

Title

bunch_count — Calculate bunching statistics for a distribution. The method used is detailed in:

Chetty, Friedman, Olsen and Pistaferri
Adjustment Costs, Firm Responses,
and Micro vs. Macro Labor Supply Elasticities:
Evidence from Danish Tax Records
The Quarterly Journal of Economics, 2011, 126 (2): 749-804

Syntax

bunch_count *x_var* *count_x_var* [*if*] [*in*] [, *Bunch_calc_options*, *Bunch_plot_options*]

<i>options</i>	Description
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<i>varlist</i>	
x_var	Name of (binned) variable, the distribution of which we are studying.
count_x_var	Name of variable containing counts for each bin of <i>x_var</i> .
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Bunch_calc_options Options	
bpoint (#)	Bunch point - eg kink point in tax system, measured in \$; default is bpoint(0)
binwidth (#)	Bin width, measured in \$; default is binwidth(200)
degree (#)	Degree of fitted polynomial; default is degree(7)
max_it (#)	Maximum number of iterations; default is max_it(200)
nboot (#)	Number of bootstrap samples; default is nboot(0)
ig_low (#)	When fitting the polynomial: Number of bins to consider on the left of the bunch point; default is ig_low(-50)
ig_high (#)	When fitting the polynomial: Number of bins to consider on the right of the bunch point; default is ig_high(50)
low_bunch (#)	Leftmost bin in bunching windows relative to bunch point; default is low_bunch(-7)
high_bunch (#)	Rightmost bin in bunching windows relative to bunch point; default is low_bunch(7)
int2one (#)	Default int2one(1) imposes the assumption that all excess mass in the bunching window comes from the right of the bunching window. int2one(1) ensures: area under counterfactual = area under actual distribution,
Bunch_plot_options Options	
plot (#)	plot(1) plots the actual distribution. The default plot(0) does not produce a graph.
plot_fit (#)	When plot(1) is specified, plot_fit(1) overlays the graph with the counterfactual distribution. The default is plot_fit(1) .
graph_dir (<i>string</i>)	Specifies the path to the directory where the graph will be stored.
graph_name (<i>string</i>)	Specifies the base name for the graph to be stored.
graph_step (#)	specifies the stepsize for Stata's xlabel (<i>axis_label_options</i>) option; the default is graph_step(10)
zoom_low (#)	A value higher than ig_low means that the graph will be zoomed from the left; the default zoom_low(0) implies no zooming from the left.
zoom_high (#)	A value lower than ig_high means that the graph will be zoomed from the

pct_hgt (<i>string</i>)	right; the default is zoom_high(0) implies not zooming from the right. Scaling option. Attempts to set the minimum value on the y-axis to pct_hgt% of the average graph height in bunching window; the default value of pct_hgt(101) overrides scaling.
use_xline (#)	xline option: use_xline(1) creates a vertical line at a value of at xline(#) ; Default value is use_xline(1) . Setting use_xline(0) implies no xline.
xline (#)	xline option: set where the first xline is going to be; default value is xline(0) .
use_xline2 (#)	xline option: use_xline2(1) creates a vertical line at a value of at xline2(#) ; Default value is use_xline2(0) . Setting use_xline2(0) implies no second xline.
xline2 (#)	xline option: set where the second xline is going to be; default value is xline(0) .
use_xline3 (#)	xline option: use_xline3(1) creates a vertical line at a value of at xline3(#) ; Default value is use_xline3(0) . Setting use_xline3(0) implies no third xline.
xline3 (#)	xline option: set where the third xline is going to be; default value is xline(0) .
use_xtitle (#)	xtitle option: Default use_xtitle(1) creates a title under the x-axis. use_xtitle(0) implies no xtitle.
xtitle (<i>string</i>)	xtitle option: Sets title of x-axis. If empty and use_xtitle(1) the xtitle will default to "Bin Group".
outvar (<i>string</i>)	While creating the graph, the data for it is written to three new variables <i>outvar1</i> , <i>outvar2</i> , and <i>outvar3</i> ; default setting is outvar(plotabc) .
png_export (#)	Option to export graph in png format; default png_export(0) does not export graph as a png file, while png_export(1) does.
wmf_export (#)	Option to export graph in wmf format; default wmf_export(1) exports graph as a wmf file, while wmf_export(0) does not.

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Remarks

For detailed information on the technique used to calculate bunching at kink points, see:

Chetty, Friedman, Olsen and Pistaferri
 Adjustment Costs, Firm Responses,
 and Micro vs. Macro Labor Supply Elasticities:
 Evidence from Danish Tax Records
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Examples

- . bunch_count income freq if gender==1
- . bunch_count income freq if gender==1, bpoint(250000) binwidth(1000) nboot(100) plot(1)
graph_dir("c:\graphs\") graph_step(4)