

**Package Name:** IRRVAL

**Author:** Eren Ocakverdi

**Date:** 2015/04/28

**Add-in Type:** Series and Global

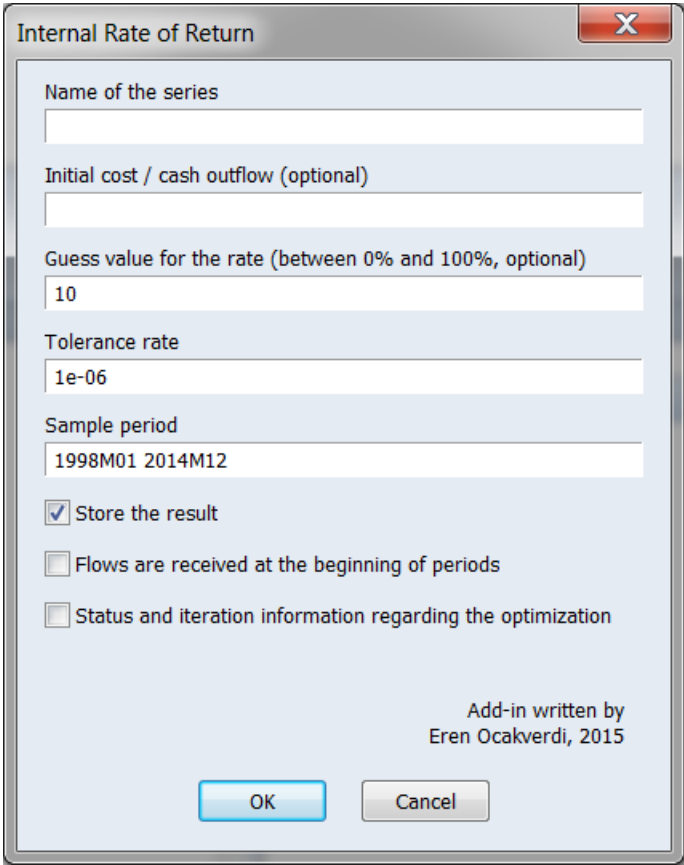
**Default Proc Name:** irrval

**Default Menu Text:** Interest rate for which the net present value is zero

**Interface:** Dialog and Command Line

**Description:** This add-in computes the internal rate of return for cash flow data. Add-in makes use of the optimize feature of EViews, so version 8.0 or higher is required.

**Dialog:** Upon running the add-in from the menus or command line, a dialog will appear:



Internal Rate of Return

Name of the series

Initial cost / cash outflow (optional)

Guess value for the rate (between 0% and 100%, optional)

10

Tolerance rate

1e-06

Sample period

1998M01 2014M12

☒ Store the result

☐ Flows are received at the beginning of periods

☐ Status and iteration information regarding the optimization

Add-in written by  
Eren Ocakverdi, 2015

OK Cancel

In the first box, enter the name of your series. Usually, the first value of the series (during the chosen sample period) is assumed to be negative to indicate the initial cost/cash outflow. If that is the case, then you can leave the second box blank. Otherwise, you are expected to supply a nonzero value, which will be treated as an outflow regardless of its sign. You may want to provide different starting values for internal rate of return (between 0 and 100) to ease the optimization if you experience any convergence problems. By the same token, you may wish to adjust the tolerance rate should you need it. The result should be a scalar value between 0 and 100. If you like, you can also see the status and iteration

information that summarizes the current state of an optimization. By default, flows are assumed to realize at the end of period. If that is not the case, simply check the related box.

Procedure recognizes the frequency of workfile and adjusts the formula accordingly. For an undated/integer workfile, annual frequency is assumed.

#### **Command Line:**

*Syntax-1:* irrval

*Syntax-2:* myseries.irrval(options)

#### *Options:*

Argument	Type	Explanation
ser	<i>string</i>	Name of the series
cost	<i>numeric</i>	Initial cost or cash outflow (optional)
init	<i>numeric</i>	Starting value for internal rate of return (optional)
tol	<i>numeric</i>	Tolerance level for convergence (Default is 1e-06)
smpl	<i>string</i>	Sample period
results		Store the results (a scalar named irr??)
begin		Flows are received at the beginning of each period
status		Summary information regarding the optimization (a string named status??)
prompt		Open the GUI

#### **Examples:**

- 1) myseries.irrval(results)
- 2) myseries.irrval(cost="5000",init="20",tol="1e-07",sample="2000m04 2010m11",begin,results,status)