> For every dollar of profit made by a trader, there must be a trader losing that dollar. As an extension of this, if there is a group of traders consistently making money, then there must be another group of traders consistently losing money. Usually, this group making money consistently is small, as opposed to the group of traders who lose money consistently. *

The difference between these two groups is their understanding of Risk and their techniques of money management. Mark Douglas, in his book 'The Disciplined Trader', says successful ***trading is 80% money management and 20% strategy.*** I could not agree more.

Money management and associated topics largely involve assessment of risk. So in this sense, understanding risk and its many forms become essential at this point. For this reason, let us break down risk to its elementary form to get a better understanding of risk.

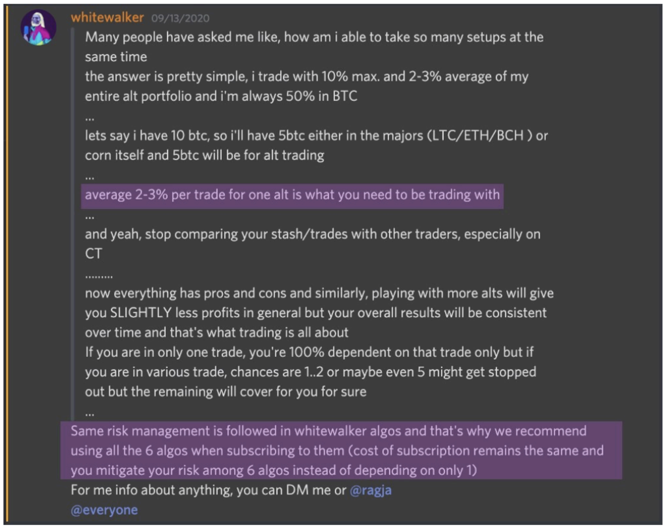
The usual layman definition of risk in the context of the stock market is the 'probability of losing money'. When you transact in the markets, you are exposed to risk, which means you can (possibly) lose money. For example, when you buy the stock of a company, whether you like it or not, you are exposed to risk. Further, at a very high level, risk can be broken down into two types — Systematic Risk and Unsystematic Risk. You are automatically exposed to both these categories of risks when you own a stock.

Think about it, why do you stand to lose money? Or in other words, what can drag the stock price down? Many reasons as you can imagine, but let me list down a few –

1. Deteriorating business prospects
2. Declining business margins
3. Management misconduct
4. Competition eating margins

All these represent a form of risk. In fact, there could be many other similar reasons and this list can go on. However, if you notice, there is one thing common to all these risks — they are all risks specific to the company. For example, imagine you have an investable capital of $1000. You decide to invest in a certain coin A. A few months later coin A declares that their revenues have declined. Quite obviously coins A price will also decline. Which means you will lose money on your investment. However, this news will not impact coin A's competitor's stock price (coin B or coin C). Likewise, if coin A's management is guilty of any misconduct, then A's stock price will go down and not its competitors. Clearly, these risks are specific to this one coin alone and not its peers.

Unsystematic risk can be diversified, meaning instead of investing all the money in one coin, you can choose to invest in 2–3 different coin *(preferably from different sectors).* This is called ***'diversification'***. When you diversify your investments, unsystematic risk drastically reduces. Going back to the above example, imagine instead of buying coin A for the entire capital, you decide to buy A for $500- and maybe coin B for the other $500, in such circumstances, even if A price declines *(owing to the unsystematic risk)* the damage is only on half of the investment as the other half is invested in a different coin. In fact, instead of just two coins, you can have a 5 or 10 or maybe 20 coin portfolio. The higher the number of stocks in your portfolio, higher the diversification, and therefore lesser the unsystematic risk.



Risk Management is something which I follow very thoroughly, and trust me, I learnt this the hard way as well. 2–3% in one altcoin will keep your stress away. Same risk mitigation is followed in the algos we provide for auto trading. Currently we depend 16.6% on one algo to deliver results, we will be bringing down that risk to 12.5% by introducing two more algos this month .

