The Unicorn Market Open Scalp: An Introduction to a Time-Based Mechanical Trading Strategy for Stock Indices

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Abstract

The ICT community often leans towards a discretionary, or intuition-based style of trading, which can be challenging to successfully implement due to its lack of boundaries and excessive liberty. This research paper proposes a fully mechanical trading model based on ICT concepts, that rests on sound logic, and is supported by data. The model is crafted around algorithmic price delivery principles, and has integrated time concepts as additional structural components. Our analysis reveals that this model has been consistently effective through different market conditions, from 2010 to 2022. This paper meticulously outlines the prerequisites, and offers in-depth insights into trade management techniques. It is designed to help SMC traders build a mental framework by executing a mechanical edge without compromising on their beliefs about the market.

Introduction

Around half a year ago, I made a post on Twitter, describing a new model I was in the process of testing and improving: the unicorn market open scalp (UMOS). The tweet quickly gained in popularity, and a lot of people then started to test out the model. *I, by no means, pretend that I came up with this.* A lot was taken from Michael[1], who is the primary inspiration for this particular model.

I also want to mention The Pragmatic, a dear friend of mine, without whom I would never have gotten into trading stock indices in the first place. He is the one who first introduced me to this "Unicorn" model. There are a lot of other traders who deserve a special mention here, so you can refer to the Honorable Mentions section. Please understand that this is **my version** of the model, and that it is not unique. There are multiple ways of trading the 9:30 Judas Swing open, and I do not claim that this version is objectively better than the others.

The Unicorn Market Open Scalp is a setup that is traded exclusively on the **stock indices market**. It basically takes advantage of the manipulation that occurs at 9:30, when the NYSE market opening bell rings. In other words, we are trading a highly predictable *Power of 3* range during a highly volatile time of the day (see Relevant Market Open Mechanics). I like this model a lot because it happens a few times a week, across all the major US stock indices, and you just need 30 minutes to an hour of execution and management, during a very specific time window.

The objective of this paper is to acquaint the trading community with a straightforward yet highly effective logic-based trading strategy while providing data demonstrating that the model can yield long-term capital growth, thus, by extension, narrowing the gap between neophytes and profitable trading. As per the *FOSS*[2] philosophy, I also want people to help expand this model to new horizons by adding, subtracting, or modifying elements to increase either its performance or ease of use, or overcome some of the limitations. Maybe even get some smart trader/developers to build an automation based on the logic provided here. I discuss a few possibilities on how we can expand this strategy, and would love to see what the community comes up with (see Expanding the Model).

Note: This paper is written with the expectation that readers have a basic understanding of the ICT methodology. While expertise is not required, familiarity with ICT's core concepts is recommended for better comprehension.

[1] Michael J. Huddleston, also known as The Inner Circle Trader, or simply ICT

[2] You can read about the Free and Open Source Software philosophy here.

Relevant Market Open Mechanics

Before jumping in straight into the model and executions methods, we need to understand some core mechanics of the stock market open. This will be the main logic behind the model, and will be essentially the only theory we need to trade this model profitably.

The whole model originated from when Michael started discussing market behavior at the 9:30 NYSE market open. Those who are familiar with his teachings and concepts are going to recognize similitude between UMOS and the way he teaches his students how to trade the daily range. They are indeed using the same backend logic: the *Judas Swing*.

The Judas Swing

A Judas Swing is simply a false price run, either up or down, that tricks traders in the wrong direction, before completely reversing, punishing whoever was chasing the move. For example, if higher timeframe analysis indicates that the institutional order flow is bearish, price will likely run above the last accumulation's high. In the case of the daily range, the last accumulation is the *Asian Range*.

Once above that high, retail turtle traders[3] are being led into the wrong side of the market. The bulls are trapped in their longs, and the early bears are punished by means of their stop losses being triggered. Using logic and sound analysis, we should classify as "suspect" any rally that goes against our bearish bias. They will often result in a false breakout (Huddleston, *ICT Forex - Understanding the ICT Judas Swing*).

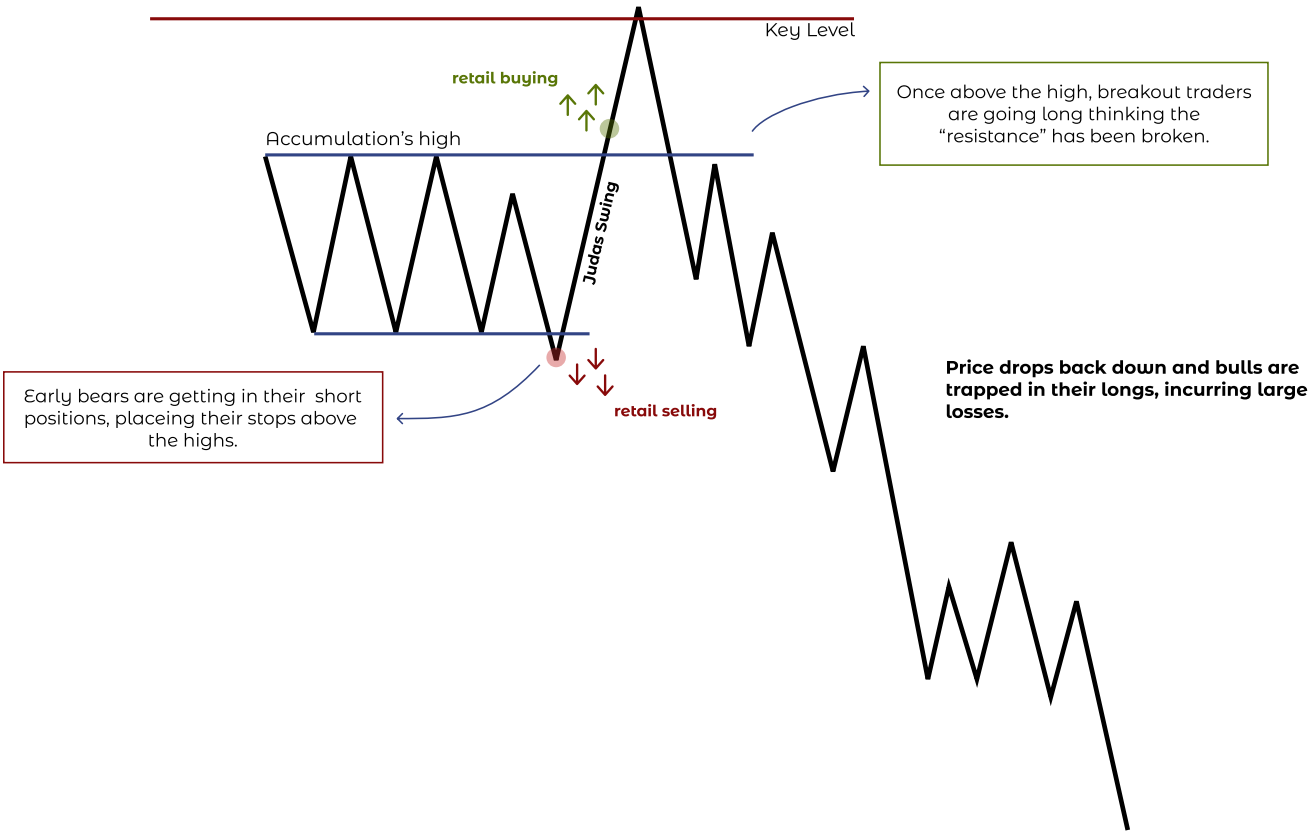


Figure 1: Graphical representation of a Judas Swing

The manipulation swing will often run to a key level. That key level can be an obvious liquidity pool, in the form of an old high, or an old low, as seen in the *figure 1*, but can also be represented by a number of

[3] A "turtle trader" is a participant in a trading strategy popularized by Richard Dennis and William Eckhardt, involving systematic trend-following techniques in financial markets.

other PD Arrays, including orderblocks, imbalances, and more. In the Execution section, you will have to determine the Judas Swing's direction. To do this, we need to observe the manipulation swing. When the market extends into a *discount array*, it signals a bullish Judas Swing, whereas when it reaches a *premium array*, it indicates a bearish Judas Swing.

Trading the traditional ICT Judas Swing usually requires the trader to have good analysis skills. Without a good ability to find the direction of the day, the Judas Swing is useless, because you won't know if it actually is a Judas Swing, or not. This is why Michael discourages newer traders to trade the London session in Forex. (Huddleston, *Commentary of September 1st 2016*, 16:15) However, the *Unicorn Market Open Scalp* (as it is now) does not require the trader to spend time on the higher timeframes, making it perfect for beginners and/or traders for whom getting to a clear daily bias is difficult or confusing. This is possible by understanding what happens at 9:30 (New York time), specifically, the indices "opening range concept".

