QuickCourse 

Calculating Returns

A quick-and-easy method for calculating the return on your account is the approximation method. With simple addition, subtraction, division and multiplication, returns can be calculated using information right from your brokerage account statement(s).

This method compares the account's ending value with its beginning value for the period, typically quarterly or annually, then adjusts for any additions or withdrawals. To keep this simple, there's a little fudging in how additions and withdrawals are accounted for: 50% of net additions/withdrawals are subtracted from the account's ending value and 50% of net additions/withdrawals are added to the account's beginning value. This creates a mid-period average for cash flows. If deposits and withdrawals are infrequent and not too sizeable, the approximation method provides a fairly-accurate estimate of your return without any complicated calculations. Here's the formula:

$$\left(\frac{\text{Ending Value} - 0.50\ \text{Net Additions/Withdrawals}}{\text{Beginning Value} + 0.50\ \text{Net Additions/Withdrawals}} - 1.00 \right) \times 100 = \text{Return \%}$$

Example 1:

Ending period value:	$100,000
Additions:	$7,000
Withdrawals:	$2,000
Beginning period value;	$90,000

In this example, net additions were $5,000. 50% of $5,000 is $2,500.

$$\left(\frac{100{,}000 - 2{,}500 = 97{,}500}{90{,}000 + 2{,}500 = 92{,}500} - 1.00 \right) \times 100 = \text{Return \%}$$

$$\frac{97{,}500}{92{,}500} = 1.054 - 1.00 = .054 \times 100 = 5.4\%\ \text{Return}$$

Example 2:

If you have no additions or withdrawals from your account for the period, simply divide the ending period value by the beginning period value.

$$\frac{100{,}000}{90{,}000} = 1.111 - 1.00 = .111 \times 100 = 11.1\%\ \text{Return}$$

© 2018 DecisionPoint Services, LLC.

While the beginning and ending values in example 1 and 2 were the same, additions and withdrawals affected the rate of return in example 1. The following overview of two popular methods for calculating returns will help explain why:

Dollar Weighted Rate of Return

This method measures the return on your invested dollars. It takes into account the beginning period account value, the ending period account value, and the date and amount of each addition or withdrawal. This method is also referred to as an internal rate of return. It shows returns you can “take to the bank”. This method should be used when you want to compare your account’s return against your goal-based return objective.

Time Weighted Rate of Return

This method assumes a one-dollar investment at the beginning of a given time period and measures the growth of that dollar as a percentage rate of return, thus the term "time weighted". This method should be used to compare your account’s return against the return of an index/benchmark like the S&P 500 index for example, or the return of a particular mutual or investment category against a benchmark or peer group (which also calculate returns assuming a one-dollar investment at the beginning of a given time period.)

Your financial advisor welcomes the opportunity to explain the method they use to calculate the return on your account.

© 2018 DecisionPoint Services, LLC.