This leads us to a very important question — how many stocks should a good portfolio have so that the unsystematic risk is completely diversified. Research has it that up to 21 stocks in the portfolio will have the required necessary diversification effect and anything beyond 21 stocks may not help much in diversification i.e. 4–5% allocation in one trade is what is recommended but since I'm 50% in bitcoin (or other majors) i usually trade with 2–3%, giving me more room to play with extra alts.

Poker Face

Last month I got an opportunity to play poker with a few good friends. I was playing poker after a gap of 6 years and I was quite excited about it. The buy in for this friendly game was $1000. *For those who are not familiar with poker — it's a card game where in your skill and luck are tested in equal measure.*

So, the game started, cards were dealt, and in the very first round I bet $200/- and I saw it go away, just like that. In the next round, I bet another 200, and again saw it go away. At this stage I convinced myself that I could make up my losses in the 3rd round, and with this thought I increased the bet size to 600, only to watch it go away! So for all practical purposes, I lost $1000/- in a matter of 10 minutes! ***In the trading world, this is equivalent to blowing up your entire trading account.***

I didn't give up, after all, I'm supposed to know trading and poker draws many similarities to trading. I decided to ***'recover'*** my initial loss and stay in the game longer. I bought in for another 1000 and started fresh. This time, I stayed on the table a bit longer — for a total of 15 minutes!

Clearly, it was not working for me. I had a better memory of me playing poker 6 years ago. Though not the best, at least, I would stay on the table till the game lasted and even win few hands. So what was happening this time around? I was confused and I kind of didn't believe that this was happening to me? ***How could I wipe my account twice in a matter of 25 minutes?***

With these confusing thoughts on my past poker skills and my current game play, I decided to buy in again for another $1000. This was my 3rd buy in. ***In the trading world, this is equivalent to funding your account 3rd time over after successfully blowing it up twice.***

What advice would you give someone who has blown up his account twice in the markets? — 'get out of the markets immediately', would perhaps be the best-suited advice right? Well, I didn't pay any heed to my inner voice, ***gambler's fallacy*** had taken over my rational thinking abilities and I bought in again for 1000 more.

> *For those of you who don't know gambler's fallacy — if you are betting on an outcome and you tend to make a long streak of losses, then at the time of quitting, your mind tells you or rather tricks you to believe that your losing streak is over and your next bet will be a winner. This is when you increase your betting size and lose a bigger chunk of money. Gamblers fallacy is one of the biggest culprits in wiping out many trading accounts clean.*

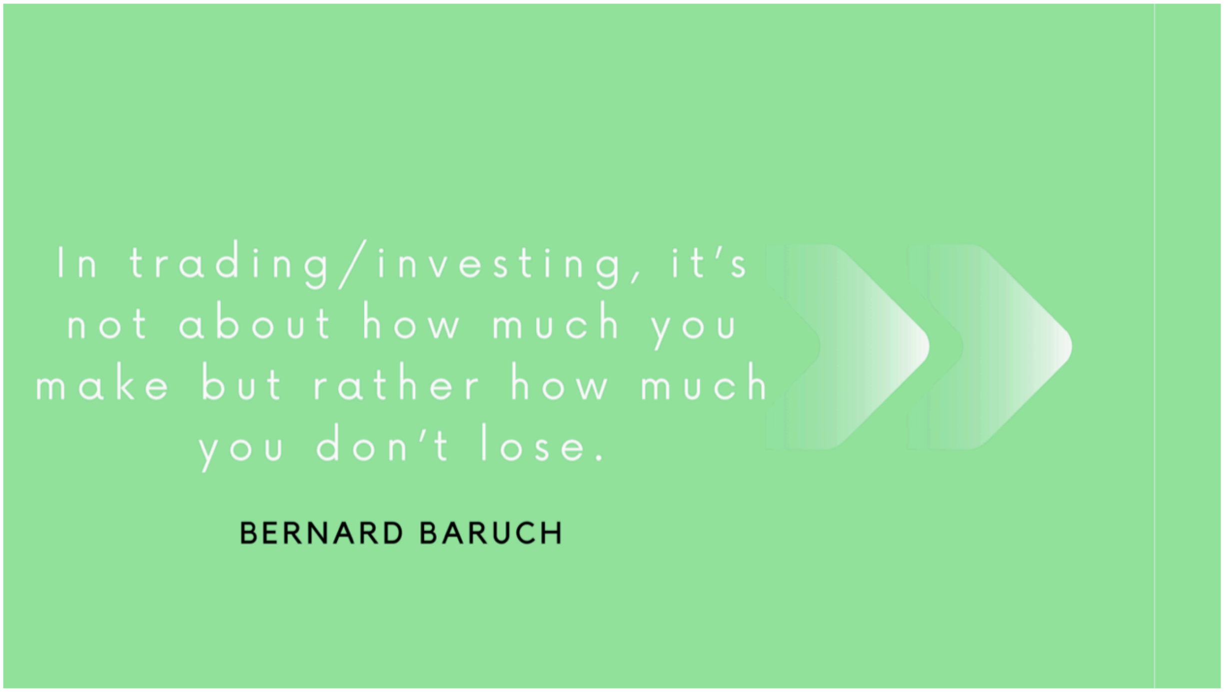
Anyway, back to my poker game. This was my 3rd buying, I had already lost 2K and was betting with another 1K. I was confident I'd recover plus make some money and save myself some shame, but the boys on the table had other plans for me. They knew I was the sucker on the table and it was easy to allure me to make irrational bets. So they did and wiped me out clean over the next 8 minutes.