Indices Opening Range Concept

Stock indices see their highest volume between 9:30 and 10:00 (New York time). According to Huddleston (*Index Trading Concepts - Lesson 1: Basics and Opening Range Concept*), this time window is referred to as the *opening range*. This is usually where the *Judas Swing* is going to form, thus forming either the high, or low, of the day. During the opening range, the algorithm is generally going to execute one of two commands:

1. Seek Liquidity (raid an old low/high)
2. Return to fair value (return to a key *PD Array*)

Most of the time, those events happen in a 10-mintue window after the 9:30 open, between 9:30 and 9:40 (New York time). This time fractal is when the stock market is being heavily manipulated. Novice and intermediate traders are often being punished for trading directly at the open because the volatility is so high. This is why it is recommended for traders that are getting started with this model to only execute after 9:40. At this point, the craziness has mostly calmed down, and this is when the market will offer you its best opportunities. As my first ever mentor Wesley always says: "You don't need to be the first one in [the market]".

Exercising this kind of patience, the trader will not only have a better chance at being on the right side of the market, increasing his success rate, but a more experienced trader can place his stop loss with heightened precision, which often translates to an increased reward to risk ratio, and therefore, increased profits overall.

If the trader has a good grasp of what happens during the opening range, he now doesn't need to have a clear bias for the day. All he needs to do is identify liquidity and key levels on both sides, wait for the opening range, and play off the first move to a key level, assuming that it is a Judas Swing. What I've found over the multiple hours of backtesting and live testing is that the model can present itself on the opposite direction of the day. You can enter the market, ride what looks like the distribution after a Judas Swing, close your position in profits, and watch the market reverse and rapidly expend to the opposite direction. This means that you will not always catch the actual Judas Swing, and that the daily bias is not necessary.

A few times a week, this framework will give you a nice trade setup. This method can be further enhanced by waiting a little more for an *algorithmic macro*, which completely removes the need for a daily bias because it confirms the current market direction.

Algorithmic Macros

Another important aspect of this model that makes it beginner-friendly is the price impulse timing. Indeed, understanding algorithmic macros allows traders to manage their own expectations, and assess whether the market is actually doing what it is supposed to do.

In the 2023 mentorship, in February more specifically, ICT introduced this idea of macros, describing them and giving special insights about them. According to him, there are multiple macros, each at a different time, but for this model, we will focus on two specific time windows. Huddleston (*March 30, 2023 Live Tape Reading - AM Session*) says:

> "There are macros that exist in price, where, between 9:50 and 10:10 [...] generally, you are going to see a price run that begins within that 20-minute span."

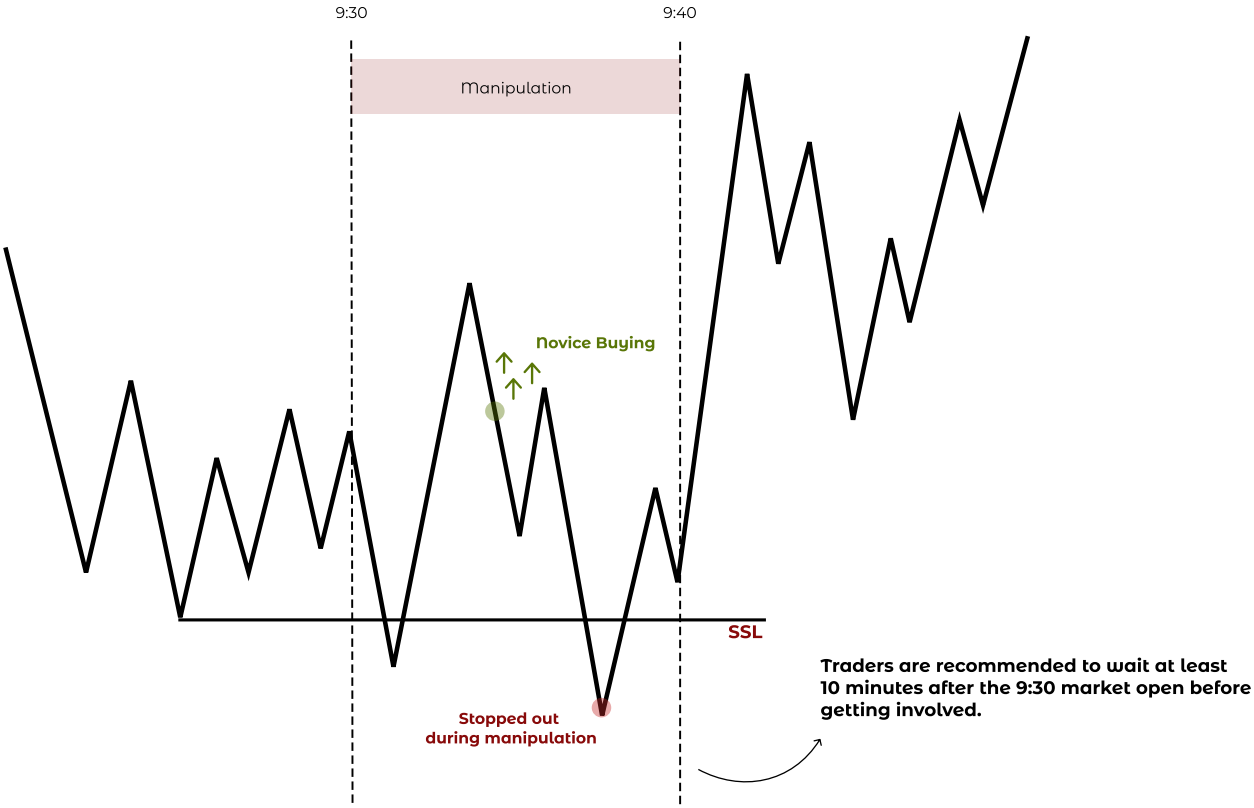


Figure 2: Graphical depiction of how the opening range manipulation can affect traders.

In computer science, a macro (short for "macro instruction") is a set of rules, patterns or instructions sent to a system, or program, that specifies how a certain input should be mapped to a replacement output (Computer Hope). If we believe that market prices are being delivered via an algorithm, then surely that system needs to receive instructions. Michael teaches that IPDA[4] executes macros at specific times during the day. The one we are going to concern ourselves with the most is the **9:50 to 10:10** (New York Time) macro. We need to understand what it does, and how we can use it to enhance the model. Without this concept of time-bound action, a less experienced trader is likely to try and enter on any key level, for he doesn't have the discretionary experience or intuition to judge whether the key level is relevant. He might also expect an aggressive price move when it is not likely to occur, or not manage the trade accordingly.

Traders can now expect that inside of this 20-minute time window, the market is going to increase its pace and run towards a key level. That key level can either be a liquidity pool, or any other PD Array that acts as the "draw on liquidity". In my original Twitter post on the model, I made a mistake. I wasn't well-informed and mentioned to "take off most of your position during that sensitive time period". I have since learned from Huddleston (*March 30, 2023 Live Tape Reading - AM Session*) that the price run only **begins** during that window, and that the whole move does not need to be completed during the macro.

> "The move begins in those twenty minutes. It is not the entirety [...] it starts doing its run between those two time windows."

Traders do not need to take off most of their position during that time window because the market will not have necessarily ended its move at 10:10. It can, if there is a fast move, but it does not have to. Instead, they should use the macro to time their entries. The goal is to have a time-based entry criteria. This way, we know exactly when we are looking for our entry, and we do not waste mental energy looking for a setup outside that time range.

[4]The 'Interbank Price Delivery Algorithm' serves as the pricing engine responsible for determining the different currency quotes.

News Events & Macros

When we expect news at 10:00 (New York Time), it slightly changes the model. We can now expect a second volatile period from 10:00 to 10:10. You should treat that 10-minute period like the opening range manipulation, which we are going to avoid by simply letting the market do its thing. Once that time span is over, we can start to look for an entry.

Since the manipulation is going to be happening during the 9:50 to 10:10 macro, traders should disregard it. It's often not going to give you a clean signal. Instead, there is a second macro that is going to be relevant there: the *10:50 to 11:10 algorithmic macro*. When there is little movement between 9:50 and 10:10, usually the market is going to start moving at 10:50. You can therefore operate out of this specific time window.

Execution

This section includes a step-by-step execution guide that traders who have understood the required concepts (see above sections) can use to validate if the price action they are looking at matches with the entry criteria. The key for executing the *unicorn market open scalp* is be methodical and mechanical. Meaning that traders should exercise caution and refrain from advancing to the subsequent stage until they have diligently verified the completion of the present step.

