Package Name: CUTOFF
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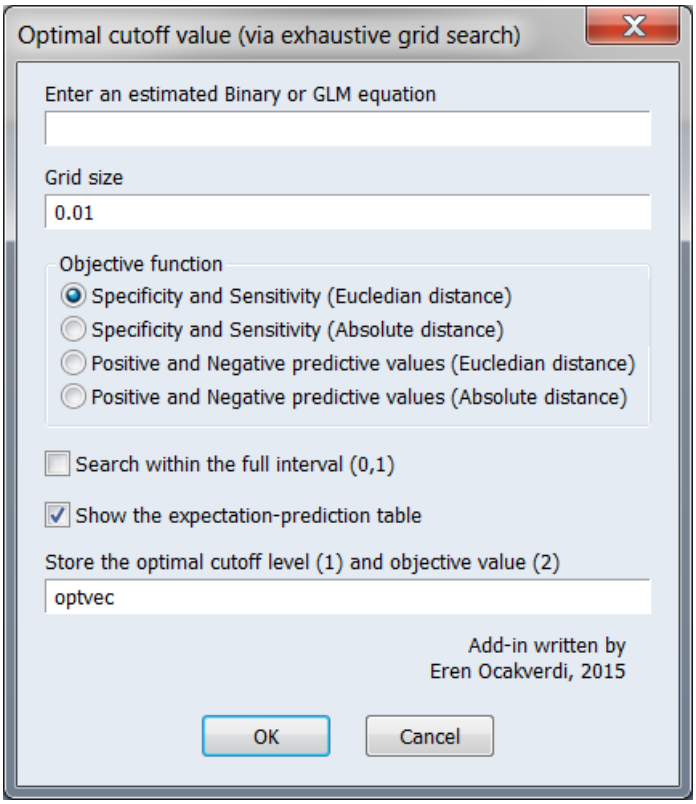
Add-in Type: Equation and Global
Default Proc Name: cutoff
Default Menu Text: Optimal cutoff value for binary choice models
Interface: Dialog and Command Line

Description: This add-in performs an exhaustive search to find the optimal probability cutoff value for binary choice models. Add-in makes use of several new features of EViews introduced with the version 9.0, so will not work in older versions.

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



In the first box, enter the name of your equation. It should be an already estimated equation with Binary or GLM method. Grid size is used to determine the number of steps of the (0,1) interval. An estimate is made for the maximum value of the interval based on the data properties. However, if you would like to search within the full interval, check the related box. Four objective functions are available each of which minimizes the distance of prediction values from the perfect fit: i) First one minimizes the Eucledian distance of Specificity (P(Dep=1)<=C|Dep=0) and Sensitivity (P(Dep=1)>C|Dep=1), ii) Second one is the same as first one, but minimizes the absolute distance, iii) Third one minimizes the Eucledian distance of Positive (Dep=1|P(Dep=1)>C) and Negative (Dep=0|P(Dep=1)<=C) and iv) Fourth

one is the same as third one, but minimizes the absolute distance. By default, add-in will show the expectation-prediction table immediately after finding the optimal cutoff value. If you like to store the search results, enter a name for the vector. And leave it blank for no output. The vector will have two elements: i) first element corresponds to cutoff value and ii) second element is the value of objective function.

Command Line:

Syntax-1: cutoff

Syntax-2: myequation.cutoff(options)

Options:

Argument	Type	Explanation
ser	*string*	Name of the estimated Binary or GLM equation
grid	*numeric*	Grid size (“0.01” by default)
func	*numeric*	Objective function (“1” by default)
result	*string*	Name of the vector to hold the search results (cutoff and fval)
full		Search the full interval (0,1)
show		Show the expectation-prediction table with the optimal cutoff
prompt		Open the GUI

Examples:

1) myequation.cutoff(results)
2) myequation.cutoff(grid="0.005",func="2",result="myvec" full,show)