That was it, I called it quits and I got back more after losing 3k.

After the game, I thought through on what went wrong. The answer was very clear

1. I had forgotten to recognize the odds of winning with the cards that were dealt
2. I was not 'position sizing' my bets — my bets were way too irrational and random

After a couple of weeks, I had another invite to the game. I had set a bad precedence of giving away easy money. This time around I had decided to position size my bets well.



I bought in for 1000 and started the game. Each time the cards were dealt — I accessed my odds fairly well and if I thought my odds were fair, I bet accordingly. In the trading world, this was equivalent to following a 'trading system' backed by position sizing techniques. The result of this simple systematic approach had a great impact on my game –

1. I won few hands
2. At the peak, I must have had about 4K of winnings
3. I lasted throughout the game and had a lot of fun along the way
4. Towards the end I gave up some gains but was extremely happy with the fact that few simple techniques helped me manage my game much better

Position sizing made all the difference in this game. It always does and this is the exact reason for me to narrate this story. I do not want you to speculate in the markets without understanding your odds or without position sizing your bets. If you do, you will end up making a fool out of yourself.

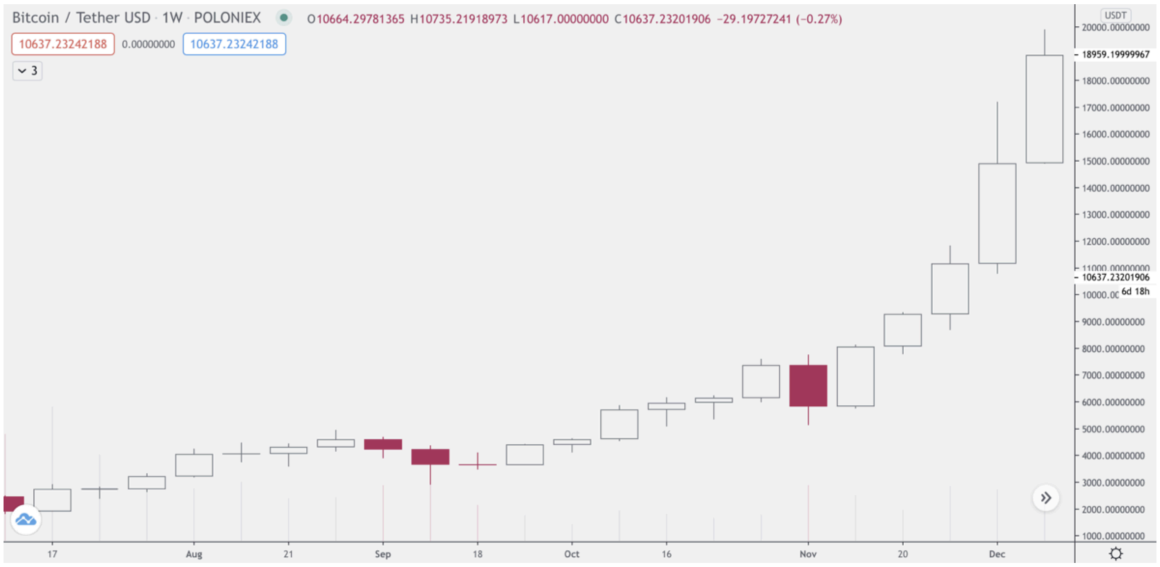
Poker is played for fun but when you trade, you are essentially deploying your capital for a more serious and meaningful outcome. So please do pay attention to some of the things we will discuss over the next few paragraphs. I'm certain it will have a positive impact in your trading career.