Entry Protocol

Regular Model

1. Wait for the 9:30 NYSE market open, identify the Judas Swing and note the direction.
2. Seek a pronounced displacement in the opposite direction to the manipulation swing.
3. Annotate clean algorithmic market structure:
   (a) When bullish, price should not reach below down-close candles, especially when they are inside imbalances.
   (b) When bearish, price should not reach above up-close candles, especially when they are inside imbalances
4. Seek a low-resistance target. It can be a liquidity pool, or any other opposing PD Array.
5. Wait for the 9:50 algorithmic macro.
6. Enter on an Institutional Order Flow Entry Drill.[5] If no entry is created by 10:10, you may conclude your search.

Alternative Model

1. Wait for the 10:00 red folder news event[6], identify the Judas Swing and note the direction.
2. Seek a pronounced displacement in the opposite direction to the manipulation swing.
3. Annotate clean algorithmic market structure:
   (a) When bullish, price should not reach below down-close candles, especially when they are inside imbalances.
   (b) When bearish, price should not reach above up-close candles, especially when they are inside imbalances
4. Seek a low-resistance target. It can be a liquidity pool, or any other opposing PD Array.

[5] This step is modular. You can substitute the IOFED with any other PD Array or PD Array combination you are comfortable with.

[6] I refer as "red folder" news the high impact events depicted with a red folder on forexfactory.com

5. If there isn't a clean signal after 10:10, wait for the 10:50 algorithmic macro.

6. Enter on an Institutional Order Flow Entry Drill. If no entry is created by 11:10, you may conclude your search.

As you can see, the alternative model, where the 10:00 news event acts at the catalyst for the manipulation instead of the 9:30 exchange open, is very similar to the regular model. I've only added it as a separate model for clarity purposes and for the sake of being complete and thorough with my explanations and examples. The only difference is when to expect the entry to present itself.

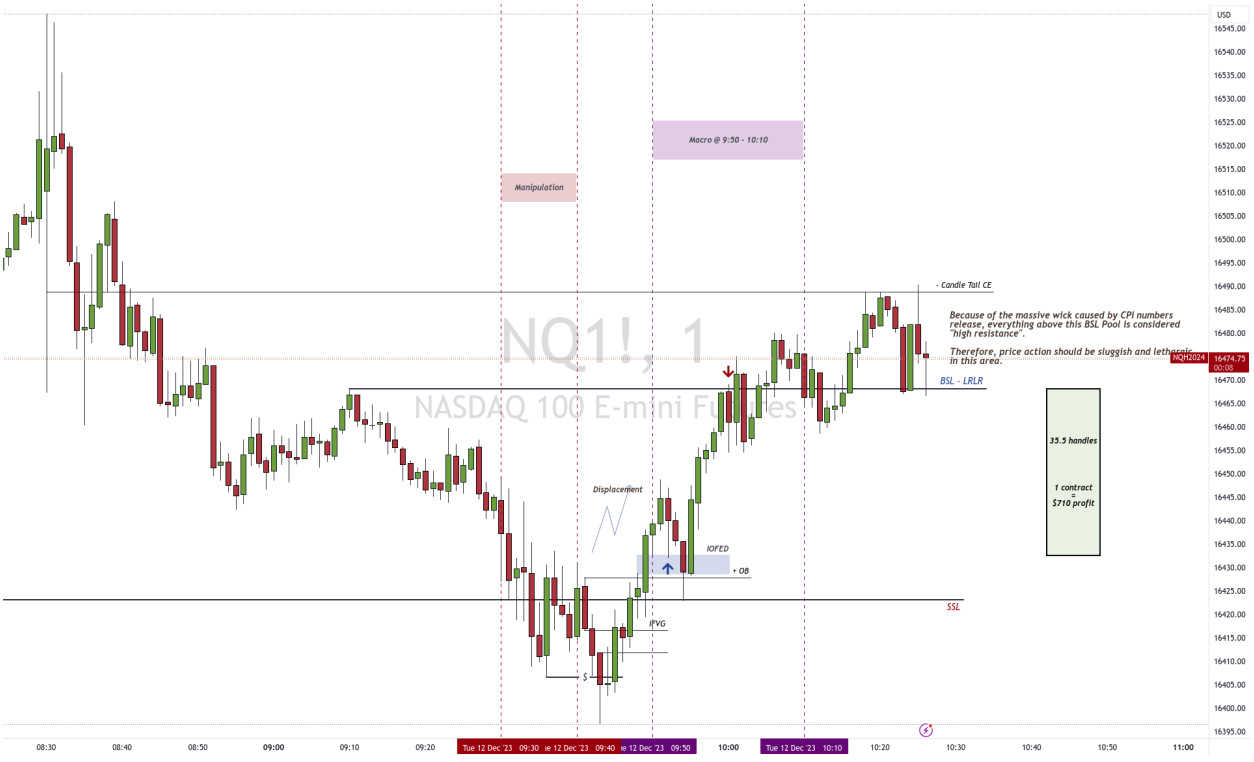


Figure 3: Example of the regular model where the judas swing is a run on liquidity

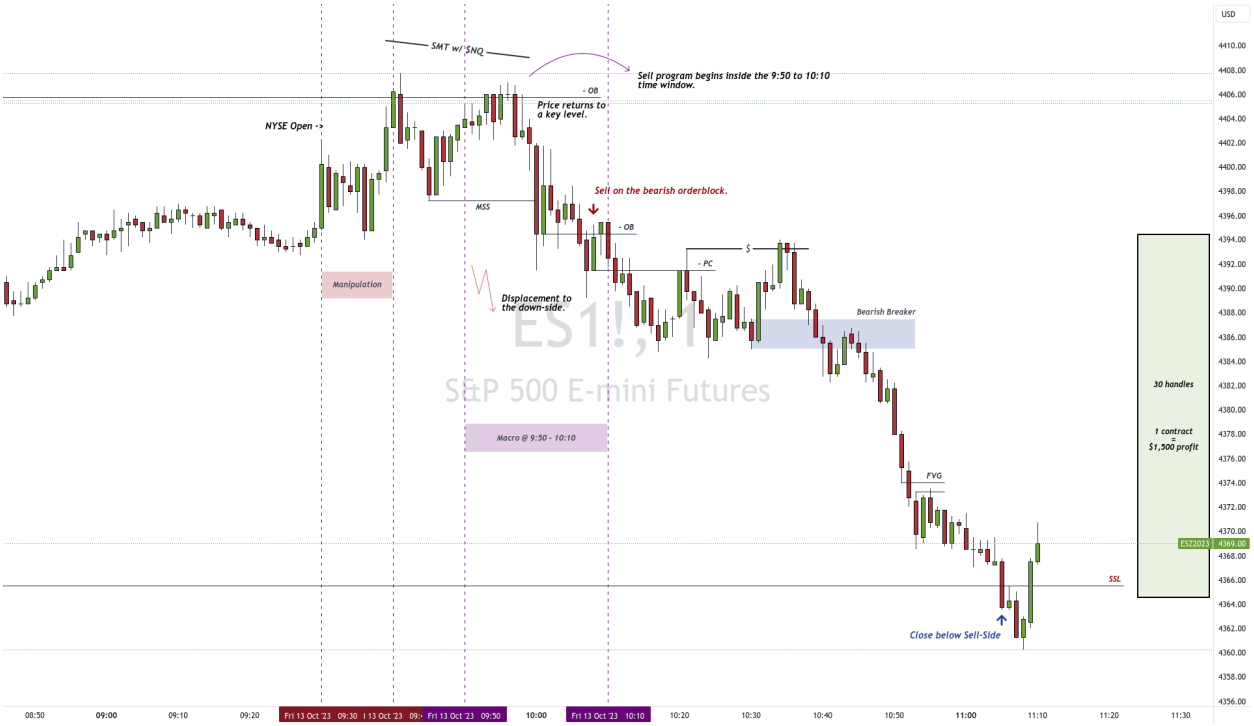


Figure 4: Example of the regular model where the judas swing is a return to fair value

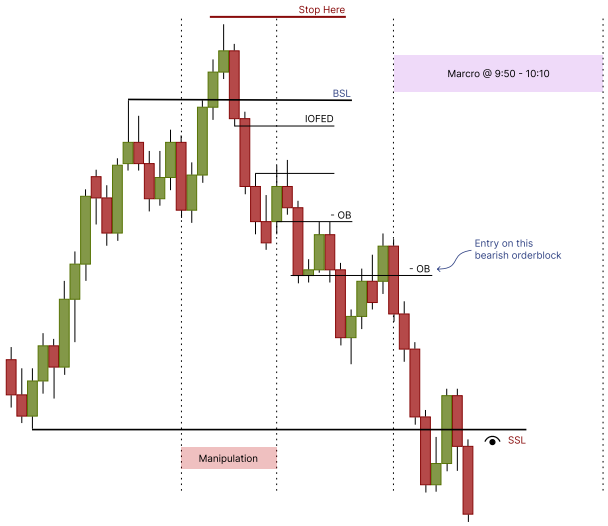
Trade Management

Note that the preceding sequence of actions exclusively outlines the entry process into the trade, without delving into the subsequent actions to be taken once you are actively engaged in it. This section will go over how you should define the risk, and what are the different ways of paying yourselves.

