thinking straight – not when you are under stress because the position is losing you money. It is hard to think clearly when you are about to be hurt.

### **DO NOT move the stop-loss further away EVER**

Stops are a one-way street. When you are long you can only raise the stop. When you are short you can only lower it. We all know how frustrating it is to have our stop-losses taken out, and then see the market move back in our favour. However, that is not an argument for not having stop-losses or for moving a stop further away – and giving the trade “a bit more room”.

So let's focus our attention on the learning how to place good stops.

Do all market professionals use stop losses? NO.

There are many segments within the trading and investment community that do not use stop-losses. Hedgers don't use stops. They sell out future inventory. Option traders may use options as a hedge (stop loss) against a position.

The market is often like a chess game for big traders. They don't want to tip their hands. If they put a stop-loss in the market on a big position, it is like a red cloth to a bull. The market will seek to move to where there is liquidity. If there is a big order resting somewhere, the market may see this and be drawn towards it.

Big traders may not place stops. We are talking BIG here, probably not people like you and me. These iron-willed professionals will have mental stops but probably not physical stops. They don't want the market to know where the stops are or they don't want their broker to know where the stops are (remember a broker makes money from executing trades, so it will be in his interest that the client is stopped out).

When their levels are touched they will take their loss without remorse or second thoughts. Taking losses is part of the process of making profits.

Placing a stop loss is a challenge. We want to place a stop close enough to protect your capital but not so close that it is sucked up in the „noise“ of the market. What is “noise” I hear you ask? Noise may mean different things to different people, but to me “noise” refers to the back-and-forth movement in the market, which doesn’t change the trend.



The DAX trend looks negative, but within the two black lines the market is oscillating around 30 points up and down – without changing the trend or continuing the trend. I define this as noise.

However, you can’t ignore noise as if to say it doesn’t matter. I was short the DAX in this example, and I defined the noise as the trading range between 12740 and 12710. I placed my stop-loss outside the noise. Soon after this screenshot was taken, the market flew up to 12800.

Noise means different things to different people. Short term traders see backing and filling activity as noise. Some call it the ebb and flow of orders and business being executed - without meaning - and it does not change the direction of the market.

For long term investors, the daily volatility is just noise in a big bull run and they may not even pay close attention to it. They know not to get sucked into the emotional fray of short-term movements if they want to secure big profits. Noise could be measured in percent in their world. It is all a matter of perspective.

## Stop Loss Techniques

Let's look at a number of techniques suited to short term trading. I am a short-term trader and so are you likely to be. Short term here means day trading and trading for a few days but really not beyond 2-3 weeks.

### Hard Stop

A Hard Stop is one in which you simply place a stop a certain number of pips or points or percent from your entry price. For example, you always use a 12-point stop loss in DAX or a 25-point stop loss in Sterling Dollar.

This stop-loss doesn't make much sense, because it assumes the market is always in the same state of volatility. It sure as heck isn't. I have seen the Dow Jones index trade in a 20-point range all day – the day before Xmas. I have seen the Dow Jones jump in 50 point increments – the day Lehman Brothers went bust.

Why would you place the same 12-pip stop in both a quiet market and one showing volatile market conditions? Similarly, why would you risk the same 25 pips in both quiet and volatile market conditions? The stop is not related to the market in any way.

Despite its obvious flaws this technique is one of the most common methods used for placing a stop loss. This is also the preferred method for professionals and their risk managers. When I traded for a company, I was told I could not lose more than 50 points. As long as my losses were 50 points or less I was fine. The end result was that I always risked 50 points, even though my stop loss could have been far less.

A trader friend recalls a story from his days trading at a prop desk. *“We had a risk manager who let us get away with murder – as long as our losses were less than 35 points. It was insane because we could lose 35 points and then put on the same trade again – again with a 35-point stop loss. Even when we needed a much smaller stop-loss, we would still use a 35-point stop, because it gave our position much more leeway. The problem was that whenever we lost, we always lost 35 points.”*

**I don't think hard stops should be used. They are plain dumb to use.**

## Volatility Stop I

Volatility is a two-edged sword for traders, but I remind myself that as traders we live by the sword and we die by the sword. I love volatility and at the same time I hate volatility.

For example, how often have I bought into a signal during the morning hours in the DAX, and built up an acceptable position, and then seen my stops hit because the US markets open, and volatility cranked up 100% for 30 minutes or so.

As a short-term trader, I like the mix of quiet and volatile markets. Volatility is often associated with losses and is often blamed for them. For a day trader, this is not true. Yes, higher volatility does mean higher risk as a direct result of higher fluctuations in the price. However, while it is a concern for some, we do need volatility to make money as short-term traders. Really, volatility is a degree of uncertainty. Without volatility, there is no opportunity for short term profit.

