



opportunity costs and the time value of money

opportunity cost refers to what a person gives up when a decision is made. This cost, also called a trade-off, may involve one or more of your resources (time, money, and effort).

personal opportunity costs may involve time, health, or energy. For example, time spent on studying usually means lost time for leisure or working. However, this trade-off may be appropriate since your learning and grades will likely improve.

financial opportunity costs involve monetary values of decisions made. For example, the purchase of an item with money from your savings means you will no longer obtain interest on those funds.

time value of money can be used to measure financial opportunity costs using interest calculations.

e.g. **For example:** spending \$1,000 from a savings account paying 4 percent a year means an opportunity cost of \$40 in lost interest.

Calculation: $\$1,000 \times .04$ (4 percent) $\times 1$ year = \$40

Over 10 years, that \$40 a year (saved at 4 percent) would have a value of over \$480 when taking into account compound interest.