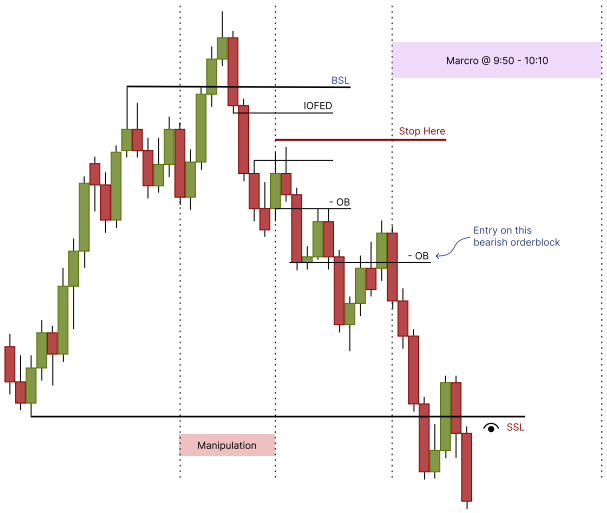
Defining Risk

First, you should always place a protective stop order when trading any kind of mechanical or subjective model. Risk always needs to be predefined before you enter the trade. Douglas (*Trading in the Zone*, p. 190) says that "there is always an optimum point at which the possibility of a trade not working is so diminished [...] that you're better off taking your loss and getting your mind clear to act on the next edge." In this section, I will discuss four ways of defining this "optimum point" when it comes to the *Unicorn Market Open Scalp*:

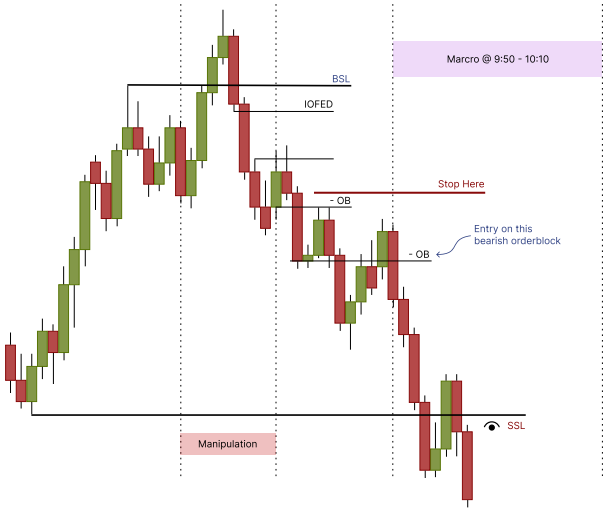
- Stop loss above (below) the swing high (low).
- Stop loss above (below) PD Arrays used for entry.
- Stop loss based on *institutional order flow*.
- Stop loss based on a fixed arbitrary distance.



(a) Stop placement above the range high.



(b) Stop placement based on algorithmic market structure.



(c) Stop placement above the premium array.

Figure 5: Examples of different risk definition methods.

Stop Loss Above or Below Swing Points: The first one is self-explanatory. You place your protective stop order above the Judas Swing's high if you're shorting the market, and below the Judas Swing's low if you're going long. This method if preferred by many traders because it substantially reduces the likelihood of the market hitting your stop loss before moving in your desired direction. Often, if you're going to be stopped out of your position, it's because price is not going in your direction at all. The only con is that out of all the methods, it's the one that often offers the worst reward to risk ratio (R:R) because the distance between the entry and the stop order is the largest. However, the higher win rate (due to the lesser chances of being stopped out when you have the right direction) makes up for it.

Note: It is worth mentioning that are exceptions to this. For example, J Trader is successfully trading the open placing a stop loss above or below swings while consistently getting a 3 R:R ratio. His model is not exactly the same, but similar in nature. He trades the 9:30 Judas, but in a more aggressive manner, only taking entries in deep retracements.

Stop Loss Above or Below PD Arrays: The second stop placement style is the most punitive one. It requires the trader to define their risk based on the PD Array used for entry. For example, if you enter on a bullish orderblock, you would place your protective stop below the down-close candle's low. Out of all the methods, it has the potential to offer the highest reward relative to the risk. However, I would only advise the more advanced traders, who are more versed in the ICT methodology, and know the intricacies of the PD Arrays they trade, to trade in this way. The novice traders can easily be drawn by this style because it has the potential to offers a high reward to risk ratio, and then be punished. Not understanding PD Arrays and institutional order flow is only part of it. Traders who will be able to successfully trade this method will also need to undergo a deep psychological metamorphosis, and align their understanding of the *algorithm* with the proper beliefs a professional trader needs. Unfortunately, this is the challenge the vast majority of ICT students fail to overcome.

Stop Loss Based on Institutional Order Flow: Another way, and my preferred method, is to place your stop loss based on the observable algorithmic market structure and institutional order flow. In both executions variants discussed above, step 3 says to "annotate clean algorithmic market structure", and specifies the criteria. The underlying premise is that in a buy program, down-close candles should be respected, especially when they are formed inside a gap. I like to call those lows *algorithm structure points*. You can therefore place your protective stop order below those down-close candles. You can invert the logic when the market is in a sell program. This method is best suited for the intermediate trader because it demands fewer elements of subjective judgment and finesse compared to the second method. This is mainly because the stop does not change in function of which PD Array you decide to enter on. It also often offers a better reward to risk ratio than the first method, because you do not place your stop as far.

Stop Loss Based on a Fixed Arbitrary Distance: The last stop placement method is the easiest to implement. I highly recommend the newer traders to start with this one. It's very easy to implement into your trading regiment, and will help with building up the discipline required to be a consistent trader. Here are the stop distance I recommend for each index[7]:

- S&P 500 ($ES): 32 ticks
- NASDAQ 100 ($NQ): 80 ticks
- Dow Jones ($YM): 40 ticks

The important thing to consider when using this method is that the distance must be **predefined before the trade**, and must be **fixed across your trade sample**[8]. Traders should still test those recommended stop distances, and tweak them to your liking, or to something that matches your personality and psyche. A trader may feel like anxious when trading with a 5-handle stop, while another might feel like it's not aggressive enough.

Taking Profits

Defining a reasonable level for profit taking is the fourth execution step. It is unfortunately too often disregarded and not taken seriously. Having a target is a non-negotiable and should always be thought of **before** entering the trade. There are two main reasons for that:

1. A specific way of determining the target defines your edge.
2. Evaluate if the opportunity is worth the risk.

There are a lot of different ways of taking profits, and each trader can have his/her personal preference. In this section, I will describe how I personally do it when I trade the *Unicorn Market Open Scalp*. Please note that the following method is what I've tested, not what I think is superior.

[7]These recommendations are based on my own experimentation. I took the average stop size I used over 500 backtested trades and corrected them to today's contract value. They do not constitute financial advice, nor do I promote their use in the trading of commodities. I am not a licensed financial advisor.

[8]Engaging in sample-based trading entails the evaluation of a specific strategy's performance on a sample-by-sample basis, as opposed to scrutinizing individual trades.

Fixed R:R Targets: When I started trading this model, I settled on a simple "3R all or nothing" management strategy. I would enter, place my stop loss, and aim for 3R. The market would either go to my target, or stop me out. During my backtesting, there weren't a lot of times when the market didn't offer me 3R. The only issue with this method is that your results will vary a lot depending on how you place your protective stop. As someone who either places his stop directly above (below) PD Arrays, or Algorithmic Structure points, I often have tighter stop than those who place their stops above the highest (lowest) swing point, thus making it easier to reach my 3R objective.

Fixed Point-Based Targets: It is important to understand what this model is supposed to accomplish, and to fix your expectations around that. This is a **scalp**. We are not trying to ride the full daily range; this particular model was not designed for that. Instead, we are taking advantage of a small price swing right after the market open. The key word is "small".

Setting good profit targets is often harder than spotting a good entry. If you cannot consistently rely on your analysis and experience to define a good exit point, you can set a static point-based profit target that you will use for every trade. For example, The Pragmatic is notorious for successfully scalping 5 points on *$ES* using this model. This might not sound like much, but it is a very reliable way of getting what you need from the market. Rare are the times when the market will not offer you 5 points. From there, it is very easy to build consistency and up the size of your trades.

