

Cost vs. Present Value Or, "Figures Don't Lie (But Liars Figure)"

By Richard G. Halpern

On November 23, 1997, the cost of an annuity producing income of \$1,000 per month for 50 years (\$600,000) was \$198,395. This annuity had an internal rate of return of 6.015%.

Discount factor is the same as rate of return, except working backwards from the income stream. You use the rate of return to determine what X amount of money will produce in income over the next 50 years; you use the discount factor to determine what needs to be invested today to produce Y amount of income over the next 50 years.

1. Using the same variables (discount factor, desired income, and time span) the present value of this annuity will equal the cost.
2. But ... if you assume a discount factor of 0%, the present value on November 23, 1997 becomes \$600,000 (equal to the total payout).
3. And if you assume a discount factor of 100,000% per month, the present value is \$1.00.
4. The cost is still \$198,395 on November 23, 1997.

You see? Present value can be anything the presenter wants it to be!