

# Transient & Recurrent Zones

by [Saver0](#) · December 11, 2014

In this post I will walk you through the basics of what transient and recurrent zones are. And then get to how they can be used in trading and for doing statistical analysis to give yourself a unique edge. We will start from the very basic and then move on to more advanced application of the concept.

## Terms to keep in mind as you read

TZ = Transient Zone

RZ = Recurrent Zone

PZ = Pending Zone that can either become a TZ or RZ

## First a little bit of history

I first heard of transient and recurrent zones from EURUSDD of ForexFactory in his thread "The similarity system". The concept was presented as a very complicated and advanced system and many found it confusing because of the vagueness of its explanation. There was a lot of politics and debates that went on at ForexFactory regarding this theory and those of who experimented and worked on it soon became "outlaws" and many memberships were revoked without any explanations. Many of those members now call this site their new home (including myself). Also EURUSDD found himself labeled as a scam artist for running a scam which I also came to believe through my connections to be the case. But at the end, the guy may have been a scammer but the theory holds ground. Not in the sense of it being some holy grail system where you can always win, but with probability based things that you can do with it. The real power of this theory lays in it's application and the steps one take to work with what they have. At the end of the day, the most important are the steps that you actually take to make a statistically reliable system.

## Acknowledgement

My sincere thank you goes out to EURUSDD, ForexFactory, and all the users that worked so hard to make sense of it and shared their understanding freely. Also a special thanks goes out to FX-Jay for giving us hope and showing what's possible.

## Basics of the theory

Let's start off by exploring the definitions of transient zone and recurrent zone in the simplest sense and then walk through an example. In order to understand this concept, we will consider X is the time axis and Y is the price axis and not think of H bars. Let's imagine that the current price of EURUSD is at 1.3200 and located at time 8:00AM. For this price at this location to be labeled as a transient price, the price can only exist at the time 8:00. Not prior to this and not after this. In the simplest sense, for it to be recurrent, the price will exist at another time location other than 8:00AM.

Now lets take it a step further. Let's introduce H bars. H bars is the number of bars to the left and right of time location at 8:00AM. We can further break down H into H\_Left and H\_Right. H\_Left simply meaning number of bars to the left of the time location at 8:00AM and H\_Right meaning number of bars to the right of time location at 8:00AM. Keep in mind that H is nothing but another time variable. If we are looking at 1 hour chart and H is 24, then we are looking at the 24 hours prior to 8:00AM and 24 hours after 8:00AM.

What does it mean when I say a price level at 4:00AM was transient in the past 10 hours if I'm looking at the 1 hour chart? This means H\_Left = 10 and a price level at 4:00AM only exists in that time location within the past 10 bars. For the time 4:00AM to be labeled a TZ (Transient Zone) and if our H is 10, then a price level that existed at 4AM can only exist in

that location within the past 10 bars and future 10 bars.

Now you are ready for an actual chart example.



Fig1 – Transient Zone Basics

Take a look at the figure 1 above. Take the time to spot the TZ and RZ and to understand why they are the case.

I marked one RZ at (1) bar. This bar has a H\_Left Transient Zone of height (A). See how that space is transient to the left 10 bars of the bar (1). But then the price comes back to fill the zone at (B) and then completely at (C) within 10 bars. What about bar (2)? This here is a Transient Zone because the price is H\_Left transient as indicated by (D) and the price was only recurrent (E) amount and left the rest of the zone as transient.

Now that we have covered the definition of what Transient Zones and Recurrent Zones are, try to think of how we can apply this to our trading. Think in terms of probabilities. Further the theory states that if you get the H settings correct, you should be able to arrive at settings where price levels tend to be more recurrent than transient. This is directly in line with the market theories. We know that markets tend to be ranging more than trending. We all have heard how markets tend to range 70-80% of the time. What we have arrived at is a method in which we can mathematically calculate this simple market movement and apply probabilities to it in order to make highly mathematical trades. Like I said earlier, this is the real power of the method. Not in terms of what TZs or RZs are but what one can do with it to measure the market using statistical analysis. We will get to more deeper concepts in my next revision.

### Introduction of K

Take a look at the following chart. On this chart, I will define the area (D) as the variable K.