I've also personally tried aiming for 10 or 12 points on *$ES* in the past. If your stops are consistently around 4 or 5 points, it can be a viable strategy. Sure, there are times when the market will run 30 full handles, but it often requires a great deal of analytic skills to know when to expect such movements, and to then place adequate targets.

Disrectionary Targets Recently, I've transitioned from always aiming for 3 R:R plays, or 12 points moves to a more flexible way of taking profits. After backtesting both and comparing, both methods have the same win rate, but the latter has a higher potential for profit, raising the expectancy. The new method is to aim for a minimum of 3 R:R for every trade, but I also leverage my discretionary trading skills to allow myself to choose higher targets when they are present.

If it is not painfully obvious that we are very likely to reach the higher target, I stick to the 3R target. If, for example, we have a PD Array (e.g. a liquidity pool) right above (below) the target, giving us a 3.5 or 4R target, I will instead aim for that. There are times when we're inside a higher timeframe *market maker buy (sell) model*, and the original consolidation is the next liquidity pool to be reached. In those instances, the trade could turn out to be a 5 or 6 R:R opportunity.

In summary, there isn't a single way to take profits. You need to go with the method that is the best suited for your personality, and for your level of experience. If you're less experienced, you should use a fix point-based target. If you're confident with analysis, and have proof that your discretionary targets are usually accurate, you can add that level of intuition to the model. The key is to always test it beforehand. The data will let you know whether your method makes sense or not.

Break-Even Rules

I want to preface this section with the following statement: **not everyone is suited, or ready, to have break-even rules in their trading plan.** If you're just starting out, odds are that you still haven't extensively worked on your trading-related psychology and mental state. Even seasoned traders will often put off this step until the gap is too painful to ignore. If that is the case, breaking even or "removing the risk" on an active trade will often be the result of pain-avoidance mechanisms in your brain, and they are rarely going to be based on logic. For those who are ready to integrate a risk-suppressing component to the model, the following will break down my the different rules that you can implement.

Some people might say that I have an "aggressive" break even methodology, but I believe that a logic-based break-even rule is way superior to a rigid mechanical one, and that, for two reasons:

1. It is more accurate.

2. You're going to be at peace with your decisions.

A rigid mechanical rule such as *"break even when you're 1R in profit"* or *"break even when you're up X points"* are not my favorites because they lack logic behind their implementation. Of course, they can work, and if, **after testing**, you find that they increase your expectancy, then by all means try to implement them into the model.

My preference leans towards rules underpinned by technical rationale. When I refer to them as "more precise", I'm suggesting they reduce the risk of a price movement stopping you out at the break-even point before continuing in your favor. This also allows for the possibility of adjusting your stop earlier, mitigating potential losses. Here are the two versions of what I think is a good logic-based rule:

Break Even Using Classical Market Structure This is the simpler approach. Once you're in a trade, you wait for the market to print a higher high or a lower low, depending on your direction. There is a caveat when using this method: (1) in a bullish scenario, the price swing that marks a higher high should start above your entry, and (2) in a bearish scenario, the price swing that marks a lower low should start below your entry.

Break Even Using Algorithmic Market Structure This is a little more complex, but better in my opinion. This is the method I currently use to establish when I need to raise (lower) my protective stop. The idea is pretty simple: you wait for the market to indicate that it wants to remain unidirectional through algorithmic market structure. Down-close candles must be respected if bullish, and up-close candles must be respected if bearish; especially when they are inside gaps or other price imbalances. For example, as soon as I see a fair value gap being respected, followed by a *change in state of delivery*, I can raise (lower) my stop.

Again, the most important aspect of this rule is being able to successfully implement them. You may have the best possible rules in your plan, but the serve no purpose if you can't abide by them.

Other Management Rules

There are other management rules worth mentioning in this paper. Effectively managing your trades is what will make the difference between good and exceptional results. However, do not forget that applying extra rules requires practice. You may not be able to stick to them from the beginning. This section will cover some beneficial rules you can implement to reduce the risk of either loss, or giving back your unrealized profit.

The 10-Candle Rule: A major advantage of a discretionary system where the trader makes decisions based on intuition is the ability to *"feel"* when the trade is not going to work out and get out while you're at break-even, or at a smaller loss. Being a mechanical model, *UMOS* does not have that luxury, so I had to come up with a way to mitigate risk when the market isn't moving in a way that is considered "high probability".

This is when I came up with the "10-Candle Rule": when the price hangs around your entry level for 10 consecutive candles, close the position at the current market price. The logic behind this simple, yet effective rule is based on something ICT said in one of his mentorship commentaries. He mentioned that on the best setups, price should be very sensitive to PD Arrays, and should not linger around your entry point. Therefore, if price sticks around my entry for 10 or more, it is no longer a high-probability setup in my eyes.

> **Note:** This does not mean that some trades will not work out when price consolidates around PD Arrays. In other circumstances, it may work out, but from my own experience and testing, it's very rare that price behaves like this and still delivers to my target.
>
> More experienced traders can refer to retail patterns and methodologies to differentiate the consolidations that represent an unwillingness for the market to keep moving in its current direction from those who are used to build liquidity. This technique is from a concept I call *"Maximum Pain Theory"*. I will eventually write a similar article on that topic.

Time-Based Exits: In the current landscape, it is evident that a substantial proportion of SMC traders acknowledge the pivotal role that timing plays in their entry decisions. Given the paramount relevance of time in trading, it raises a pertinent query: why do many traders fail to account for time when formulating their exit strategies? When ICT first introduced "kill zones", it was clear that the *London Close* was a period where price action would often become sluggish. This was the perfect **time** to close active intraday positions.

This model can incorporate a dependable exit rule based on time as well. A practice that I have personally been doing is closing my trades if I see price action slow down at the **New York lunch**. The New York lunch spans from 11:00 to 13:00 (New York time). During that period, traders should expect consolidations and shallow retracements. There is also an *algorithmic macro* between 10:50 and 11:10. If the market does not make a significant move towards my target during that macro, I will close the position at 11:15. Doing that comes back to what I was saying about expectations. This model is designed to catch a short scalp, not to get the entire daily range. It is possible that the market continues in your direction during the PM Session, but it can also retrace to your break even stop, or even run some AM Session lows (highs) before resuming its original course.

Data

This section of the paper presents the data collected and analyzed during the development of the trading model. As data is the foundation of professional trading, this section is critical to understanding the strategy's performance and viability on a longer term perspective.

Before diving into the data, it is important to understand the core principles and purpose of backtesting. Many traders have this wrong view of the method, and end up disappointed by the results they get. The main objective behind testing your model on historical data is not to see if you personally are a profitable trader, it is to check whether your strategy has an edge over time. In other words, the trader is not the one being tested, the strategy is. When testing a new strategy, you should take your time, and really focus on respecting each execution step and management rules you have. The goal here is to collect as much *pure data* as possible. Those backtesting sessions will reflect the strategy's full potential.

There is another objective a trader can have when starting a backtesting session: practice. This is done to practice the live execution of a specific model. For example, *UMOS* only has the potential to occur once every day. There is only one 9:30 open. So a trader can go and test his pattern recognition skills on historical data. This is similar to trading a demo account, although there are some differences. In any case, the results of these "practice runs" will not reflect the live market results, because there conditions are not same, the same way simulated, or demo accounts results do not necessarily represent live market results.

Disclaimer: Backtesting results may not reflect what a trader will experience in live markets. Factors such as slippage, transaction costs, and psychological differences can significantly impact the profitability of a trading strategy. Therefore, the results of the backtesting should be interpreted with caution.

Backtesting Methodology

During my research, I've devided my testing into two different blocks: the *"theory viability and refinement"*, and the *"climactic performance assessment"*. This strategic approach to the development and improvement of the trading model ensured that I ended up with the best viable model I could come up with at the time of the testing, with the parameters I had selected. Of course, if we include other parameters, we can surely find other ways of further improving the model. (see Expanding the Model).

Theory Viability and Refinement

Once I was done outlining the theoretical edge and made the first draft for the model[9], the next step was to put the theory to the test, and see whether the simplest form of the model was viable, or not. This was the

[9] As mentioned in the Introduction, I did not come up with the edge myself, I was heavily inspired by other traders.

