

Money now is worth more than an equal amount of money in the future. This is always the case. Thus, if choosing to invest a certain amount of money in the present, a greater amount of money in the future is needed in return. This is why interest rates exist—interest is the extra return required for a capital investment.

When inflation is present, it is easy to see why this is true. However, this holds even when there is deflation, rather than inflation. When there is deflation, one can perform what is called **mattress arbitrage**—that is, one can simply hold cash inside a mattress rather than investing it. Thus, interest rates can never be negative.

The Time Value of Money is why all investments must offer a positive rate of return.