

TIME VALUE OF MONEY

Compound Interest: $(1+i)^n$ where “i” is the periodic **Interest Rate** and “n” is the number of periods that are **Compounded**.

Compounding: Approach to taking a **Present Value** to a **Future Value**:

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

Discounting: Approach to taking a **Future Value** back to **Present Value**:

$$\text{Present Value (PV)} = \text{Future Value} \div (1+i)^n$$

Annuities (PMT): Investments with constant future **Periodic Payments**.

Interest Rate (i), Effective Yield, Internal Rate of Return (IRR): Various measures of the **Return on Capital** or the **Cost of Capital**.

Net Present Value (NPV): The **Present Value** of all **Projected Future Cash Flows** discounted at a specified **Discount Rate**, less the cost of the **Investment**.

Internal Rate of Return (IRR): The calculated **Discount Rate** at which the **Present Value** of all **Projected Future Cash Flows** is equal to the cost of the **Investment**.

Risk: Is essential to evaluate in order to determine whether the expected **Investment Return** is sufficient in light of the perceived **Risk**.

n	i	PV	PMT	FV
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