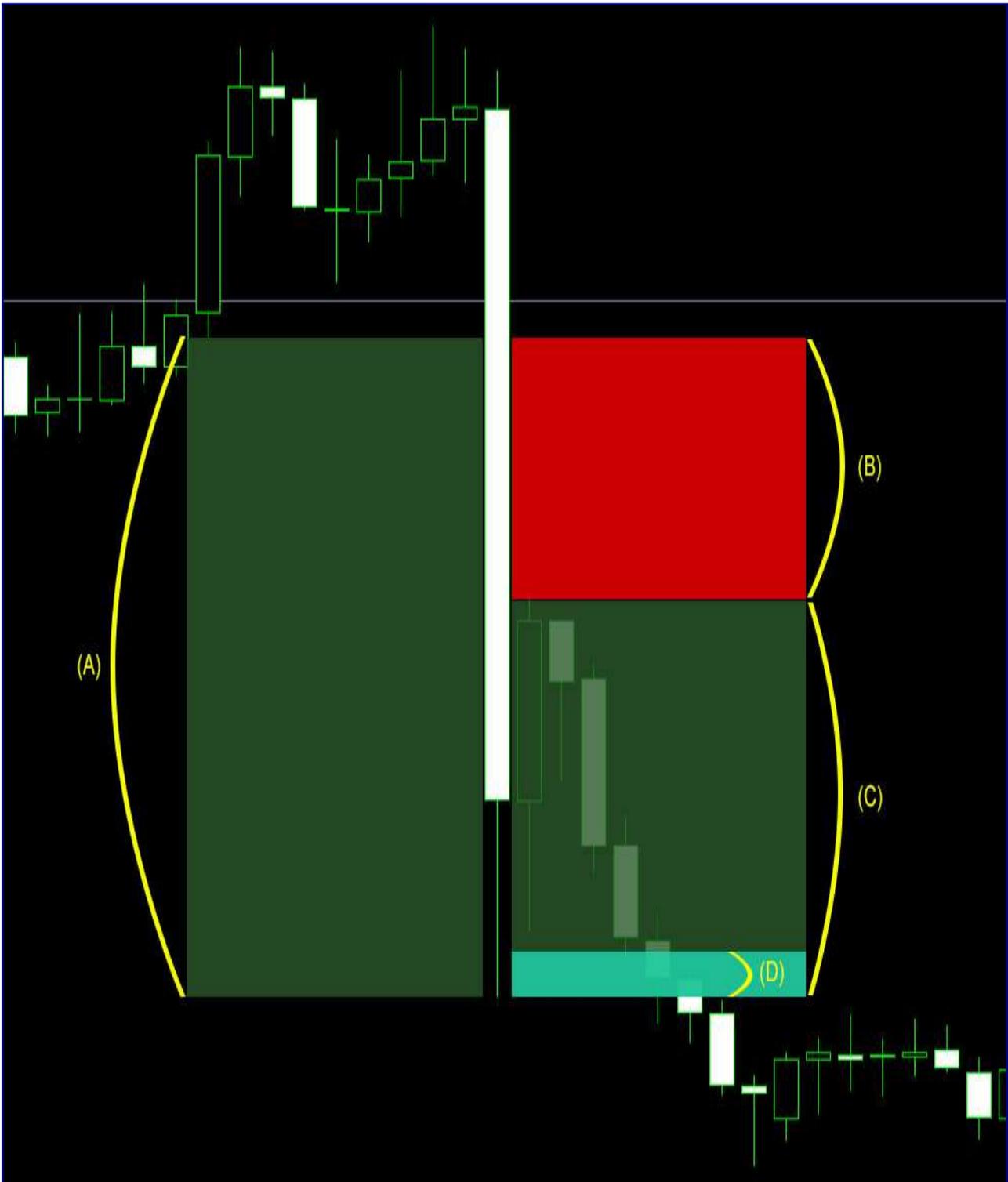


Fig2 – TZ with K

What we now have is a H\_Left transient zone at (A) and area (C) that became recurrent and an area (B) that was left transient. (D) is the constant or variable K. By using K, we are saying that the price should at least be recurrent (C) – (D) amount. With K we are assuming for probability sake that the bottom transient zone could be (D) in height if it ended up making a TZ at the bottom of that bar. But in this case it was fully recurrent meaning the lowest low that followed the center bar exceeded the low of the center bar.