At this point I have to mention this — I myself learned position sizing many years ago by reading Van Tharp's books. Van Tharp is one of the most prominent people to bring in the concept of position sizing to traders.

Gambler's fallacy

We briefly discussed the gambler's fallacy early on. I guess it makes sense to discuss a little more on this at the very beginning especially in the context of markets.

Take a look at this chart –



Bitcoin breaking ATH in 2017

This is the chart of Bitcoin — hit the magical number of *(almost)* 20,000 in December 2017. As a trader, how would you trade this?

1. BTC is at an all-time high ~ 20K
2. Many market participants may book profits at this point — considering it is a psychological level
3. All time high implies no resistance points
4. Bitcoin has been in a great upwards trend over the past few months
5. Maybe BTC would consolidate around these levels?
6. Maybe a correction of 20–30% before the rally continues?

Let us just assume that these are some valid points for now. This means a short position is justified or for that matter buying of puts. Your analysis could be as simple as this or as sophisticated as studying the time series data and modeling the same using advanced statistical or machine learning models.

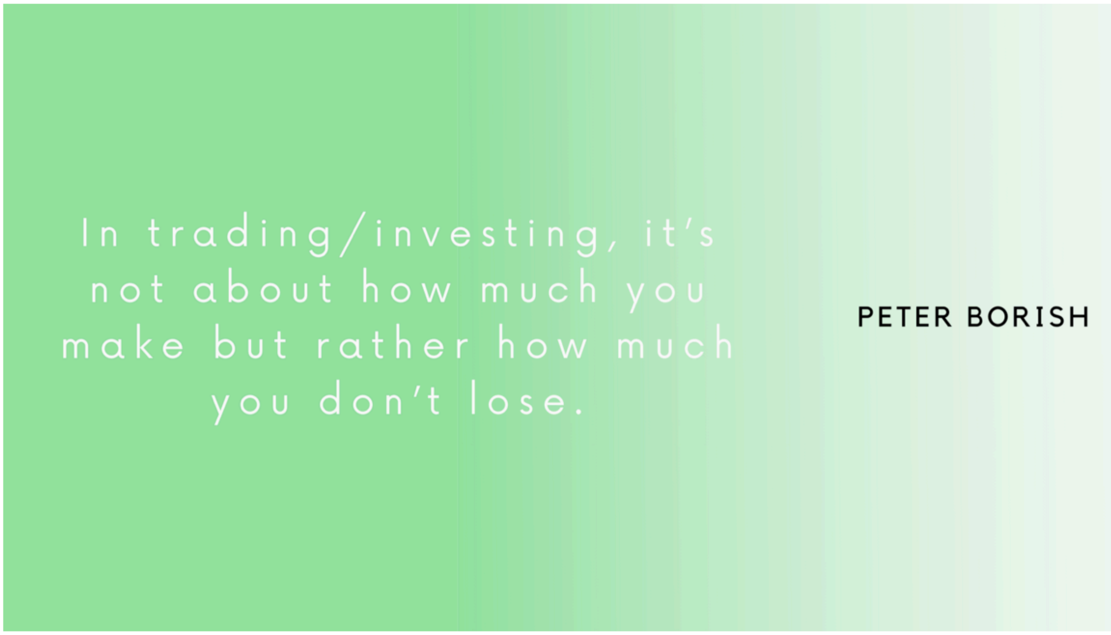
Irrespective of what you do — there is no certainty in the markets. No one technique will tell you the outcome in advance. This implies that we are dealing with fairly random draws here. Of course, based on how meaningful your analysis is, your odds of winning can improve, but at the end of the day, there is no certainty and you have to acknowledge the fact that markets are indeed random.

