



Calculating Present and Future Value of Cash Flows

Money today is *more valuable* than money tomorrow

Scenario I:



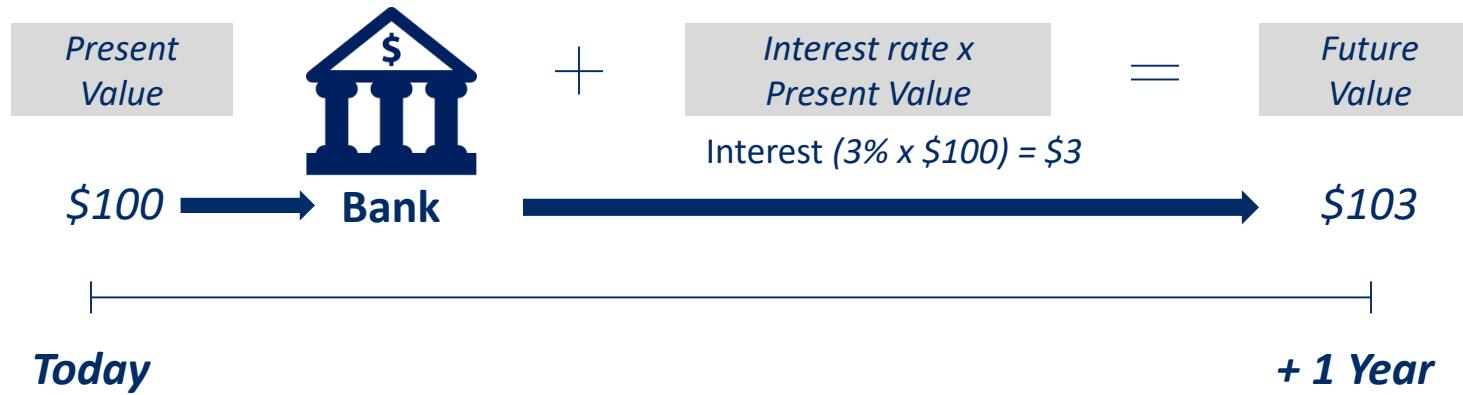
Scenario II:



**We have to consider
the Time Value of money**

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$$\text{Future Value} = \text{Present Value} \times (1 + i)$$

$$\text{Future Value} = 100 \times (1 + 3\%) = \$103$$

How do we find the Present Value of a Future Cash Flow?

$$\text{Future Value} = \text{Present Value} \times (1 + i) \quad \boxed{\text{Divide by } (1 + i)}$$

$$\frac{\text{Future Value}}{(1+i)} = \frac{\text{Present Value} \times (1+i)}{(1+i)}$$


$$\frac{\text{Future Value}}{(1+i)} = \text{Present Value}$$

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$$\text{Present Value} = \frac{\text{Future cash flow } "n" \text{ years from now}}{(1 + i\%)^n}$$