Are you a rotten gambler or just plain unlucky? You seem to have hit on a winning system when woe and behold you are struck down by a really bad losing run and with it your confidence. So, were you just unlucky?

If you know the probability of an event and how many times you will perform the event there is a formula that will work out your maximum winning and losing runs.

Let us assume that S=The number of times you play this game / perform the event. In this case a coin toss. S=555 coin tosses. For success in this trial we will need to throw a head. There are only two events so our chance of success is 1/2 or 50%

Fire up Excel and type the following formula

=ROUND(LN(555)/-LN((1-0.50)),0)

Gives the answer: -

= 9

In 550 throws you will get a maximum run of nine heads in a row.

You could of course work out the maximum run of losers which, as this is a 50/50 chance, is exactly the same. Try varying the % figure (0.50) to see the effect of a better or worse strike rate. If you are confident that you know the % success of the event this is a good calculation for working helping out how much bank size you could stake. I have done lots of work on this subject but far too much and too complex to post here.

THE STOCK MARKET TRADER

If you were a stock market trader and had a 25% success rate with a fixed loss per trade, say 10% of capital. (Being simplistic) You would only need a run of 10 consecutive losers to go out of business or maybe a couple of average bad runs. However, You would have to be unlucky to make 10 straight losing trades, right?

Let us assume the following of this trader, Their trading career would last 20 years and they made a trade every 20 days, in a year which contained 260 trading days. That's 13 trades a year or 260 trades in this persons career.

Using the above formula this person would not stay in their career for 20 years. With a success rate of only 25% and 10% of capital going on each losing trade this trader can expect a maximum losing run of 19 trades based upon their historic success rate and staking strategy. If they reduced the fixed capital stake to 5% they would only just survive this bad run (which is, of course, entirely to be expected. No bad luck required!!).

Therefore the options open to our trader is to increase his success rate or decrease his percentage loss.

If the success rate rises to 47% the losing run reduces to just under nine in a row and our trader can expect to carry on in business much longer. But would still expect a large draw down at some point in their career.