Risk – Return

Most of us feel we understand "Risk and Return" intuitively and this is correct to a large extent. Most of us will not run across a busy road to catch a balloon but may do so in an instant to protect our kid from danger.

Let's look at Anand's day to day story to understand risk:

Anand takes a train to go to his office. The train is scheduled to arrive at 9:00 AM. The train "usually" arrives late by 10 mins. Every day Anand reaches the station at 9:05 AM and catches the train on most days. He misses the train some times. Let's say Anand has a promotion interview tomorrow and he needs to catch the 9:00 AM train to be in the office to attend his promotion interview. Do you think Anand will come in at his usual time of 9:05 AM?

Most of us (and hope fully Anand as well) will try on or before 9:00 AM. Although he know the train "usually" arrives at 9:10 AM. Anand wants to avoid the risk (or uncertainty) of the train arriving on time.

Therefore risk can be defined as uncertainty that can lead to an adverse outcome.

Now let's look at how risk and reward (return) are related.

Reward is the benefit (payoff) one gets for doing something. In this context it is the benefit (payoff) you get by taking the risk.

Coming back to our example of Anand…..

Arriving at 9:05 gives Anand that extra time to drop his kid in his school. On most days the pleasure of dropping his kid in the school is worth the chance of missing the 9:00 AM train if it arrives before 9:05 AM.

On day of an important meeting, the pleasure of dropping the kid may not be worth arriving late (and may be losing out on promotion).

Anand is taking the same risk every day, but on the day of the promotion he feels the reward is not worth the risk.

Rewards should be commensurate with the risks, if one is taking a greater risk one should expect a greater reward.

High risk – high return is a commonly misunderstood concept. **Don't take "high risk – high return" literally.** If someone is asking you to take high risk, you need to make sure they are offering you a return commensurate with the risk. High risk does not automatically guarantee high return. It only means that prudent people will expect higher returns to take high risks. The statement should be **"for taking high risk one should expect a high return".**

Even if Anand arrives at 9:00 AM that the train may not come that day due to some issue and he can still lose out even after not trying to take a risk!!!

We should remember chance has a BIG role to play in our lives. We don't usually consider the train not arriving as a risk, but the operative word here is "usually"!!! We need to remember that extra ordinary events like earth quakes, tsunami's, acts of war, acts of crazy people etc…..do happen.

Now let's look at some other features of Risk and return in the context of cricket series. Let's say India is touring Bangladesh. Let's say India has 80% chance of winning a match against Bangladesh, i.e., if India and Bangladesh play 100 matches one can reasonably expect India to win 80 of them.

In a particular match it is difficult to predict a winner, as Bangladesh could win the match that day. It can happen that Bangladesh can beat India in a short series. We need to remember that **winning is never certain.** It is possible to lose even if the odds are in our favour.

Let's say India is playing a 20 match series against Bangladesh. If a person is betting all his money that India will win the very first match (or any one match) then the person may lose all his money if the India just loses that match. If the person divided his money into 20 parts and bets on each of the match, then the chances of him making money are better as India can be fairly expected to beat Bangladesh in a 20 match series.

Even if the odds are good your endurance (ability to take bets for a long time) matters. One needs to preserve capital to be able to participate in the betting process.

Though India is reasonably expected to win in a 20 match series against Bangladesh, there is always a possibility that Bangladesh can beat India in that series. We can say that the person who bet on 20 matches exercised good judgement as opposed to the person who bet all his money on just one match. We have to remember that **"One can avoid bad judgment but can do little about bad luck".**

In summary we can say the following things about risk return:

- Risk is a product of uncertainty (that can lead to adverse outcomes)
- Return should be commensurate with the risks, if one is taking a higher risk one should expect a higher return
- Winning is never certain
- Chance has a big role to paly
- Preservation of capital (Endurance) is key as this allows one to participate for much longer.
- One can avoid bad judgment but can do little about bad luck – for a large part investment wisdom is all about ability to determine if the outcome is due to judgement or luck.

Risk in a stock market context

When we purchase a stock – there is a risk that the stock price will go down because of various reasons. Some could be related to the performance of the company or its management. Some of the reasons could be related to the industry getting impacted due to environmental reasons – like fluctuation in the price of inputs, or change in legislation, change in exchange rates etc. It is also possible that there is a crash in the market and the stock price also declined.

There are some risks that we can hedge though diversification etc, but risks like market risk (where there the overall market crashes) cannot be hedged within the market. One has to be present in multiple markets. Our next article we will discuss various approaches the managing risk.