# HALL Trading Returns



Actual trader performance figures brokers, system sellers, and trading educators don't want you to know

by John Forman, PhD

#### Introduction

The question of trader success or failure rates is one that often gets tossed around in trading forums and pretty much anywhere traders come together. You hear figures like, "95% of traders fail." The problem is no one knows where those stats came from, if they are reliable, and what exactly "fail" means. This report will provide some clarity.

I'm going to share with you statistics from the actual trading data of more than 5000 retail forex traders. These are folks from all over the world, trading through dozens of different brokers, operating in all different time frames, and trading pretty much every currency pair available. In other words, it's a very inclusive dataset, just like the market itself. That means what it tells us will be very representative.

Actually, in one way this collection of traders isn't representative. That's in their performance. By the numbers, they are a bit better than average.

As you may be aware, the Commodity Futures Trading Commission (CFTC) requires that all US retail forex brokers under its oversight (which is nearly all of them), must report customer quarterly profitability



figures. Basically, they have to indicate the % of their active accounts (those with at least 1 trade in the period) that ended the quarter profitable.

The website Forex Magnates – which is now Finance Magnates – collected all the broker statistics going back to the first quarter the CFTC required them to be reported in 2009. The trading data I have runs from 2009 into 2013. I've set up a comparison of how well those traders' account have done by quarter for that time span and matched them up with the aggregated broker data collected by Forex Magnates.

The table below shows the quarter-by-quarter comparison. You'll notice that in every quarter the accounts in my data set showed a higher % profitable than for the overall figures collected

by Forex Magnates. In a few instances, my group has a profitable proportion that is 10 percentage points higher. These are statistically significant differences.

Quarterly % of Profitable Accounts – All US Brokers vs. Traders in My Dataset

Broker Reported				My Data			
Quarter	<u>Accts</u>	<u>Profitable</u>	<u>%</u>	<u>Accts</u>	<u>Profitable</u>	<u>%</u>	Diff.
Q4 2009	92,024	25,943	28.2%	226	75	33.2%	5.0%
Q1 2010	81,289	21,854	26.9%	1,592	565	35.5%	8.6%
Q2 2010	106,650	28,176	26.4%	2,592	868	33.5%	7.1%
Q3 2010	100,320	29,026	28.9%	2,835	889	31.4%	2.4%
Q4 2010	108,361	31,242	28.8%	2,636	915	34.7%	5.9%
Q1 2011	108,513	34,620	31.9%	2,561	867	33.9%	1.9%
Q2 2011	106,945	28,765	26.9%	2,320	877	37.8%	10.9%
Q3 2011	108,490	32,512	30.0%	2,302	950	41.3%	11.3%
Q4 2011	97,206	33,953	34.9%	2,106	970	46.1%	11.1%
Q1 2012	97,281	32,370	33.3%	2,170	896	41.3%	8.0%
Q2 2012	93,687	29,884	31.9%	2,062	901	43.7%	11.8%
Q3 2012	101,020	32,731	32.4%	1,872	788	42.1%	9.7%
Q4 2012	89,567	32,131	35.9%	1,752	786	44.9%	9.0%
Q1 2013	99,207	34,918	35.2%	1,785	799	44.8%	9.6%
		Average:	30.8%		Average:	38.9%	8.0%

You may be wondering at the selection process involved in collecting this data. It comes from a social network. There wasn't any particular profitability related criteria for joining the network and all the data comes from real trading, with no demo or paper trading of any kind included.

If you look at the early part of the table, you'll see the differences in profitability aren't very large. The gap really jumps in Q2 of 2011 when we start to see the number of active accounts in my dataset beginning to decline. That reflects traders dropping out (no longer trading). Most likely, those are unprofitable traders, which means you're going to be left with a higher percentage of profitable ones in the sample. That's exactly what you see with the profitable %.

