M4MONEY

JOURNEY TOWARDS FINANCIAL BLISS

POWER OF COMPOUNDING

Power of Compounding is often referred to as “Magic” because it is one of the most fundamental ways to build ‘wealth”.

Any financial transaction involving transfer of money from one entity to another for a specified temporary period would generally involve payment of “interest” by the “receiver” to the “giver”. Rate at which such interest would be calculated is also defined upfront. In addition to the rate of interest, another critical aspect of interest calculation is the method of such calculation. Two methods i.e. **Simple** and **Compound** would make substantial difference in the amount of “interest” payable/receivable by the receiver/giver.

“Simple” interest would always be calculated with reference to the original amount of principle, while in calculating “Compound” interest, the original principle amount gets updated and increased at the end of each frequency period set out for such compounding.

What is Compounding?

It is the ability of an asset to generate return on the original investment as well as on the returns from the previous period. As this process is repeated year after year, in later periods, the returns on the aggregate returns of all the previous years grow at a much faster pace than the return on original investments in that particular period. In the longer terms, the total effect is that the corpus increases manifold over the initial amount.

How It Works

A sum of money – principal - is invested that accrues interest at the end of the first period (monthly, quarterly, yearly or any other fixed tenure) at a certain rate. During the second period, principal earns interest and the interest earned during the first period also earns interest. During the third period, the principal, the interest from the first and the second periods, all earn interest. The process goes on during each subsequent period to have a larger sum of money at the end of each period.

In simple terms, Rs.100 invested at 10% p.a. will become Rs.110 at the end of the first year. In second year, the principle becomes Rs.110 (and not the originally invested Rs.100) and thus the maturity amount would become Rs.121 i.e. 10% on the updated principle of Rs.110. With this process, the maturity at the end of third year would be Rs.132.10, and so on.

It is interest on interest OR earnings on previous period's earnings. **Thus, compounding is process of exponential increase in the original value of investment.**

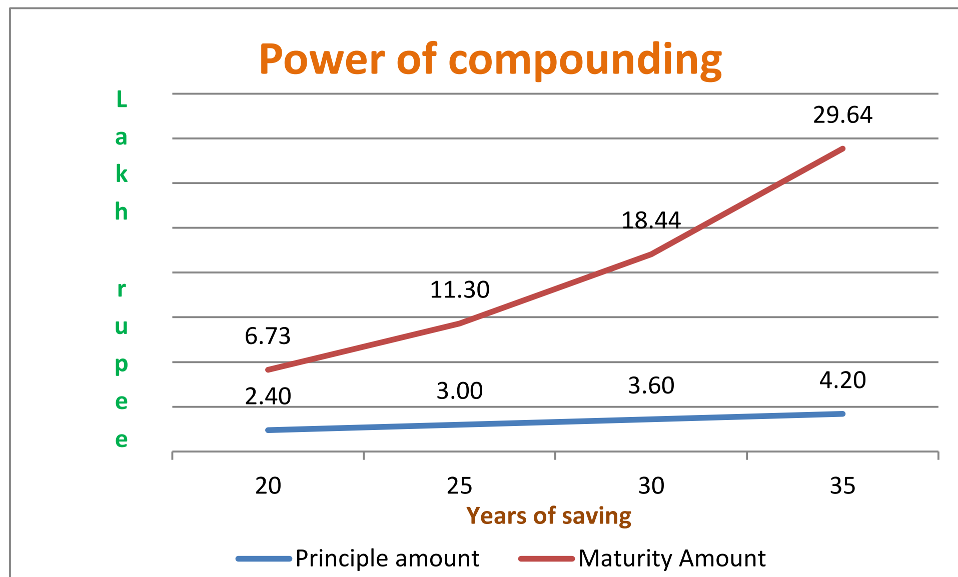
Effect of compounding depends upon the frequency at which interest is compounded. Compounding frequency could be monthly, quarterly or yearly OR even daily. Shorter is the frequency, better it is for the investor because it would yield more to him/her. In case of debt, however, it would be reversed. Shorter compounding frequency would mean your debt would attract more interest liability for you. So be careful.

Cost of Delay

Majority of us start thinking about planning our retirement generally around the age of 40 years. Assuming the retirement age at 60 years, he/she would save for 20 years. Thus, one saves a small sum of Rs 1,000 every month and invest it for 20 years (240 months). This investment, on conservative basis i.e. the prevailing bank deposit rate, gives an average annual return of 9% over 20 years. At the time of your retirement, your total corpus will be nearly Rs 6.73 lakh, for which your actual investment (principal) is Rs 2.40 lakh only.

Now, if such retirement planning is started at an earlier stage, say at the age of 35 years or 30 years or ideally when you are 25 years of age, the retirement corpus would be Rs.11.30 lacs, Rs.18.44 lacs or Rs.29.64 lacs, respectively, at the same rate of interest. Thus, while the principle amount is nominally higher by Rs.60,000 in each such period of five years, the retirement corpus increases exponentially, ***from Rs.6.73 lacs to Rs.29.64 lacs***, if savings start at the age of 25 years.

Delay in saving by 15 years would save you Rs.1.80 lacs but you end up losing Rs.22.91 lacs in your retirement corpus. This astronomical cost of delay gets highlighted if presented graphically as below.



Also imagine the impact if such rate is higher than 9% assumed above, when one opts for mutual fund SIP or other options.

The secret lies in- ***Start early - longer the period stronger is the impact.***
Besides, higher the rate, higher the corpus.

To take full advantage of compounding,
start saving and investing early

For more, please log on to www.m4money.in