# WHY COMPOUNDING IS CONSIDERED AS THE EIGHTH WONDER OF THE WORLD? 

## "Compound interest is the eighth wonder of the world. He who understands it, earns it. He who doesn't, pays it." - ALBERT EINSTEIN.

Compound interest is nothing but the interest on interest we tend to earn on our investments. Let me give you a live example that applies to all of us. We can relate compound interest to our knowledge. As children we used to have a limited knowledge about the things around us. But as we grew older, our knowledge tends to compound, we learn more and more from our mistakes and experiences. Likewise, the money invested today will earn interest every year and grows exponentially. Most of you might be aware of what compound interest is but do you have any idea that why is it considered as the eighth wonder of the world? We are going to discuss it in detail and will find out what wonders can compound interest do to our investments.

Let us start with a simple example, suppose you have invested Rs 1,000 in an instrument which is yielding 10\% p.a., so after 1 year your investment will grow to Rs 1,100. Thereafter in the second year, you will earn interest not on the initial investment (Rs 1,000) but on Rs 1,100 which after interest will become Rs 1,210. Consequently, in the 3rd year you will earn interest on Rs 1,210 and so on as long as you stay invested.

Following is the glimpse of the wealth that will be created if you would invest Rs 1,00,000@12\% for $\boldsymbol{n}$ number of years.


## DIFFERENCE BETWEEN SIMPLE AND COMPOUND INTEREST

In case of simple interest, the investor earns subsequent returns only on the principal amount while in case of compound interest; the interest is earned on the principal amount as well as on the interest earned in the immediate preceding year. For better understanding of the investors I would like to quote an example here. Let's say an investor invested Rs 1,000 and the expected return on that investment is around $15 \%$. So the interest in both the cases will be as follows: -

| YEARS | SIMPLE INTEREST | COMPOUND INTEREST |
| :---: | :---: | :---: |
| $\underline{1^{\text {st }}}$ | $1000 * 15 \%=150$ | $1000 * 15 \%=150$ |
| $\underline{2^{\text {nd }}}$ | $1000 * 15 \%=150$ | $1150 * 15 \%=\mathbf{1 7 2}$ |
| $\underline{3^{\text {rd }}}$ | $\underline{4^{\text {th }}}$ | $1000 * 15 \%=150$ |
| TOTAL INTEREST EARNED | $1000 * 15 \%=150$ | $1522 * 15 \%=198$ |

Hence, as you can see that you will stand to earn Rs 148 more in interest where the interest is compounded annually.

## HOW COMPOUNDING HELP YOUR MUTUAL FUNDS INVESTMENTS GROW

You all must have heard that mutual funds create wealth over a period of time. But how do they actually create wealth for the investors, let us understand. For that let's assume that you invest in mutual funds via SIP and invest Rs 5,000 per month. Assuming CAGR of $12 \%$ on your investments, the value of the corpus would be: -



So, as you can see that the longer you stay invested the more wealth you would be able to create. Always remember that not only the time horizon but also the return you earn on your investment is equally important. Hence, one should always allocate at least some portion of his investment towards equity related instruments like mutual funds.