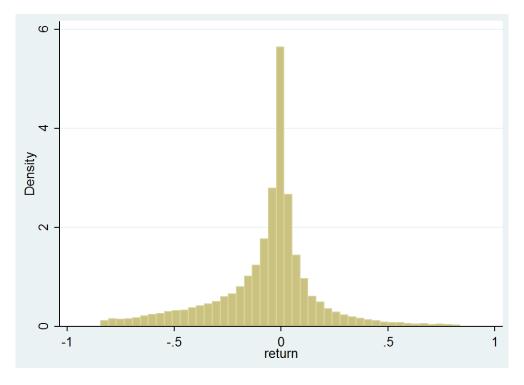
In fact, you see a similar bump up in the profitable % for the overall data in the late 2011 period when there is a decline in active accounts. In academic terms you'd call this a survivorship effect. In any case, I bring this up because it shows that the stuff I present regarding trade profitability in the pages ahead come from a sample which is actually a bit better than your average group. Just keep that in mind as we move forward.

## **Monthly Returns**

To lay the ground work for figuring out what success/failure rates are for retail forex traders, let's start with how they do in terms of monthly returns. The data the CFTC requires brokers to report about quarterly profitability percentages doesn't really do a good job of telling us just how well or how poorly traders are actually performing because it doesn't speak to the size of the returns. We can start doing that a bit here, though.

There are over 34,000 trader-months of data in my dataset, where a trader-month is one trader's activity and performance for a single month. I dropped the top and bottom 1% to avoid major outliers from overly influencing the statistics. The average return for the remaining 33,700+ trader-months is -6.75%. That's a scary number. It compounds to an annual return of nearly -57%! That said, we need to understand that averages don't really tell the full story. You have to consider the distribution underlying them. The graph below provides that for us.

# Distribution of Monthly Returns for a Sample of Retail Forex Traders



You'll notice in the graph that the central peak of the distribution is at the 0% level. Actually, the median (middle) point that represents is -1.80%. The range of values is just a bit too wide to

plot that kind of precision. The fact that the midpoint of the range is negative reflects the fact that retail forex is inherently a negative-sum market after factoring in spreads. That means *on average* traders are going to lose a little. (If you'd like a fairly detailed description of the retail forex market, albeit from an academic perspective, have a look at <a href="this paper">this paper</a> taken from my PhD dissertation.)

Make note of the thickness of the distribution of monthly returns in the chart. It's greater on the left side (unprofitable) than on the right (profitable). That tells us traders are having losing months more often than winning ones.

# **Performance Consistency**

Based on the chart above, and the table earlier in this report, it will come as no surprise that fewer than half of all trader-month returns are positive. In fact, only 39% are profitable. A single month's results, though, aren't what decides whether a trader is successful in the markets. Instead it's whether they can be consistent and have repeated positive performances.

So let's take a look at that.



There were 11,353 trader-months with positive returns where we can look to see if the trader was able to be profitable in the following month. Only 46% of the time was the second month also profitable. The results aren't significantly different from 50%, so basically it works out to be a coin toss as to whether a trader can follow one

profitable month with another. (I should note I did the same thing looking at trader-months with negative returns and 64% of the time the following month was also negative.)

Let's take things a step further.

What about if you've got two straight months of profits? Based on the numbers above, that would seem to be a less than random occurrence, which might indicate some sort of ability or

skill. Alas, traders who have two winning months in a row are no more likely to win in the third month than they are to lose. In the 4717 instances of back-to-back winning months, only 51% of the time was the third month also profitable.

So only 39% of trader-months are profitable to start and it's only about 50/50 whether the ones which follow that will be as well. That means you've got about a 10% chance of having 3 straight winning months (39% x 50% x 50% = 9.75%). By this point you probably won't be surprised when I tell you that it's basically a coin toss as to whether the  $4^{th}$  month is profitable as well, so now we're down to about a 5% chance of someone having a string of profitable months that long. And of course the odds just get shorter and shorter the longer the string.

You might be wondering how come if you've only got about a 10% chance of being profitable 3 months in a row the profitability figures from earlier in the report show that it's more like 30%-40% of accounts that are profitable each quarter. It comes down to the actual returns. You can have two losing months in a quarter, but if the third one is a big enough winner you'll have a positive quarter. Likewise, if your one bad month on the quarter wipes out the gains from your two good ones, you'll have a negative result for the period.

