

Compound interest can be confusing – but it doesn't have to be

The main idea behind compounding is that as well as earning interest on your savings, you also earn interest on your interest.

This can make a big difference to the value of long term savings and investments (and the costs of debt). And over long periods of time, it can really start to add up. So if you're thinking big, think ahead...

Let's get to grips with the effects of compounding on the growth of a stocks and shares investment. Hope you've got your maths head on!

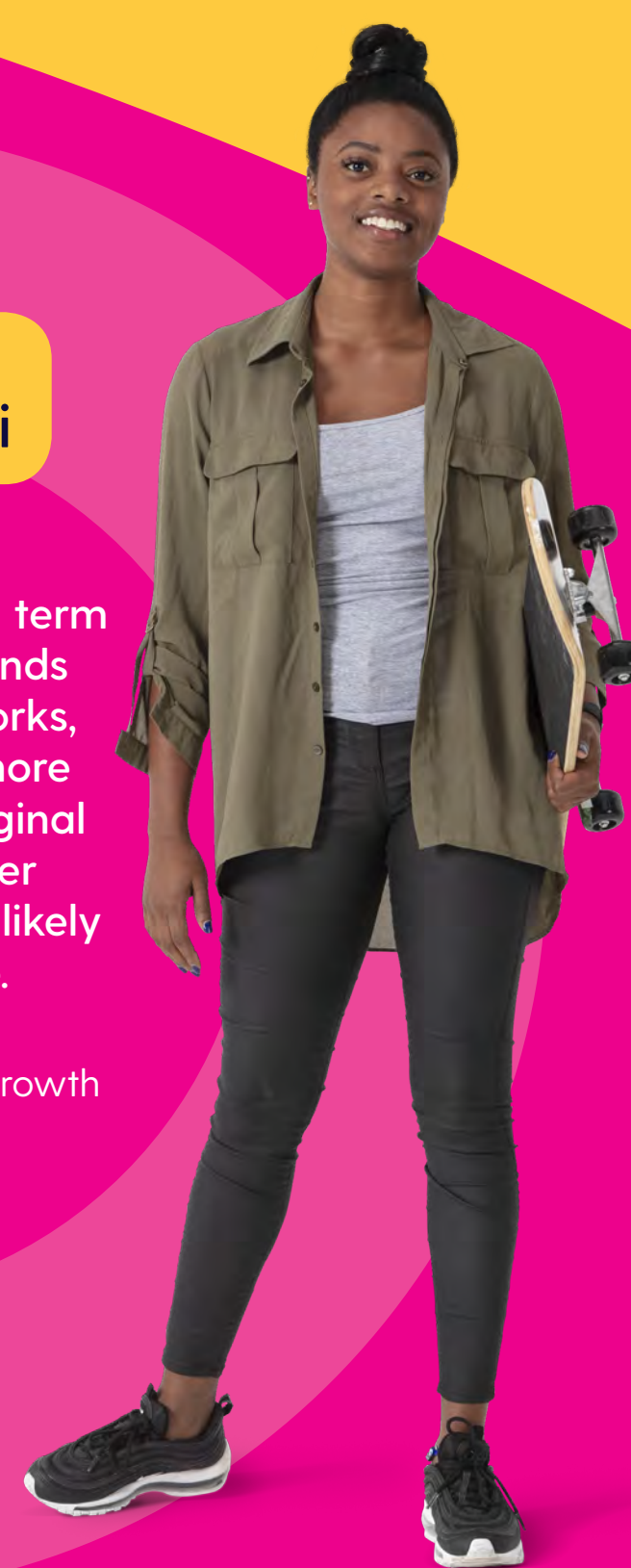
A tale of two teens...



Meet Dean

Dean is the kind of person who likes to make a big-ticket purchase every now and then.

He knows that if he invests his money, he could earn additional income from the growth on his investments. Which could help pay for future shopping sprees!



Meet Sammi

Sammi has a more long term outlook. She understands how compounding works, and knows that the more she can add to her original investment, the better growth outcome she is likely to get in the future.

She decides to leave any growth on her investment to be reinvested.

Dean's investment

Vs

Sammi's investment

Although they have different approaches to income, both Dean and Sammi were lucky to invest in funds that provide a good return on their investment over the long term.

However, this is not a real life example and investment returns do fluctuate. This means you may end up with less than you paid in.

Imagine Dean invests £10,000

in a stocks and shares fund, which gives an average annual return of 5% growth on the investment.

Year 1

After a year, Dean's £10,000 investment has grown by 5%, giving him £500 which is paid out as income.

Not bad. Dean decides he deserves a break, so spends his £500 on a week away in the sunshine.

Year 2

In year 2, the growth on Dean's investment is a bit lower at 3%. This is still only calculated on his original investment of £10,000 and he gets another £300.

This time Dean puts his money towards a new phone – better camera means better selfies!

Year 10

Despite a few fluctuations in the stock market, over the last 10 years Dean's investment has given him a yearly average of 5% growth.

Each year he has had this growth paid out as income, and each year found a new way to enjoy the benefits of his investment.

Sammi also invests £10,000

in a stocks and shares fund, with a similar average annual return of 5% growth on the investment.

Year 1

After a year, Sammi's investment has also grown by 5%, also giving her a £500 return.

Unlike Dean though, Sammi chooses to leave her extra earned cash where it is, and re-invest her £500 back into her fund.

Year 2

Sammi's investment also receives 3% growth this year, but hers is calculated on both her original investment and the £500 growth from year 1. Giving her £315 to add back into her fund.

Let's see how it adds up in the long term...

Year 10

Sammi's investment has also seen some ups and downs over the last decade (haven't we all!) but has also grown at an average of 5%.

By accumulating this growth within her fund, she has increased the value of her fund by over £6,000. Nice work Sammi!

Now let's fast forward even further to get an idea of the really, really long term impact!

Year 25

Due to a lucky investment choice, Dean still has his £10,000, and has enjoyed the benefits of being able to spend the income from the growth of his investment along the way.

Dean's total growth to date

£12,500

Sammi's total growth to date

£23,864

(That's £11,364 more than Dean!)

Year 25

With a lucky investment choice and a long term outlook, Sammi can now really reap the benefits of her earlier decision.



As you can see, the effects of compounding can make a real impact, especially over long periods of time.

While spending any income received on your investment you've earned right away can be super attractive for those immediate wants and needs, it can sometimes be wise to re-invest any returns as you could end up with a much larger return on your investment.