INSTRUCTIONS FOR "RETURN ON INVESTMENT CALCULATOR"

This program gives any easy way to determine the annualized "return on investment" (R.O.I.) for any financial transaction or investment. ROI is the score card businesses and investors use to determine if they are winning the game.

Hand held financial calculators can give you the ROI (interest rate) for very simple situations only. This program will give you the ROI with any type of investment or business scenario.

Please print the results of EXAMPLE 1 under PRINT in the main menu to see the type of input this program needs from you. You simply have to enter "money in your pocket" or "money out of your pocket" and a date for each transaction. Every data set must have a final transaction. The program uses sophisticated mathematics to give you a ROI based on your input. "What if" analysis is easy by changing the inputs.

Do not be afraid to select menu options you are not sure about. The program is written to be user friendly so there are plenty of warning screens and checks to prevent data loss.

INSTALLATION

Return on Investment Calculator will run under Windows 95 (tm) or newer. If you receive ROI32C.ZIP, then you have to un-zip the file first. Run SETUP.EXE to automatically install the program (double click on the desktop icon or using Windows Explorer, depending on the file location). It can be un-installed like many other Windows programs: my computer, control panel, add/remove programs.

Please give this program to friends and co-workers.

THE BASICS

Question: What is return on investment (ROI)?
Answer: It is the interest rate a savings account at a bank would have to pay you in order for it to be an equivalent investment. Return on investment is also called "internal rate of return" or "return on capital employed"

Question: Why is it annualized, and what does it mean?
Answer: Annualized means "per year." To compare investments, they naturally have to be for the same length of time. An annualized return on investment can be calculated for investments of less than one year.

Question: Why is complicated mathematics needed to find the ROI? Why can't I just divide the profit by the amount invested to get the ROI?
Answer: If there are only two transactions (initial and final), exactly one year apart, then the simple method of dividing profit by initial investment does yield the ROI compounded yearly.

There are three issues:
1) Most investments are compounded monthly or continuously, and not yearly.
2) Most investments do not start and end exactly a year apart.
3) There are often intermediate transactions, such as interest payments or dividend receipts, between the initial and final transactions.

The ROI calculation takes into account the "time value of money." To illustrate the point, lets look at two simple

examples and see which one should have a higher ROI. In example "A" you receive a dividend a WEEK after making an initial investment. In example "B" you receive an identical dividend a YEAR after making an identical initial investment. Clearly, example "A" has a higher ROI because you had the use of the dividend for a longer period of time.

EXAMPLES

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Example 1: (common stock before taxes)

Event: You buy some stock in XYZ Company in 09/05/92 for $2,000 including commission.
Action: You add an individual transaction for "money out of your pocket" by hitting the "ADD" button and filling in the blanks.

Event: You receive a dividend check for $20 on 12/31/92.
Action: You add an individual transaction for "money in your pocket" for $20.

Event: You receive a dividend check for $80 on 12/31/93.
Action: You add an individual transaction for "money in your pocket" for $80.

Event: You sell this stock in XYZ Company on 2/23/94 for $3000 after commissions.
Action: You add a individual transaction for "final dollar in" for $3000.

The ROI for this investment is 30.5% compounded monthly. Select menu choice VIEW, CALCULATE to see the ROI.

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Example 2: (common stock after taxes)

Event: You buy some stock in XYZ Company in 09/05/92 for $2,000 including commission using after tax money.
Action: You add an individual transaction for "money out of your pocket" for $2000.

Event: You receive a dividend check for $20 on 12/31/92 and you are in the 30% tax bracket.
Action: You add an individual transaction for "money in your pocket" for $14
($20 - 30%)

Event: You receive a dividend check for $80 on 12/31/93 and you are still in the 30% tax bracket.
Action: You add an individual transaction for "money in your pocket" for $56
($80 - 30%).

Event: You sell this stock in XYZ Company on 2/23/94 for $3000 after commission and you are in the 30% tax bracket.
Action: You add a individual transaction for "final dollar in" for $2700 [(gain of $1000 - 30%) + (initial after tax investment of $2000)].

The ROI for this investment is 22.5% compounded monthly. Select menu choice VIEW, CALCULATE to see the ROI.

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Example 3: (investment rental property, before taxes)

Event: You buy some investment rental property for $200,000 by borrowing $160,000 and using $40,000 of your own money for a down payment and closing costs on 07/23/97.
Action: You add an individual transaction for "money out of pocket" for $40,000. ($160,000 in your pocket and $200,000 out of your pocket on the same day yields the same results as $40,000 out of your pocket.)

Event: Every month you write the bank a mortgage check for $1500, and every month you receive a rent check for $1700.
Action: You add a periodic transaction for "money in your pocket" for $200 ($1700 - $1500) with an initial date of 07/23/97 and put an "x" by MONTHLY. (Entering separate periodic transactions for "money out of your pocket" for $1500 and "money in your pocket" of $1700 yields the same results).

Event: Every year you do about $1000 worth of repairs on the property.
Action: You add a periodic transaction for "money out of pocket" for $1000 with a initial date of 07/23/97 and put an "x" by YEARLY.

Event: You sell the property on 01/17/03 for $225,000 and pay the bank $135,000 you still owe them.
Action: You add an individual transaction for "final in your pocket" for $90,000 ($225,000 - $135,000) for 01/17/03.

The ROI for this investment is 17.5% compounded monthly. Select menu choice VIEW, CALCULATE to see the ROI.

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MENU DESCRIPTION

I. "Add/Edit" - where you add, edit, view, and delete financial transactions.

A. "Add/Edit/View/Delete INDIVIDUAL Transactions"

Individual transactions are one time events such as paying $20,000 down payment on a house. Each transaction must be entered separately into this screen. You can have multiple transactions on the same day if you desire.

B. "Add/Edit/View/Delete PERIODIC Transactions"

Periodic transactions occur once a period such as paying your house mortgage once a month. Using the Periodic Screen is optional, but it will save you having to add many repetitive transactions in the Individual Screen if financial transactions do occur on a regular basis. Periodic transactions occur at the END of the period.

All financial transactions can be boiled down to one of three types:
1) Money in Your Pocket
2) Money out of Your Pocket
3) Final Transaction are always "money in your pocket" and you must have a single final transaction and associated date for the data set to calculate the ROI. If there is not a true final transaction, enter a final transaction of $0.01 and a date. The date is what is really needed.

Examples of "money in your pocket" are receiving a dividend check from a stock or rent money on investment property you own. Examples of money out of your pocket are buying a stock or paying a down-payment on a house. Examples of a final transaction is selling a stock or a house.

II. "View" allows you to calculate ROI (instead of printing it) and to view other data.

III. "Print" - It is a good idea to look at your ROI for a data set here so you can confirm the accuracy of each transaction.

IV. "Utilities"

A. "Type of Compounding" allows you to choose continuous or monthly compounding in the internal mathematics. The difference in the final results are not usually significant for decision making.

B. "Delete ALL for a data set"

C. "Pack and Re-index" - This should be done occasionally, or if weird behavior is observed.

D. "Registration" - important!

E. "About" - Yes, this is a trial and the program will not run after 45 days, or after 10 user sessions, unless you have registered the software for $15 (US).

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