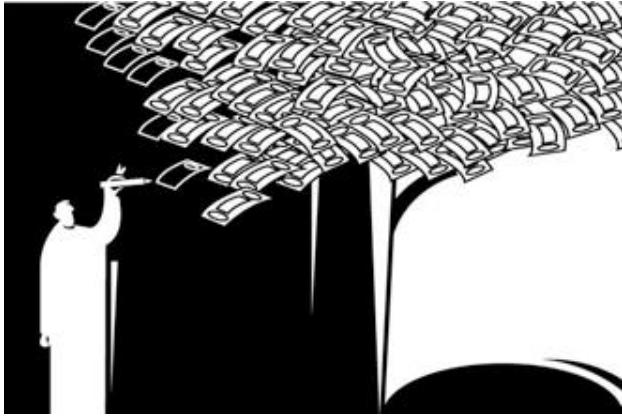


Resolve to be wealthy: take the help of Einstein

Inflation requires that your wealth should grow at a certain rate to maintain its purchasing power

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Shyamal Banerjee/Mint

“Compound interest is the eighth wonder of the world. He who understands it, earns it. He who doesn't, pays it,” Albert Einstein supposedly said.

Investigators have been unable to verify when, and if at all, Einstein ever said that. But it would not be surprising if he did actually say it. Compound interest is similar in concept and effect to the nuclear chain reaction which causes the highly destructive explosion of an atom bomb. Compound interest causes a highly constructive explosion in your wealth if it is working in your favour in your investments, and a highly destructive explosion in your wealth if it is working against you in your debts. Let's talk about its virtuous effect on investing.

Given that it is a new year, we think it is an appropriate time to focus on building long-term wealth. An important question in setting an investment goal is along the lines of (depending on your ambition and audacity): Can I reach `1 crore, `100 crore or `1,000 crore? Or for

the more globally minded: Can I reach a \$1 million, \$100 million or \$1 billion?

There are a number of articles discussing this and calculators online (or mobile apps) that you can find related to this. However, let us look at this from a slightly different perspective. You typically understand the value of money in terms of its purchasing power today. Since India is a high inflation country, the purchasing power of a given amount of money, say `1 crore, could be very different in the future.

So we have constructed a concept called the “wealth horizon” or “wealth cone” to understand how much money will be needed and how much can realistically be created over a future time horizon.

In Einstein's theory of relativity, there is a concept of an “event horizon” or “event cone”. This forms a limit in space-time outside which an event cannot impact. This is due to the speed limit of light which cannot be exceeded by any object.

In investing, the wealth horizon forms a similar limit to the wealth which can be created. The limiting factor here is the rate of returns on investments. Of course, the rate of return on investments is not prohibited by physical law similar to the speed of light. However, in practice, a majority of investors will only get the returns available on bigger asset classes. The fixed-income returns form the lower limits (around 5% post tax), and the equity indices provide the higher ranges (15-20% post tax). All other bigger asset classes over the long run, typically, provide returns between these. (Albeit many asset classes could provide higher returns for short periods of 3-10 years).

Inflation, the silent killer, requires that your wealth should grow at a certain rate (7% over the long term in India) just to maintain its purchasing power. So, this is the minimum that one has to make.

Now we can use all the above information and concepts to develop a simple model to help answer the question: Can I reach `10 crore or \$10 million if I start out with `10 lakh or \$100,000?

First, take the current investible corpus you have. Say it is `10 lakh. To maintain purchasing power one has to grow it by 7% over the long term. This means that, `10 lakh should become `20 lakh in 10 years, `40 lakh in 20 years and `80 lakh in 30 years.

Assuming you get 15% returns on your investments, a starting corpus of `10 lakh will be worth `6.6 crore in 30 years. This will form the realistic wealth horizon for most people. However, the rarest of the rare might be able to get higher returns, say 30% per annum. Of course, then you are probably either Warren Buffett or George Soros. This is a wealth horizon which most people are highly unlikely to breach. With this kind of investing prowess, one is looking at growing their money to nearly `260 crore over three decades.

It is imperative to grow your corpus to about eight times in 30 years just to maintain purchasing power. This cannot be done with fixed-income investments, such as fixed deposits, and hence, some high return, yet risky assets such as equities have to be added to your portfolio. With equities, even with getting the average returns, one can realistically expect 15% post-expenses and taxes over the long term.

This helps you to multiply your purchasing power (i.e., post inflation) by about eight times over 30 years. But if you are Buffett or Soros, then

you get to multiply your purchasing power by about 300 times over 30 years.

So, to reach a billion dollars at the current purchasing power you would need about \$0.4 million today. For reaching a corpus of `100 crore, one would need about `50 lakh and grow it over 30 years at 20% compounded annual growth rate (CAGR) or `1.5 crore and grow it over 30 years at 15% CAGR. Challenging, but possible.

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