

NARRATOR

Let's have a close look at compound interest and how it works. If you kept 500 pounds in your savings account, and the interest rate payable at the end of the year is 4 percent per annum, how much interest is paid at the end of year one; at the end of year two, assuming that year one's interest is added to the account balance; and at the end of year three, assuming that year one's and year two's interest is added to the account balance?

Well, at the end of year one, the interest is 20 pounds. That's 500 times 4 divided by 100. This makes the balance of the account 520 pounds at the end of year one, when you add the 20 pounds to the balance initially of 500 pounds.

Now, at the end of year two, the interest is 20 pounds and 80 pence. That's 520 times 4 divided by 100. This makes the balance of the account 540 pounds and 80 pence at the end of year two.

At the end of year three, the interest is 21 pounds and 63 pence. That's 540 pounds and 80 pence from the end of year two times 4 divided by 100. This makes the balance of the account 562 pounds 43 pence at the end of year three.

This example looks at the way compounding helps build up the balance in your savings account. But remember, the same process of compounding would apply if you borrow money and fail to make new payments when due. Interest charged on the borrowed money is normally higher, often much higher than interest earned on savings accounts. You can easily see how quickly debts can build up if people don't manage the money they borrow responsibly.

Let's demonstrate this by changing the interest rate in the calculation to 20 percent. That's a rate that could be charged if you borrowed on a credit card or a store card. Then, at the end of year one, the interest would be 100 pounds, which is 500 times 20 divided by 100. This makes the balance 600 pounds at the end of year one.

At the end of year two, the interest would be 120 pounds. That's 600 times 20 divided by 100. So this then makes the balance of the account 720 pounds at the end of year two.

At the end of year three, the interest would be 144 pounds. That's 720 times 20 divided by 100. This makes the balance of the account 864 pounds at the end of year three. So the balance has grown over three years by a staggering 364 pounds. The message is clear. Compounding interest is good news if you're a saver, but bad news, perhaps very bad, if you're a borrower.