The Volatility Stop technique adapts to the market. It dynamically self-adjusts. As such it is a much smarter way of placing a stop-loss than the “hard stop”.

What tools can you use under the heading of “Volatility Stops”.

There are a number of ways to measure volatility but a simple technique uses the Average True Range (ATR). This was developed by Welles Wilder. All charting packages will have this function.

## Volatility Stop Method 1

ATR is a measure of the underlying volatility of an instrument. If the Daily ATR is 100 over a 14- period setting, then it tells me the average High Minus Low is 100 points. Can I use this for anything as a day trader, who trades a 5-min chart? I believe I can.

On the FTSE chart I have established that the daily ATR is about 55 points. The average of the high minus low is 55 points over the last 14 trading days.



The 55 points represents a daily volatility average.

I will introduce a simple trading technique in the FTSE index by way of example. The MACD is a simple tool for timing your trading entry. I am not going to tell you what techniques to use or not to use. I find MACD a little slow. Remember – it is an **Average** CD, so there will be a delay in the signal, but for the sake of the example, I think you will like its efficiency.

The idea of a MACD system is to buy or sell short based on the crossover of the lines. The ATR suggest the stop-loss and the target.

I will use 20% ATR stop – meaning my stop loss is 20% of 55 points. If I risk 11 points, I will want to use a 150% target, meaning I will want to make 16.5 points. If I get a MACD counter signal and I am still long/short with a profit, I will move stop loss to breakeven, or I will take loss

I use a standard generic MACD with a 12-26-9 setting.

23rd June 2017

Entry Time Price Profit/Loss?

08:32 7413 0

09:42 7413 minus 7

09:52 7419 plus 4

10:42 7423 plus 16.5

11:34 7402 plus 16.5

13:34 7424 minus 7

13:56 7430 minus 4

14:02 7426 plus 16.5

14:54 7415 plus 16.5

15:54 7435 plus 4 (note – closed the position as market closed)

I am writing this on the 24th of June in the morning. So I am going to record the results for today in real-time:

Entry Time Price Profit/Loss

08:22 7464 minus 4

08:52 7466 minus 11

09:18 7467 minus 4

09:36 7465 minus 1

09:50 7466 Plus 16.5

FTSE then went into a 5 point trading range for the next 110 2-min bars. This is where an element of skill and knowledge will save you from being whipsawed from short to long and back.

15:36 7468 plus 16.5

16:14 7448 plus 5

The problem with MACD is that it is a lagging indicator. Another problem is that you don't know for sure that a MACD cross has taken place until the bar has ended. More experienced traders could probably get better entries than I have (although I doubt it –



these things tend to even themselves out over time). Here I have waited for the actual bar to close to confirm the MACD signal.

The stop-loss ratio and the profit worked exceedingly well – although it was a very limited sample space – to the point of being meaningless. Nevertheless, I hope this gives you appetite for doing your own research – or continue where I have left of.



The 55-point average daily range has 2 possible functions for me.

1. Am I trying to stay out of the noise whilst scalping and intra-day trading?
2. Am I trying to stay out of small counter-trend swings?

If I am trying to stay out of the noise for the sake of trading the market short-term (on say a 1-min or 5-min chart), I will use a stop loss of 20% of the daily ATR. At the moment, this means running stops in the DAX intra-day at around 24 points, while the FTSE I run stops around 11 points.

You must appreciate that we are talking short-term trading – with intense screen watching. I am not sure most people can stomach a 24-point stop loss in the DAX, unless they frequently get 36 points or more in profit.

I used to be ok with trading the DAX with a 12-point stop loss. That was when the DAX was trading at 8000. Now it is trading at 12700. The ATR forces you to adjust your stop over time as your products increase in absolute price.

If my desire is to run a swing trade lasting more than one trading session, then I need to entertain the idea of having a stop loss of more than 50% of the daily ATR. This means using a stop loss of 28 points in the FTSE at this point in time.

I admit that there is an arbitrary element at play here. Why 20%? Why 50%? The fact of the matter is that I need to weigh the desire for good money management with the time expended doing the research. I make my money by having positions on. The research is my road map for my action in the market, but I can't be all "research" and no trade. These two percentages have worked well for me.

I write this, not to make excuses or deflate myself, but to make sure you know you are free to inject your own taste and style into my suggestions (I am stating the obvious - I know you will anyway).

Currently Sterling Dollar is trading at 1.2700. The Daily ATR is 90. A variation of the volatility stop is to use 10% on markets where the spread is lower and the volatility is lower. 10% stop is 9 points loss with a 13.5 profit.

26th June 2017

Entry Time Price Profit/Loss?

