

Below is an article written by Peter Harper about the power of compound interest. I thought it was a pretty good summary of a really important concept when investing so rather than re-write, I would just provide his article.

Nigel Littlewood

The Power of Compounding...that Tortoise was on to something...

The lessons learnt from such a fable can be applied to many facets of everyday life and Investing. In particular, the power of compounding in growing your wealth, is one area that shouldn't be overlooked, especially if dividends can be reinvested.

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

The compounding of returns is a powerful factor which is constantly at work for portfolios that are properly structured, take a long term view, and are well managed.

As an example, look at what happens to \$100,000 after 30 years compounding at 10%, 12%, and 14% per annum:

The Hare and the Tortoise, one of Aesop's better known fables, tells the story of a Hare who ridicules a slow-moving Tortoise and is challenged by the tortoise to a race. The hare soon leaves the tortoise behind and, confident of winning, takes a nap midway through the course. When the Hare awakes however, he finds that his competitor, crawling slowly but steadily, has arrived before him.

Compound Interest Rate	Amount Invested	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
10% P.A.	\$100,000	\$161,051	\$259,374	\$417,725	\$672,750	\$1,083,471	\$1,744,940
12% P.A.	\$100,000	\$176,234	\$310,585	\$547,357	\$964,629	\$1,700,006	\$2,995,992
14% P.A.	\$100,000	\$192,541	\$370,722	\$713,794	\$1,374,349	\$2,646,192	\$5,095,016

The middle figure (12%) represents the compound rate of growth of the Australian share market over the last 30 years or so (approximately 8% capital; 4% dividends). The other two figures represent 2% under and outperformance of the market respectively.

But Peoples' eyes often glaze over at such figures, while novice investors often find them nigh on unbelievable, or the time frames too difficult to deal with. As always, real life practical examples best illustrate the point.

A quietly effective Charitable Trust we've watched for years clearly illustrates all that the power of compounding can produce.

In 1951, the Will of Helen Macpherson-Smith established a charitable trust to benefit Victorian based charitable institutions. It was established with £275,000 (\$A550,000).

For the first 21 years of its existence, the Will dictated that the Trust had to accumulate two thirds of its income and reinvest it. A modern day equivalent would be something like a superannuation fund being in accumulation phase. Helen Macpherson-Smith really knew the power of compounding.

As of this year, the Trust has a capital value of approximately \$A100 million; will have, by the end of this year, distributed an additional \$A100 million to a range of worthy charities during its life, and is distributing between \$4-5 million dollars each year.

As an aside, left in cash, each dollar left to the Will Trust in 1951 would have a real (inflation adjusted) value today of 3.8 cents and negligible earning power – but that's another story.

There are 3 central lessons from all of this which should never be forgotten:

1. Over extended periods it isn't necessary to outperform the market by large amounts to see substantial incremental net benefits to the investor
2. Spending time in the market as a constant investor is critical to maximising the benefits of compounding. If you didn't start early yourself, encourage your children or grandchildren to start investing as young as possible.
3. Most important of all, never let frustration at what may appear to be near term modest growth induce inappropriate risk taking and trading in the early years of building towards your retirement objectives. A portfolio initiated with \$A100,000 compounding at 12% p.a. will produce only an incremental \$76,234 in its first 5 years, whereas, the last 5 years of the 30 year period shown in the Table will produce, and without any additional contributions to the portfolio, incremental value of \$1,295,986.

Good investing, as we learnt from our friend the Tortoise, is not a sprint, it's a long term process which needs discipline, constancy, and focus.

Peter Harper
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