

According to Benjamin Graham, “an investment operation is one which, upon thorough analysis, promises safety of principal and an adequate return.”

So why do we need to protect the principal while getting an adequate return?

In this Article we Talk about asymmetry of positive and negative returns and due to this asymmetry why should we avoid mistakes while investing.

Let Assume two returns.

Stock A

Year 1 returns	Year 2 returns	Year 3 returns	Year 4 returns
50%	35%	-60%	75%

Its Average is 25%

Stock B

Year 1 returns	Year 2 returns	Year 3 returns	Year 4 returns
20%	13%	18%	21%

Its Average is 18%

Which do you think will give better return?

Lets See the calculations

If you start your money with Rs. 100

If you buy stock A first year return is 50% so at the end of year 1 we will have 150.

Similarly at end we will have 202.5, 81, 141.75 at end of year 2, year 3 and year 4 respectively.

Similarly, for stock B, we will have 120, 135.6, 160.01, 193.61 at the end of year 1, year 2, year 3 and year 4 respectively.

In case of Stock A when you have negative return at end of year 3 its entire 202.5 fall to 81, then in the final year when it grows by 75% to Rs. 141.75.

In case of Stock B its end of the it will have Rs 193.61

The beauty about investment return is that they are multiplicative you multiply each year's return with the next year's return rather than adding. When you have a long

series of numbers for example if any one of them is zero the entire term becomes zero or if for any particular year your investment return is minus hundred that is your principle Falls to zero the series stops over there.

People think that positive 10% return is same as negative 10% or positive 50% return is same as negative 50% how ever it is very different

Asymmetry of Positive and negative returns

Negative	Positive	How much return do you need if you have negative return to postive return	How much negative loss do will send postive return to Par
-10.00%	11.11%	For -10 percent loss you will have to get 11.11 percent positive return to stay at par	11.11 percent positive return will move to par if you have -10 percent negative return
-15%	17.65%	For -15 percent loss you will have to get 17.65 percent positive return to stay at par	17.65 percent positive return will move to par if you have -15 percent negative return
-25%	33.33%	For -25 percent loss you will have to get 33.33 percent positive return to stay at par	33.33 percent positive return will move to par if you have -25 percent negative return
-33.33%	50%	For -33.33 percent loss you will have to get 50 percent positive return to stay at par	50 percent positive return will move to par if you have -33.33 percent negative return
-50%	100%	For -50 percent loss you will have to get 100 percent positive return to stay at par	100 percent positive return will move to par if you have -50 percent negative return
-90%	900%	For -90 percent loss you will have to get 900 percent positive return to stay at par	900 percent positive return will move to par if you have -90 percent negative return

The above table explains the asymmetry of return. It shows that Negative and positive return are very differently.

Let us say you start with 100 rupees if you double your money in the first year 100 goes to 200 and if you have a - 50% after that it falls to 100. Or if you reverse this you get the same number if you start with 100 you have a - 50% you fall to 50 and then you get a +100% you come back to 100 . Asymmetry of return for the small number is very small. But for larger negative % it is very high for eg for -90% loss to recover we would have to get +900% return to get to 100.

Hence, in our investing career how much money we are left with at the end of our investment horizon will depend to a large extent on whether we are able to avoid these kind of problems. If you look at the investing track record of Buffett and Berkshire, its not that they have been so brilliant at identifying the next Microsoft or next Google. It's that they were brilliant in avoiding the big mistakes. They were able to avoid mistakes like the dot-com bubble or they were able to avoid the mortgage lending bubble and the financial crisis.

Hence, survival and making less mistakes are more important than getting high returns. So he keeps saying if we avoid the big investing mistakes we have most of the work done already hence the two famous Warren Buffett's rules come to effect ie. 1. Don't lose money. 2. Don't forget Rule No. 1.

This may also be the reason for the one of most popular bias for loss aversion of the Prospect Theory we will write later in this article.