Now imagine this — you have done a state of the art analysis and you place your bet on BTC only to see the stop loss trigger. You do not give up, you place another trade and to your misfortune, you are stopped out again. This cycle repeats for say the next 4–5 trades.

You know your analysis is bang on — but then your stop loss is continuously getting triggered. You still have money in your account to take on bets, you are still convinced that your analysis is rock solid and the markets will turn around, you still have an appetite for risk — given all these, what do you do?

1. Would you stop trading?
2. Would you risk the same amount of money again?
3. Now that you have lost 6 consecutive bets, would you consider that your odds of making money on the 7th trade is higher and therefore increase your bet size to recover your previous losses plus reap in some profits?

Which option are you likely to take? Take a minute and answer this question honestly to yourself.



Having been through this situation myself and having interacted with many traders let me tell you — most traders would take the 3rd option, the question however is — ***WHY?***

Traders tend to believe that long streaks will cease when they take the 'next' trade. For instance, in this case, the trader has faced 6 consecutive losses, but at this point his conviction that the 7 trade will be a winner is very high. This is called ***'Gambler's fallacy'.***

In reality, when you are dealing with random draws, the odds of making a loss on the 7th trade is as high (or low) as it was when you placed your first bet. Just because you have made a series of losses, the odds of making money on the next trade does not improve.

Traders fall prey to 'Gamblers fallacy' and often end up increasing their bet sizes without understanding how the odds stack up. In fact, gamblers fallacy ruins your position sizing philosophy and therefore is the biggest culprit in wiping out trading accounts.

This works on the other side as well. Imagine, that you are fortunate enough to witness a 6 or let us say 10 consecutive wins. Whatever you bet on, the trade works out in your favor. You are on your 11th trade now, which of the following are you likely to do?

1. Considering that you made enough money, would you stop trading?
2. Would you risk the same amount again?
3. Would you increase your bet size?
4. Will you take a conservative approach, maybe protect you profits, and therefore reduce your bet size?

Chances are that you will take the 4th option. You clearly want to protect your profits and do not want to give back whatever you have earned in the markets and at the same time you would want to take a trade considering you have had a great winning streak.

This is again 'gamblers fallacy' at play. Being completely influenced by the outcome of the previous 10 trades, you are essentially reducing your position size for the 11th trade. In reality, this new trade has a same odds of winning or losing as the previous 10 bets.

Perhaps, this explains why some of the traders, even though get into profitable trading cycle end up making very little money.

> **The antidote for 'Gambler's Fallacy', is position sizing, which was discussed in the first part of this article.**

Recovery trauma

In the trading world, the capital we bring on the table is the raw material. If you do not have enough money to trade with, then how will you make a profit? Hence we need to not just protect the profits that we make, but also protect the capital.

Extending this thought — if you risk too much capital on any one trade, then you stand a chance to risk your capital to an extent that you may burn your capital leaving you with very little money. Now if you are trading with very little money, then every trade that you take will appear to be too risky. The climb back to where you started will (in terms of capital) will be a Herculean task.

I have prepared a table to help you understand this fact. Assume you have a trading capital of $100,000-. Let us see how the numbers stack up with –