A while back I wrote <u>a blog post</u> on the subject of how well traders were able to string profitable quarters together. Interestingly, the percentages were very close to what we're seeing here at the monthly level. Only about half of traders who make a profit in one quarter are able to repeat the feat the next quarter. It's basically the same for adding on a third straight quarter. That means the probability of a trader having three straight winning quarters is about  $10\% (40\% \times 50\% \times 50\% = 10\%)$ .

Starting to see where the 95% failure rate comes from?

#### **Overall Performance**

So we've seen how retail forex traders perform on a monthly basis and how well they are able to string together profitable months. Now it's time to get down to what we're really after. How do retail forex traders actually perform in the long run, which I presume is where the failure rate conversation is really focused.

The average overall return for the traders in my dataset is -22.8%. The median, or mid point of the range is -18.6%, which isn't too different in the grand scheme of things. On the one end, some folks basically blew up and lost everything. On the other, a number of traders were up more than 100% - some well over that. Of the 5411 traders included, only 1440 showed a positive overall return. That's 26%, which isn't all that far off the figures we've seen for months and quarters, which is interesting.

It should be noted there's a wide range for the number of months each trader's returns includes. Some were relatively late joining while others were in from basically the beginning. Some were in the dataset for a long time, but only traded in a small number of months while others were consistently active. That means a range from as few as 1 month of data to as many as 56. The average is 6.22, with the median being just 3.

The scatter chart below plots months of data against overall return.



As you can see, there isn't any correlation between how many months of trading there is in the record and how the traders did. There were traders who were in for many months who did well

and there were ones who ended up deep in negative territory. Similarly, some traders posted really big gains in a short period while others did equally as poorly.

By the way, you shouldn't equate the month count from the chart above to trading experience. For some of the traders they are the same, but is a minority. These traders had anywhere from less than a year's experience to more than 5 years before becoming part of the social network from which this data was extracted.

# How do we get to 95% failure?

Above I noted that only 26% of the 5411 traders in my study were profitable overall. That's not a great number, but it's a far cry from the 5% implied by the 95% failure rate claim. It's my understanding that the origins of the 95% figure relates to the closure rate of accounts opened at brokers. Here's the thing, though. If you close your trading account it's probably



motivated by one of two main reasons. Either you don't like the service the broker is providing, or you don't feel like you want to keep trading. I don't have any idea what the broker dissatistication rate is (but it can seem quite high at times). I can pretty easily see how you get to a high account closure rate based on performance, though.

Think about it this way. Even if you're making money in your trading, there is the consideration of how much time and effort is going into it. Let's say you're putting in 10 hours a week but only making 10% a year? You're making money, but you may end up quitting trading because it's just not worth the work. If you close your account that would put you in the failure category as far as these statistics are concerned.

Of course you could also be one of those people who loses money over and over but never quits. There's someone in the dataset who has 28 months worth of trading, but only made a profit in four of them (and they weren't big gains). They might be considered a failure in term of performance, but from the broker perspective because the account is still open they aren't a failure – yet, anyway.

The point is we're probably not talking about 95% of traders ending up as losing money in the markets overall. The actual percentage of traders who leave the markets as overall losers is probably closer to the 74% who aren't winners from the stats above. On top of that goes the folks who are net winners, but who either don't find the effort worth the reward or who simply see their interests change. When you then add in broker dissatisfaction you get a number pretty close to that 95%.

#### So what does it all mean for failure rates?

The data above says pretty clearly that if you choose to become a forex trader the odds are stacked against you – no matter what time horizon we're talking about. Everything else aside, you face the uphill battle of operating in a negative sum market after factoring in the bid-ask spread. That means on average just playing the game costs money.

The challenges of being consistently profitable as an active trader applies to other markets as well, by the way.



There's a paper by a group of academic researchers¹ who looked at day trading in the Taiwan stock market and found that, "Less than 1% of the day trader population is able to predictably and reliably earn positive abnormal returns net of fees." Now this isn't the same as saying less than 1% are reliably profitable. The "positive abnormal

return" thing basically means beating the benchmark return they were using (some kind of market return). Still, it doesn't make for good reading if you're looking to trade for a living or just simply being profitable on a consistent basis.