07:10 1.2745 plus 13.5

09:00 1.2744 plus 13.5

11:20 1.2734 minus 9

15:20 1.2728 minus 9

26th June 2017 (again – but with a 20% volatility stop – risk18 to make 27)

Entry Time Price Profit/Loss?

07:10 1.2745 0 (moved stop loss up when position more than 10 in plus) 09:00 1.2744 plus 27

11:20 1.2734 0 (moved stop loss up when position more than 10 in plus) 15:20 1.2728 plus 10 (close position at market when trading day over)



The market has a “human volume” rhythm which means you need to appreciate that volatility is not uniform throughout the 24-hour time period. For example, FX traders in London are ready to work around 7am. Until then the market is dead. The green shaded area should give you all the evidence you need to understand that nothing is going on.



Some mornings the market is screaming its head off. Other mornings the market is merely limply whispering its message. I will adjust my stop accordingly.

## Volatility Stop Method II

I am currently short Dollar Yen. I am doing my best to stay with the position – balancing the trade-off between giving the position “space” but not too much space.

A simple method centres around the size of the counter-trend moves. Dollar Yen is trending down, but there are counter moves where traders are taking profits or commercials find the current price attractive.

I am trying not to get stopped out in the counter moves because I am hoping they are short-term temporary moves against the dominating trend.

The art of drawing a line on your chart of the size of the corrections gives you an idea of how much past corrections have amounted to. In a strong or a medium strong trend, corrections tend to be similar.

Today I am attempting to roll my stop so it is constantly about 15 points away from the current market price (but never moving the stop higher – of course. The last

corrections have been about 9- 12 points in size. As I type this my stop will be hit in a few ticks. Maybe.



This is a dynamic stop - a clever stop loss technique and a very potent tool for short term traders because it adjusts to the market rhythm. More technically speaking traders well traversed in the art of geometry trading would say that any correction above 12 points will “over-balance” the structure of the chart, and the market is telling you that it is now in a different degree of wave. It sounds quite Elliotastic.

## 2-Bar stop loss

The 2-bar stop loss is simple to explain. Imagine you are long the market. You look at the current bar and you compare it to the 2 bars that came before. Your stop loss should be just above the high of the two previous bars.

If the current bar closes, and you can see that the new 2-bar high is actually the bar that came just before the one which just closed, then you can move the stop loss down just above the high of the previous bar.

There are many trading techniques which are good at generating very timely signals. The Stochastic generate frequent trades. The good ones move fast in your favour but they tend to not last long.

We need to work a tight form of exit control, otherwise we will not be profitable. We must accept that Oscillators are often wrong. We have to budget for that and keep losses small because they will be frequent.

Here we have a 5-minute chart of Crude oil. I have used a Stochastic method. I review the stop-loss after each 5-min bar. I will keep trailing the stop-loss up (for the long position) and review every 5- min. If the next bar is an inside bar, where the low is higher than the previous bar, and the high is lower than the previous bar, then I do nothing.



Here I am trading US Light Crude. The signals are below

**Time Price Signal Risk Exit Time Exit Price**

13:20 43.16 Long exit below 43.06 13:55 43.26

13:55 43.26 Short exit above 43.34 14:45 43.14

What is interesting for me to demonstrate is how the Stochastics (long) gave a slightly better exit than the 2-Bar stop loss.

**Marubozu Stop**

A Marubozu bar is the technical term for what I call an Extended Bar or a Road Map Bar or even an Aggressive Bar.

It is basically a bar which tends to be longer than the preceding bars, but its most important feature is that it has no head or tail (or sometimes neither). Some call them Hit And Run bars.



It is a powerful candlestick pattern.

If it happens against the trend, it is a reversal pattern like a „key reversal“. In the direction of the trend it marks extreme conviction. So if you are long and get a Marubozu, the conviction is strong that it will continue. The market has put on a spring.

Often this leaves even our aggressive stops uselessly far behind. We cannot allow a reversal of that side before cutting the position. That would leave a lot of open profit unsecured.

The trick is to use the mid-point of the Marubozu as the stop loss (or slightly above the mid-point). Normally if the confidence is high the half way point is enough cover for you.

## Indicator Stops

The idea is to make the market show you a sign of weakness (or strength, if short) before you get out. You are less likely to get shaken out of a trade. This method makes more sense than trying to pick a top to exit your long or a bottom to exit your short. We need very sensitive indicators for this. Anything slow (moving average based) will be too late giving us the message. The best indicators to use for a stop trigger are indexed indicators such as RSI, Williams%R, Stochastics or the Commodity Channel Index.

We saw an example of the Stochastic giving a Sell signal when I was short crude oil in the example above. I got the exit signal before the 2-bar stop was activated.