This could have played out like the following where (D) ended up being the transient zone.

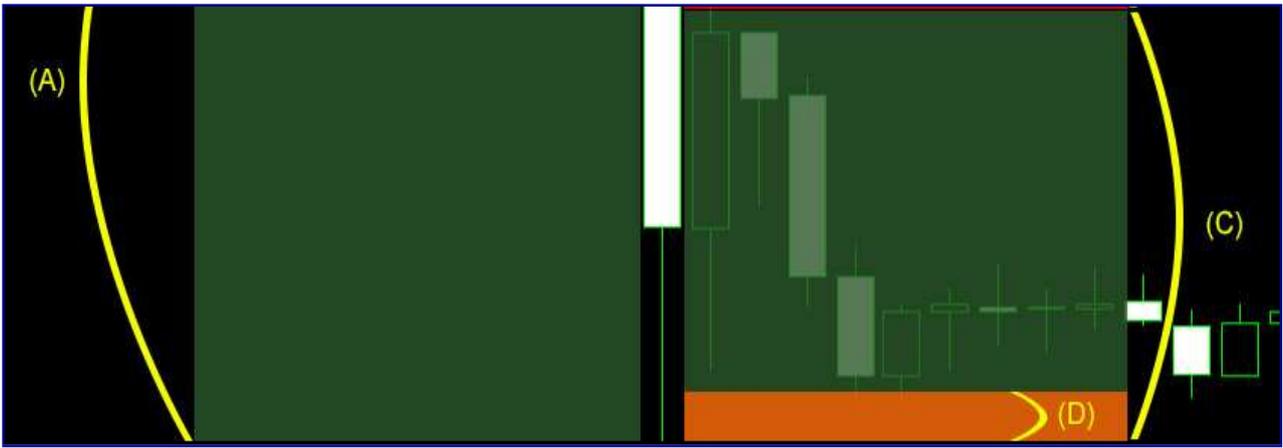


Fig3 – TZ of K height

Also, K doesn't have to be a fixed amount of pips. It can be a % or an equation. Get creative and you will have very interesting results. For example, K could be based on Fibs. Or it can be an exponentially increasing variable that depends on how many bars have developed.

### Types of Transient Zones

If you have spent the time looking at TZs, one of the very first things that you will notice is how TZs are very similar to fractals. This is one of the very first observations I made and afterwards I even dismissed TZs entirely because we all know about fractals and I didn't see much use of it until I came back to it a couple of months after and decided to go through the material. We can think of them as H size potential fractals. But the key is, we aren't interested so much in TZs but our interest should be in RZs. The zones that become recurrent is what makes the money (this doesn't mean TZs don't play a role). TZs play a role in determining SL. pRZ (potential RZs) are our take profits (TP) and pTZs or TZs are our stop loss (SL). Generally this is the case.

In figure 1 I demonstrated 1 type of TZ, this is a fractal TZ of H bars in size. In figure 2 what you see is a mid bar TZ. Finally there is just one type of RZ. It's important that we separate all of these because it matters when we approach TZs with probabilities.

### Approaching TZs with Probabilities

The best way to approach forex trading is with mathematically sound probabilities in my opinion. It can be done with TZs or almost anything else that you like. What's most important is that your math is correct and that your probabilities gives you an edge. Let's take a look at the most basic of TZ related probabilities. Below (figure 4) what we have is a chart with all the RZs (in gray) and TZs (in yellow and red) drawn. This is from a H1 chart and  $H_{Left} = H_{Right} = 72$ . Which means, each zone has an expiration of 3 days. For this example, I have looked at 10,000 H1 bars and found 85 TZs and 907 RZs. What does this tell you? This tells you that the probability of having a RZ is  $91.43\% = \frac{907}{(85+907)}$ . Very simple probability. What this means is, if you were to place a trade betting that a potential recurrent zone will become recurrent, you would win 91% of the time. This we define as success.