I have often compared retail forex trading to playing poker. Just as when you have a poker game, in retail forex there isn't any net creation or destruction of wealth. Money just moves

<sup>&</sup>lt;sup>1</sup> Barber, B. M., et al. (2014). "The cross-section of speculator skill: Evidence from day trading." *Journal of Financial Markets* (18): 1-24.

from hand to hand based on the results of a given hand (trade). Just as with poker, there's a strong random element to any particular outcome. In the long run, though, the stronger traders are able to better play the odds. As a result, money tends to flow to them and away from the less skilled traders.

This is eactly what we see in the performance statistics above. In any given period a minority of traders are profitable while the majority are not. The longer you stretch out the time horizon you look at, the smaller the group of winners. If you played long enough with no new entrants, eventually one trader would have all the money because all the rest would have either gone bust or withdrawn. Just like in a poker tournament. Unfortunately for us in the retail trading poker game, there are some folks with really deep pockets sitting at the table in the form of the major banks who act as the market's liquidity providers.

## What can you do to not end up on the failure list?

So if the odds are so stacked against you, what can you do about it? Well, a lot of folks would tell you to stay out. Don't trade. If you want exposure to the markets, put your money in a low fee index fund. At least doing that gives you a long-term positive return expectation.

I'm not going to lie. For a lot of folks trading isn't a good idea. There are A LOT of hurdles to overcome to get to the point of being able to make a decent return consistently. As the numbers above indicate, most folks aren't able to be what a person needs to be to have success in trading. You're going to have to think long and hard about whether you yourself do.

Motivation is a big part of the consideration here.

Are you in it for a quick hit? Probably best if you look elsewhere. Making a big return in a short



period means taking large risks and is almost totally down to luck. As the numbers above

suggest, the odds are not good at all. In the research I did for my PhD I found that somewhere around the 3 year mark in terms of experience is where you see a major improvement in trader performance. Obviously, that's an average type of number. Some will get there quicker and some slower. The point is that it takes time to develop trading skills. Are you ready to put in that time and deal with the inevitiable struggles to get there?

Expectations are another consideration.



Do you expect to make huge returns? Obviously, there are folks who do very well in the markets. One of the traders in my dataset, for example, had 18 straight profitable months. During most of them their return was better than 10%. That sort of performance will see an account grow very quickly. I think this trader was up about 1700% for the study period overall.

It's not a realistic expectation to target gains that high, though. The trader in question was one of a handful of folks who's total returns were above 500% (excluded from the chart above to make it easier to view). We're talking about 5 out of 5411. That's less than 0.1%. Even if you include all the others with gains over 200% you're still at well below 1% of the group.

If you can keep your expectations reasonable and are committed to putting in the time and effort then you can take a big step toward improving your chances of being a successful trader. Of course attitude isn't enough. There's more you need to do to be able to push yourself into the success category. I'll be sharing my research on that in the future.

I hope this report has proven informative and helped clarify things for you. If you have any questions or comments, definitely <u>contact me</u>.

Interested in some of the major reasons why so many people fail at trading?

Check out this mini course I'm developing together. It's totally free.

# About the Author

John Forman holds a PhD in behavioral finance with a research focus on the performance of individual traders. His experience as an individual trader in his own right goes back to the aftermath of the Crash of '87 when he first go into the stock market. He worked for more than 10 years as a professional market analyst covering forex, interest rates, stocks, and commodities for Thomson Reuters.

John is the author of the books <u>The Essentials of Trading</u> and <u>Trading FAQs</u>. He has had literally dozens of trading-related articles published in magazines such as <u>Technical Analysis</u> of Stocks & Commodities and Stocks, Futures and Options, as well as for several websites. He was Content Editor at Trade2Win and has done forum, social network, and trading system development consulting at various points over the years. John's presented at trading conferences and via webinar, and he's been interviewed by the media on a number of occassions.