	S&P 500	NASDAQ 100	Dow Jones Industrial
Time started	April 2010	January 2018	January 2020
Time ended	September 2013	December 2019	September 2021
Starting equity ($)	100,000	100,000	100,000
Risk per trade (%)	0.5	0.5	0.5
Number of trades	201	150	150
Trade frequency (per month)	4.56	5.77	7.14
Win rate (%)	67.16	68.00	66.00
Loss rate (%)	17.91	16.67	13.33
Break even Rate (%)	12.94	11.33	17.91
Average win (R)	2.89	3.22	3.11
Average win ($)	3,917.48	3847.87	3479.84
Average loss ($)	-1,204.63	-1151.60	-1061.45
Expectancy (R)	1.76	2.02	1.92
Profit factor	12.20	13.63	16.23
Total return ($)	480,121.82	372,814.13	328,427.85
Total return (R)	354.85	314.02	293.61
Total return (%)	480.12	372.81	328.48
Total annualized return (%)	65.94	117.67	139.17

Table 1: Macro testing environment results for the unicorn market open scalp

goal of this particular testing block.

I started the systematic backtesting of the model in a serialized fashion, wherein each series was designated with a precise objective, a distinct time window, and a different asset:

1. S&P 500 - 2010 and onwards
2. NASDAQ 100 - 2018 and onwards
3. Dow Jones Industrial - 2020 and onwards

I will refer to these series as the *macro testing environments*. They were designed to answer two questions: *"does the theoretical model work across all the major indices?"*, and *"does the theoretical model work on a large sample size*. The first question being self-explanatory, I want to focus your attention on the second. My goal was to avoid overfitting the strategy. Overfitting occurs when a model learns the training data too well, to the point that it performs poorly on new, unseen data (DataScientest). In the context of trading models, overfitting occurs when you're improving your model based on very limited results.

For example, you test a more or less complex model over 20 occurrences. You have a 50% win rate, but you notice that half your losses could have been avoided if you had moved your protective stop to break even after a 5-point movement in profit. You now add this new rule to your trading plan, and have a theoretical 25% loss rate, and 25% break-even rate. However, when you test the adjustment on a new 20-trade sample, your win rate drops from 50% to 10%, and your have 80% break-evens, which all could have been huge winners. In other words, you would have done way better with the original strategy, and your adjustments were too carefully made to fit the data you had at the time.

By testing the *unicorn market open scalp* on different time windows, I was able to limit overfitting the strategy to a specific period in time, or to a specific asset. Adding this to the *"micro testing environments"* each sample was divided into ensured that the model was "universal", and could be used until there was a major shift in the way prices are booked in the market.

As mentioned previously, the refinement of the model was done by subdividing the macro testing environments into smaller series of trades, where I tested different variables. In the S&P 500 environment, for example, I started out by only taking into account pools created during market hours to determine the Judas Swing. The premise was that there would be more liquidity at those levels, since there would be more traders. It seems like doing this offered fewer opportunities of trade, therefore reducing the compounding potential of the account, hence why the annualized return isn't as great.

	UMOS (v.1.0)
Time started	January 2022
Time ended	November 2022
Starting equity ($)	100,000
Risk per trade (%)	1
Number of trades	100
Trade frequency (per month)	9.93
Win rate (%)	59
Loss rate (%)	26
Break even Rate	15
Average win (R)	3.12
Average win ($)	7,492.22
Average loss ($)	-2,345.83
Expectancy (R)	1.58
Profit factor	7.38
Total return ($)	389,422.30
Total return (R)	161.92
Total return (%)	389.42
Total annualized return (%)	563.54

Table 2: Climactic performance assessment results for the unicorn market open scalp

This is only one example of a variable that was tested in a specific "micro testing environment". I could write pages on each variable, the reasoning behind each, and the results, but I don't think this will contribute much to this paper.

Note: This paper provides a concise overview of my refining methodology, omitting the detailed exploration of variables for brevity. If you're intrigued by the nuanced thinking behind each variable's selection and the results of the testing, express your interest. Should sufficient interest arise, I will consider incorporating this depth in future papers on different models.

Climactic Performance Assessment

This is the final testing, where I gather the results of the previous experiments, and aggregate the variables that yielded the best results. In this phase, the goal is to get a clear picture of what the model is actually capable of. At this point, the trader knows that, in theory, it is a profitable model, and that it isn't over-engineered to fit a specific data set. There are no more needs for further refinement at this point, since all the available variables, techniques, or methods have been tested.

Since the goal is not yet to test the trader's ability to execute the strategy, this final assessment can be done either via backtesting, or demo trading live data. For this paper, the *climactic performance assessment* was done by manually trading the model on historical data, starting from January 2022 while being indiscriminate of the instrument.

Results Analysis

In this section, the results in table 2 will be analyzed to allow a more comprehensive conclusion to be drawn. Analyzing data can help identify strengths and weaknesses in a strategy, as well as understand the factors that are more likely to yield a greater impact if improved.

Total Returns

When we look at the total return for the model, we can analyze it from two different points of view. The first one is strictly sticking to the percentage gain, and the second is by looking at it with the risk management

context. The latter is the one we will focus on because it is more useful to answer the profitability question. In the *climactic performance assessment*, the total R return after 100 trades stands at 161.92. Since there isn't a universal agreed-upon benchmark for day trading returns, I cannot comment on how profitable this model is, but we can make some observations.

We can compare it with the first set of tests we ran, and surprisingly, the total returns are lower. The average R return per 100 trade in the *macro testing environment* was 207.23. This number is considerably lower, and because the average winning trade returns were all similar in size, we can assume that the main factor affecting the return here is the win ratio, which will discussed further down in the analysis.

When we look at the percent or dollar return of the strategy, we notice a significant annualized return of 563.54%. Considering that the very indices we trade average between 10.13% and 13.75% per year, this is quite impressive for such a simple mechanical strategy.

Disclaimer: This return is theoretical and doesn't consider the model's limitations. Historical returns are not indicative of future prices. Exercise caution and be aware of potential risks before making financial decisions.

Frequency

Because we were looking at three different indices at the same time, we had more opportunities throughout the session, and this raised our trade frequency to around 10 trades per month, on average.

Often, because the three indices are correlated and move in tandem with one another, there were multiple trade setups per day, one on each index. When this happened, I didn't put on a trade on each, as this would increase the exposure, and if one were to fail, they would likely all fail. What I did instead was use relative strength analysis to choose one index on which to put the trade on.

With 10 trades per month, a trader can swiftly compound his/her trading account, and still have some sense of selection when engaging with the market.

Win, Loss, and Breakeven Ratios

A 59% win rate is good when you compare with the average methodologies that yield 3R or more per winning trade. It means that you would only need an average win greater than 0.69 R to break a profit on the model. With an average win of 3.12 R, we largely surpass the required criterion for profitability.

The more interesting question here is "why is the losing rate so much higher on this test run than on the previous tests?" The answer is twofold. First, the 10-month testing period isn't long enough to know whether the strategy itself was a less performant version, or if it was just something that had to do with the market conditions at that specific time.

Next, this can also be explained by how backtesting is performed. To ensure that I am testing the model itself, and not my ability to trade the model, I sometimes correct mistakes that I make when I backtest. In the *macro testing environment*, because the volume was 5 times larger, and because the rules weren't as well-defined yet, those "mistakes" could have been interpreted in a more subjective manner over the iterations. For the final test run, the criteria were much more strictly defined, and the volume of trades was a lot less, which allowed me to be more focused on the process, which reduced mistakes, thus the risk of mischaracterizing them.

