

# What Is Interest?

## How Interest Works with Everyday Loans

Interest is the cost of using somebody else's money. When you borrow money, you pay interest. When you lend money, you earn interest.

There are several different ways to calculate interest, and some methods are more beneficial for lenders. The decision to pay interest depends on what you get in return, and the decision to earn interest depends on the alternative options available for investing your money.

### What Is Interest?

Interest is calculated as a percentage of a loan (or deposit) balance, paid to the lender periodically for the privilege of using their money. The amount is usually quoted as an annual rate, but interest can be calculated for periods that are longer or shorter than one year.

Interest is extra money that must be repaid — in addition to the original loan balance or deposit. To put it another way, consider the question: What does it take to borrow money? The answer: More money.

**When borrowing:** To borrow money, you'll need to repay what you borrow. In addition, to compensate the lender for the risk of lending to you (and their inability to use the money anywhere else while you use it), you need to repay *more than you borrowed*.

**When lending:** If you have extra money available, you can lend it out yourself or deposit the funds in a savings account (effectively letting the bank lend it out or invest the funds). In exchange, you'll expect to earn interest. If you are not going to earn anything, you might be tempted to spend the money instead, because there's little benefit to waiting (other than saving for future expenses).

How much do you pay or earn in interest? It depends on:

1. The interest rates
2. The amount of the loan
3. How long it takes to repay

A higher rate or a longer-term loan results in the borrower paying more.

**Example:** An interest rate of five percent per year and a balance of \$100 results in interest charges of \$5 per year (assuming you use simple interest).

Most banks and credit card issuers do not use simple interest. Instead, interest compounds, resulting in interest amounts that grow more quickly (see below).

## Earning Interest

You earn interest when you lend money or deposit funds into an interest-bearing bank account such as a savings account or a certificate of deposit (CD). Banks do the lending for you: They use your money to offer loans to other customers and make other investments, and they pass a portion of that revenue to you in the form of interest.

Periodically, (every month or quarter, for example) the bank pays interest on your savings. You'll see a transaction for the interest payment, and you'll notice that your account balance increases. You can either spend that money or keep it in the account so it continues to earn interest. Your savings can really build momentum when you leave the interest in your account – you'll earn interest on your original deposit *as well as the interest added to your account*.

Earning interest on top of interest you earned previously is known as compound interest.

**Example:** You deposit \$1,000 in a savings account that pays a five percent interest rate. With simple interest, you'd earn \$50 over one year. To calculate:

1. Multiply \$1,000 in savings by five percent interest per year.
2.  $\$1,000 \times .05 = \$50$  in earnings (see how to convert percentages and decimals).
3. Account balance after one year = \$1,050.

However, most banks calculate your interest earnings every day – not just after one year. This works out in your favor because you take advantage of compounding. Assuming your bank compounds interest daily:

- Your account balance would be \$1,051.16 after one year.
- Your annual percentage yield (APY) would be 5.12 percent.
- You would earn \$51.16 in interest over the year.

The difference might seem small, but we're only talking about your first \$1,000 (which is an impressive start, but it will take even more savings to reach most financial goals).

With *every* \$1,000, you'll earn a bit more. Over time (and as you deposit more), the process will continue to snowball into bigger and bigger earnings. If you leave the account alone, you'll earn \$53.78 in the following year (compared to \$51.16 the first year).

## Paying Interest

When you borrow money, you generally have to pay interest. But that might not be obvious – there's not always a line-item transaction or separate bill for interest costs.

**Installment debt:** With loans like standard home, auto, and student loans, the interest costs are baked into your monthly payment. Each month, a portion of your payment goes towards

reducing your debt, but another portion is your interest cost. With those loans, you pay down your debt over a specific time period (a 15-year mortgage or 5-year auto loan, for example). To understand how these loans work, read about loan amortization.

**Revolving debt:** Other loans are revolving loans, meaning you can borrow more month after month and make periodic payments on the debt. For example, credit cards allow you to spend repeatedly as long as you stay below your credit limit. Interest calculations vary, but it's not too hard to figure out how interest is charged and how your payments work.

**Additional costs:** Loans are often quoted with an annual percentage rate (APR). This number tells you how much you pay per year and may include additional costs above and beyond the interest charges. Your pure interest cost is the interest "rate" (not the APR). With some loans, you pay closing costs or finance costs, which are technically not interest costs that come from the amount of your loan and your interest rate.