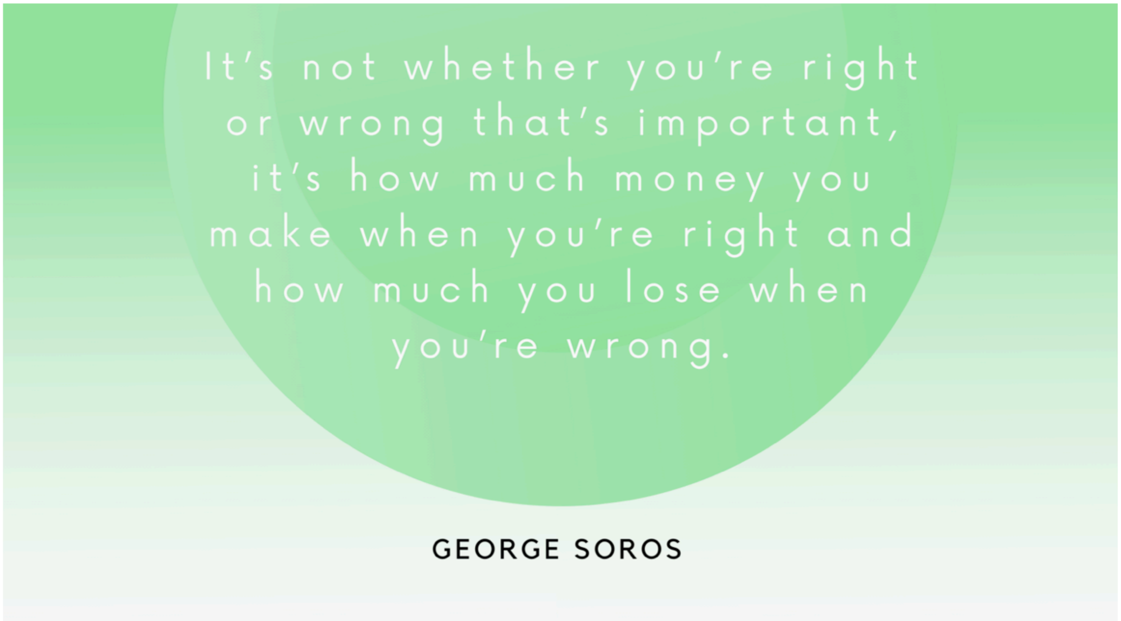
Starting Capital		100,000
Drawdown	**Starting Capital**	**Efforts**
5%	95,000	5.3%
10%	90,000	11.1%
15%	85,000	17.6%
20%	80,000	25%
25%	75,000	33%
30%	70,000	43%
35%	65,000	54%
40%	60,000	67%
45%	55,000	82%
50%	50,000	100%
55%	45,000	122%
60%	40,000	150%
65%	35,000	186%
70%	30,000	233%
75%	25,000	300%
80%	20,000	400%
85%	15,000	567%
90%	10,000	900%
95%	5,000	1900%

Assume you lose 5% of your capital or $5000/-. Your new starting capital is $95,000/-. Now, in order to recover to $5000 with a capital of 95000, you need to generate a return of 5.3%, which is 0.3% more than what you lost. Now, instead of 5%, assume you lost 10% and your capital becomes 90000, now in order to recover 10000 or 10% of your original capital, you have to earn back 11.1%. As you can see, as the loss deepens, you will have to work really hard to bounce back to original starting capital.

Unfortunately, the 'recovery trauma' affects traders with smaller account size. Assume you come to the market with $50,000/- capital. Honestly speaking, if you can manage to grow $50,000 to say $60,000 by the end of the year, you would have done a great job. This translates to a 20% return. But this is not exciting, right? I mean earning $10,000/- over 1 year when you are actively trading somehow does not seem right. But when it comes to compound gains i.e. you gained $10000 this year, next year your principal is 60k and 20% on that would be 12k and so on for many years to come. Consistent gains are important for your portfolio to grow, not risking everything in one big trade, hoping for good returns, you might get lucky once or twice but it's not a long haul.

So what do you do? You tend to take bigger risks and hope to make bigger gains, and if the trade goes against you, then you are essentially falling prey to the 'recovery trauma' phenomena.

This is exactly the reason why you should never risk too much on any one trade, especially if you have a small capital. Remember, your odds of making good money in the markets is high if you can manage to stay in game for long, and to stay for a longer period, you need to have enough capital, and to have enough capital, you need to risk the right amount of money on each trade. This really boils down to working towards longer term 'consistency' in markets, and to be consistent you need to position size your trades really well.



As shown above, **risk management** could be a crucial part of trading. An experienced trader knows how much he or she can risk, but as a beginner you should do everything possible to avoid severe losses. Losses are a part of trading and are unavoidable, but it's essential to know how to deal with them. Managing profits is another aspect. A successful trader has to find a balance between both outcomes of a trade — he or she maximises the profit while minimising the loss.

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For automating your Bitcoin and Ethereum trades with proper risk management, you can subscribe to WhiteWalker Algos. We have 6 algos currently, and will be expanding that to 8, thus depending only 12.5% on each algo to deliver results. More details can be found in the attached link or by sending a DM to me on twitter.

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