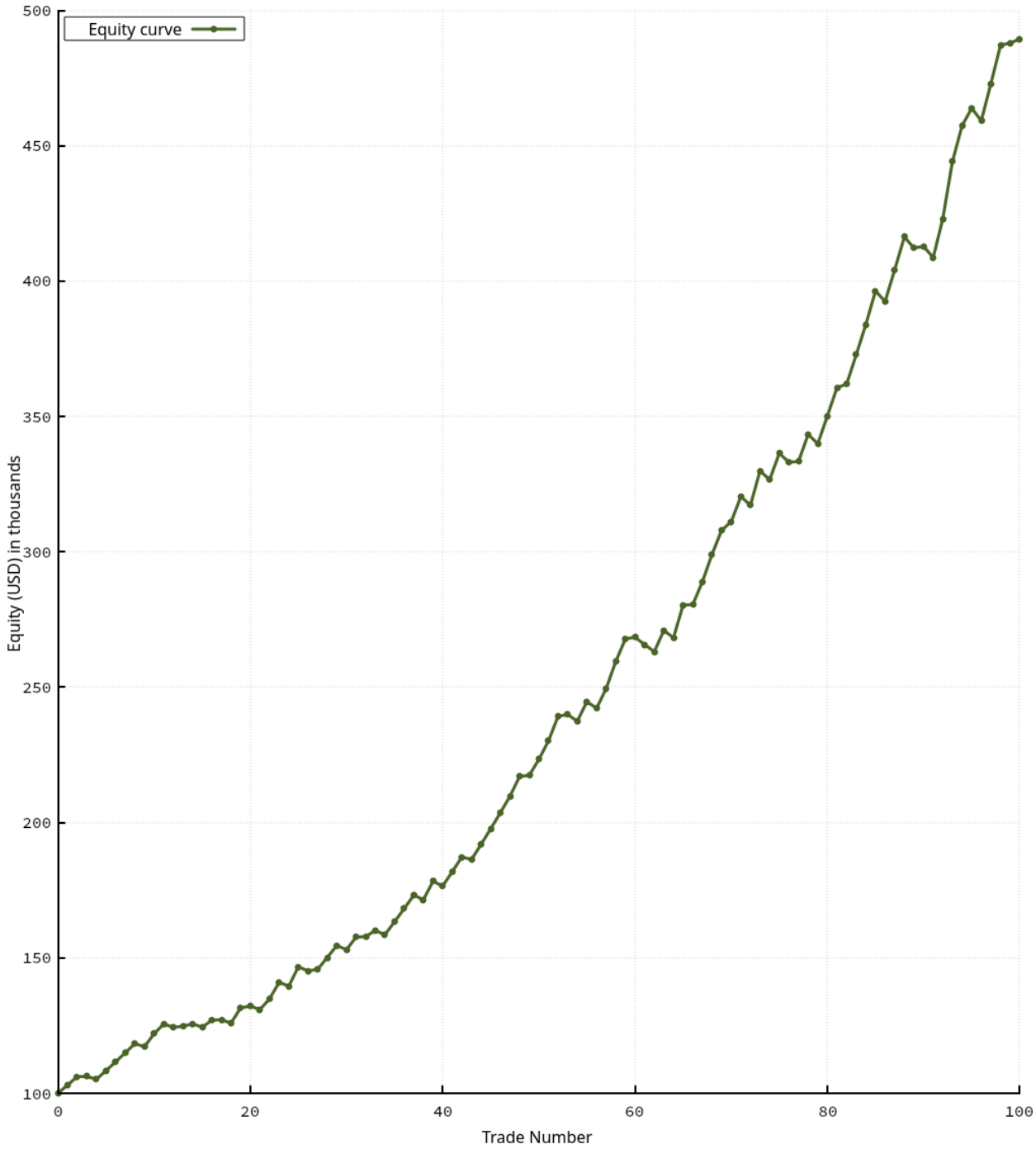


Figure 6: Climactic performance assessment equity curve.

Drawdown

The analysis of drawdown is among the most important variables to assess the quality of a trading strategy. A drawdown is the decline in value from a peak to a trough. Most long-term investors want to put their money in a place that is safe, and where drawdown is minimal.

We can have a visual representation of drawdown by looking directly at the equity curve (see figure 6). We can clearly see that there wasn't a prolonged losing streak. In fact, the model never lost more than 2 trades in a row according to the data. The highest amount of drawdown, both unrealized and realized, in dollar amount was -$11,565.46, or -2.78%. If we only look at the realized drawdown, we see that the maximum amount was -$7644.83, or -1.84%.

There were some minor setbacks, but those are only the natural losses generated by the models. In reality, major drawdown periods are rarely the cause of normal losses. Instead, they most often come from the trader's inability to control himself.

Limitations

Market Conditions

This model should not be traded in every condition. There are certain market signatures that can lower the probabilities of the model working out, or make it harder to find a proper entry. Fortunately, you can identify those signatures in the charts before you decide to take a trade. This section is a result of an enlightening conversation with Chappy on high and low probability conditions during the opening range. Low probability conditions all boil down to one thing: *High Resistance Liquidity Runs.*

The market acts like electrical current: it will take the path of least resistance to get to its objective. Knowing how to navigate through the market and filter low resistance from high resistance target can increase the effectiveness of your edge. Trading conditions awareness allows you to make better decisions, such as when to be more aggressive with your stop loss, when to expect a deeper retracement, when to expect a high (low) to be swept, etc.

Low Resistance Liquidity Runs

A low resistance liquidity run is characterized by clean and fast price action, where the objective is traded to while seeing minimal retracements. They are very satisfying conditions to work in. Your trades will run smoothly and almost never give you significant drawdown. In those conditions, the market is less likely to sweep internal range liquidity, therefore less likely to come back for your stop loss.

Traders are also less likely to make trading errors in those conditions. Since the market is swiftly moving towards the liquidity, they spend less time in each individual trade. That gives them a shorter time window for committing errors or letting doubt or other emotions slip through.

Identification: Low resistance liquidity run conditions typically occur when price is trading through:

- a range with previously balanced *BISIs* or *SIBIs.*
- a range with stacked up failure swings with minimal distance between them.

In other words, there should be little to no reason for price to reverse on the way to the *draw on liquidity.* This allows for price to travel a large distance without being met with any "resistance", therefore traveling with a higher velocity. A low resistance liquidity run often leads to many large imbalances and other PD Arrays being created withing its range.

High Resistance Liquidity Runs

A high resistance liquidity run is characterized by a lethargic and often chaotic price action that looks like it is "struggling" to reach the *draw on liquidity.* Traders who are caught up in this environment are prone to an immense feeling of frustration because price simply does not want to go any further, and will retrace a lot, often putting traders in deep drawdown or making the unrealized profits fluctuate a lot.

From a psychological perspective, participating in a high-resistance liquidity run presents considerable challenges. This is primarily due to the prolonged time it typically takes for the market to attain its intended target, thereby exposing traders to heightened emotional volatility over an extended period.

A prominent feature of high-resistance liquidity runs is the frequent runs on internal range liquidity pools, where traders often position their protective buy or sell stops. Such circumstances can swiftly elevate a trader's frustration levels, subsequently leading to substantial mental strain and detrimental effects on the trader's equity.

Identification: High resistance liquidity run conditions typically occur when price is trading through:

- a range with open liquidity voids;
- a range with large candle tails;
- a range with many premium (discount) arrays;
- a range that has recently run liquidity.

Like the name suggest, the more resistance there is in the way of the market, the fewer chances price has to go through all of it in a clean and reliable manner. It will eventually get to the objective, but it's going to be a painful ride.

Psychology

I know that many of the readers are newer traders who are looking for the thing that will simply make everything click for them. I've been there, and if I would like to give you some advice: **everything will click once you're in the right state of mind.**

This model, or any other, is not a cure for bad trading psychology, bad habits, and wrong mindset. The same failure that you're experiencing with your past or current method, or entry technique, you will continue to experience using *UMOS*. Some people mistakenly think that because they are trading a mechanical model and have data to back up their belief, all of their psychological issues are going to disappear; that all the fear is going to magically go away.

This could not be further from the truth. Fear, and other emotions are based on beliefs that are deeply rooted inside of you. A new model, technique, style, software, or account will not fix the core problem. This is a separate journey. It is the true trading journey. The specifications are way outside the scope of this paper.

As stated, one of my goal is to provide *SMC* traders a reliable mechanical model they can use to train their mental game on. As trading coach and author Mark Douglas said: "The mechanical stage of trading is specifically designed to build the kind of trading skills (trust, confidence, and thinking in probabilities) that will virtually compel you to create consistent results." (Douglas, *Trading in the Zone*, p. 173)

Unfortunately, in the ICT community, discretionary trading is often encouraged. This is because Michael always pushed towards getting the "narrative" right. Every trading decision must be made with an underlying bias based on your analysis of the higher timeframes. In my opinion, asking newer traders to practice getting their biases right, while working on the psychological trading skills mentioned above, is unrealistic. With this model, the narrative is limited to the opening range. Therefore, it is an easier starting point for traders to practice their skills on. Once their trading skills are well polished, they can then move on to work with more complex biases and a larger data set.

Expanding the Model

In the preceding sections of this paper, I've presented a fundamental version of a potentially highly profitable trading model. In this segment, I aim to offer various avenues for expansion and share ideas that could enhance the model. I invite the trading community to leverage the foundation provided in this paper, applying their own techniques, data, and domain expertise to refine and advance the model.

Furthermore, I am open to being corrected and am eager to learn from the brilliant individuals who will engage with this work. As emphasized in the Introduction, I strongly endorse the principles of free and open source ideology. I firmly believe that knowledge is a fundamental human right, and I encourage collaborative efforts to enrich the broader community's understanding.

The following paths to improvement I discuss are not guaranteed ways to improve the model. They are simply ideas, speculations, and unconfirmed thoughts that need to be developed, tested and implemented into the model. They could very well decrease its capabilities.