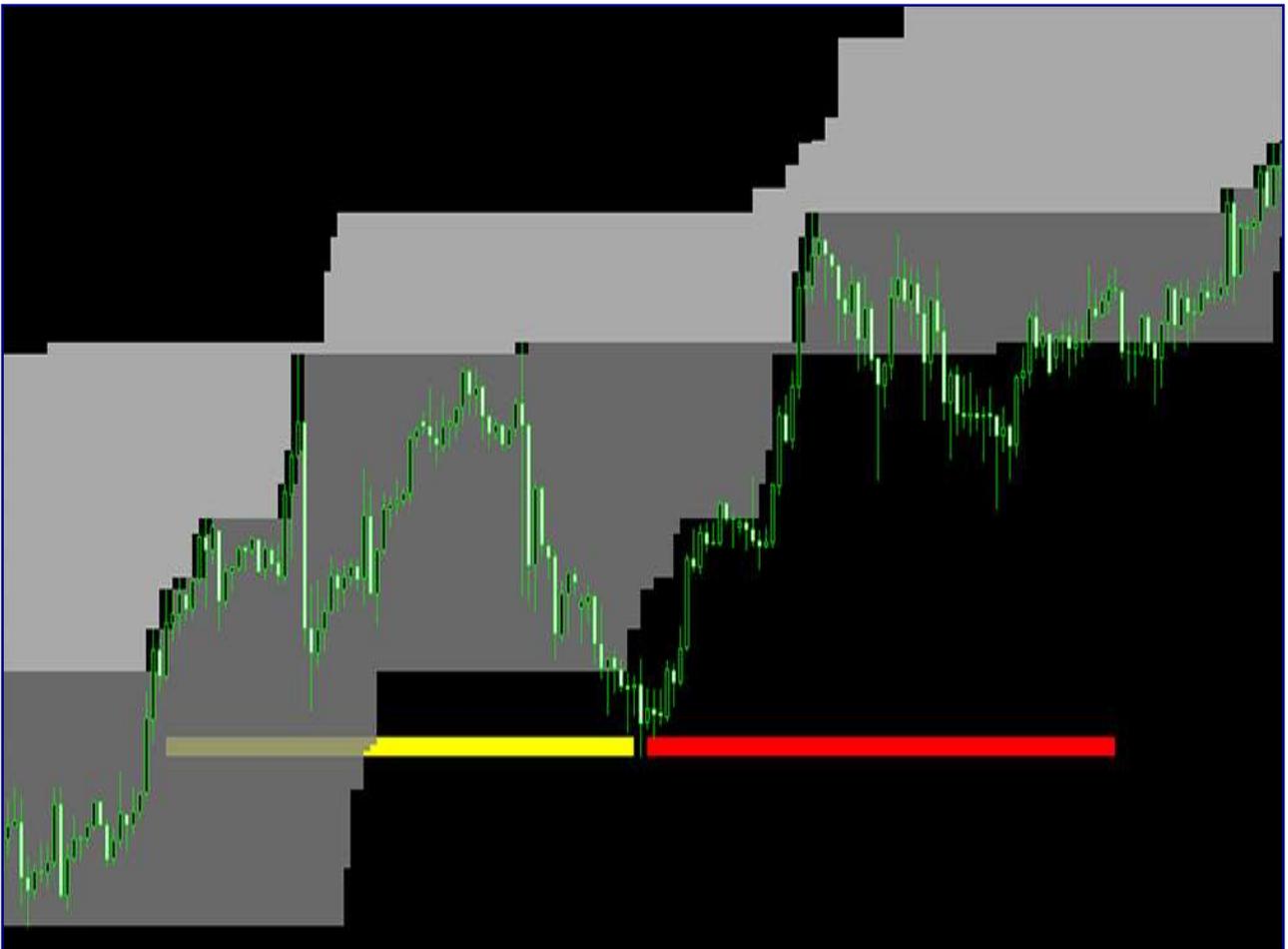


Fig4 – Transient Zone Probabilities

These are the basics of TZ probability. You can come up with more advanced and experimental probability theories using these a step further. I will cover this a bit in my next revision and lay the stepping stones for you to develop advanced probability based trading systems.