# The compounding effect in financing, the $n p v$ value technique 

Finance

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The compounding effect is one of the oldest concepts in the financial world. Compounding is a powerful concept because it allows for the creation of money. Compounding works in the following manner. If you put $\$ 1000$ in a bank account paying 5\% the money will grow by $5 \%$ after one year and the following year the account will increase by $5 \%$ of the principal plus the interest accumulated which would be 5\% of \$1050 and so on. Compounding has a reverse effect which is referred to as discounting. Discounting is used to determine the time value of money of a fixed amount of money or expected cash flow; for instance, if a person has $\$ 500$ that money will be worthless in the future because money depreciates due to the effect of inflation. Based on the time value of money present value table $\$ 500$ discounted at $3 \%$ will be worth $\$ 431.30$ five years from now (Besley $\&$ Brigham, 2000).

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The way to calculate the present value of the amount of money is by using financial calculators. Graphic calculators such as the Ti-89 titanium have integrated financial calculators in its systems which are very easy to use. The discounting rate a company uses depends on the risk the company is willing to take. Some companies require a higher discounting rate than others due to the industry in which they operate.