Fundamental Analysis

Traditional smart money concepts somewhat disregard the value of fundamental analysis due to the assertion made by ICT that every fundamental news is already accounted for in the charts. He suggests that the *algorithm* will systematically reprice assets, regardless of the specific nature of any given event. (Huddleston, *March 15, 2023 Live Tape Reading*, 1:15:30) While I agree with this perspective, I believe we can still leverage fundamental analysis in an advantageous way.

My idea is to trade individual stocks instead of indices. There are days when indices are not very volatile, and do not offer a large enough range for the trade to be worth taking. In his book *The Playbook*, Bellafiore (p. 22) writes about a concept he calls *"stocks in play"*. They are stocks that are **expected to be volatile** intraday. The key is to "seek stocks that have fresh news. This fresh news can come after the previous close or before the open." Here is a list of news to watch for to determine if a stock is indeed *in play*:

- Improved margins.
- Government investigation.
- Raised guidance going forward.
- Revenue significantly better than expected.
- Gained market share.
- New product, new drug, new something to sell.
- The market cannot put a ceiling on earnings.
- Stock +/- 3 percent with increased pre-market volume.

Those news are expected to "provide potential real order flow into the stocks we are trading." This real order flow is supposed to "increase the chances of a stock trending in the same direction cleanly". This should allow us to trade in higher probability conditions, and to diversify our risk between more than one or two instruments.

One issue with *stocks in play* is that shakeouts are not to be expected as much as in a vanilla stock, and people might categorize Judas Swings as shakeouts. However, a Judas Swing usually happens right at the open before the market starts moving in its intended direction and before any shakeout can happen. According to late Mark Douglas, it is common practice for the *Composite Man*[10] to drive price to the upside at the opening bell to drive more buyers into the market, who are going to take the other side of the Composite Man's huge sell orders (Douglas, *Trading Psychology - Think Like a Professional Trader*, 33:00). This is essentially what a Judas Swing is.

In summary, trading those individual stocks can potentially increase the overall profitability of the model. One of the key element this can improve is the opportunity frequency. There are dozens of "stocks in play" every week, and the model could occur in more than one stock every day. Of course, this is all speculation, since no testing of this has been done yet.

[10]The *Composite Man* is a term coined by Richard D. Wyckoff to represent an idealized, fictional trader who is seen as a master manipulator of the market. The concept is often used to illustrate the idea that large players in the market can influence price movements.

Quarterly Theory

Quarterly theory is a theory based on ICT's algorithmic theory with a central focus on time as its core element. It was introduced by Daye, who is still currently working on its further development. I believe that implementing his concepts into the model holds the greatest potential of increasing its profitably.

I am not an expert on *Quarterly Theory* yet, but the core idea is that each time window can be divided in four quarters. Each of these quarters have their own respective roles. In other words, the algorithm is going to take time as an input (the current quarter), and do one of three things: accumulation (A), manipulation (M), and distribution (D). The other quarter (X) can either be a reversal or a continuation of the previous quarter. (Daye)

By implementing *Quarterly Theory* to this model, we could potentially have better expectations on the market's future behavior, thus making it easier to recognize whether a Judas Swing is actually happening, or if it's going to be delayed. Again, I could be wrong about the actual implementation. It is something I want to personally dive into in the coming months, so I will probably publish an update on whether it has potential to add value to the model.

Pyramiding Entries

Richard Dennis, a renowned commodity trader, was a big believer in adding size to his winning trades. His goal was to use his increasing profits to carry the extra positions. Doing this, he could maximize the gains on each individual winning trade.

Mike Bellafiore and Ralph Vince also wrote extensively about this principle in their books. Even ICT mentions how he often pyramids his trades to make the most out of each opportunity. This section is self-explanatory. A very easy way to add value and make more money out of each trade is to use this pyramiding technique.

Traders should use caution when doing this. I suggest that you actively manage your trades while doing this, raising (lowering) your protective stop in a way where you always remain at the maximum risk you've planned even when adding to a position. Note that I do not currently use this management method, hence why I included it in the Expanding the Model section. Gene is one very good example of a trader successfully implementing this style into his own trading, which yields him exceptional results.

Summary

In this paper, I have introduced my own version of the *Unicorn Market Open Scalp*, a trading strategy designed to capitalize on market manipulations during the opening range of the stock market. This model's primary objective is to provide traders with a mechanical approach for identifying high-probability opportunities using concepts that were created primarily for a discretionary trading methodology.

Throughout the paper, I have broken down the model's core components, from the understanding of the opening range, to the identification of manipulations. I also addressed several limitations and challenges that traders may encounter, something that, in my opinion should be a standard in the industry. I have highlighted the distinction between low and high resistance liquidity runs, shedding light on the importance of recognizing low probability from high probability market conditions.

In the spirit of open collaboration and knowledge sharing, I have proposed avenues for expanding and refining the model. From incorporating fundamental analysis to exploring other price delivery determination theories, such as quarterly theory and chaos theory. These ideas represent opportunities for further enhancing the strategy's performance.

Ultimately, this paper encourages the traders to take the provided information as a base for their trading strategy, while keeping on testing different variables in hope of achieving their long-term goals. It is important to acknowledge that the path to success in trading the financial markets is a continuous process that requires both technical proficiency and psychological growth. I made sure to outline my ways of implementing risk and trade management methodologies into the model, for they can serve as valuable guides for traders seeking consistent results.

As the trading community evolves, and new insights emerge, I look forward to seeing what brilliant minds can come up with. Collaboration and open discourse will definitely continue to enrich our collective understanding, allowing traders of all backgrounds further improve their edge.

Honorable Mentions

There are a lot of formidable traders whom I have failed to mention in this paper, but deserve a special mention because they are doing fantastic work using a similar model to the *Unicorn Market Open Scalp*. Here is a quick list:

- Backtest Jess - She is amazing at backtesting, and at improving models. She has extensive material on the art of backtesting, including data on the 9:30 Judas Swing model.
- Umair Siddiqui (Phantom) - He is the one who really popularized the 9:30 Judas Swing as a mechanical model. He also has other mechanical models based on the same principals, notably the *Forex Judas Swing Model*.
- Hydra - Very complete trader from my city. He is a specialist of time macros and breakers. He calls the market live and has a lot of material, including videos and personal notes on ICT's lectures.
- Tristen Gelrud - Lots of material, notably on chaos theory, that has very good potential of making this model way better. Unfortunately I don't understand any of it (yet!), which is why it wasn't included in Expanding the Model.
- Joshua - He is doing amazing work with data. I personally think that his average ranges can also be a great addition to this model.
- Romeo - Turtle soups and market manipulation. Does not like PDFs.

I invite all the readers to check out their work. You are bound to gain valuable insights. And please, do not overlook the traders I've referenced or quoted in other sections, for they also offer valuable information.

References

Bellafiore, Mike. *The Playbook. An Inside Look at How to Think Like a Professional Trader*. 2013.

Computer Hope. *Macro*. Apr. 2, 2019. URL: https://www.computerhope.com/jargon/m/macro.htm (visited on 11/11/2023).

DataScientest. *Overfitting: What is It? How can I avoid it?* Sept. 23, 2023. URL: https://datascientest.com/en/overfitting-what-is-it-how-can-i-avoid-it (visited on 11/13/2023).

Daye. *Introduction to Quarterly Theory (Something Your Shouldn't Know)*. 2023. URL: https://www.youtube.com/watch?v=SG9gkRXRhis (visited on 11/08/2023).

Douglas, Mark. *Trading in the Zone*. Penguin Publishing Group, 2001.

— *Trading Psychology - Think Like a Professional Trader*. URL: https://www.youtube.com/watch?v=-SkNMQ6a3Lo (visited on 11/11/2023).

Huddleston, Michael J. *Commentary of September 1st 2016*. ICT Mentorship. Commentaries. Sept. 1, 2016.

— *ICT Forex - Understanding the ICT Judas Swing*. 2017. URL: https://www.youtube.com/watch?v=xJMbva8SjzE (visited on 11/08/2023).

— *Index Trading Concepts - Lesson 1: Basics and Opening Range Concept*. ICT Mentorship. Core Content Month 10. 2017.

— *March 15, 2023 Live Tape Reading*. Mar. 15, 2023. URL: https://www.youtube.com/watch?v=ZpSwaiwGgt0 (visited on 11/12/2023).

— *March 30, 2023 Live Tape Reading - AM Session*. 2023. URL: https://www.youtube.com/watch?v=LN1nfYp4dBw&t=3355s (visited on 11/08/2023).

Wesley, Jared. *Trading Reversals, Pivots and Volume: How to see the 'turn'*. 2021. URL: https://www.youtube.com/watch?v=dzLdPCJDius&t=1177s (visited on 11/09/2023).