

## FinancialQuotient

# What is an effective interest rate?

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### WHAT DOES IT MEAN?

Most financial contracts state an annualised rate. For example, the interest payable on a credit card debt is usually quoted as 24 per cent.

This is an annual percentage rate. It would also be the effective rate if payments are made only once a

year. However, in reality, interest payments on credit card debt are due monthly. Therefore, the effective rate is in fact 26.82 per cent.

### WHAT IS THE IMPORTANCE?

It is important to know that the effective rate is higher than the quoted rate if interest is paid on a monthly basis.

This is because interest is

charged on the accumulated principal and interest payable.

Let's consider a \$5,000 outstanding credit card debt. For the first month, your interest payable will be  $\$5,000 \times (24 \text{ per cent}/12)$  or \$100.

For the second month, you will have to pay interest on the total amount of \$5,100, that is,  $\$5,100 \times (24 \text{ per cent}/12)$  or \$102. Every

month, the interest payable escalates because of the accumulated interest. Put simply, you are not paying  $\$5,000 \times 24 \text{ per cent} = \$1,200$  in annual interest. You are, in fact, paying \$1,341 (26.82 per cent  $\times$  \$5,000).

### IF YOU WANT TO USE THE TERM, JUST SAY:

When taking up a loan, one should

remember that the effective interest rate is higher than the quoted interest rate.

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- Both writers are associate professors in the department of finance at National University of Singapore (NUS) Business School. The opinions expressed are those of the writers and do not represent the views and opinions of NUS.