proportion postestimation — Postestimation tools for proportion

Postestimation commands Remarks and examples Also see

Postestimation commands

The following postestimation commands are available after `proportion`:

Command	Description
`contrast`	contrasts and ANOVA-style joint tests of parameters
`estat vce`	variance–covariance matrix of the estimators (VCE)
`estat (svy)`	postestimation statistics for survey data
`estimates`	cataloging estimation results
`etable`	table of estimation results
`lincom`	point estimates, standard errors, testing, and inference for linear combinations of parameters
`marginsplot`	graph the results from proportion
`nlcom`	point estimates, standard errors, testing, and inference for nonlinear combinations of parameters
`pwcompare`	pairwise comparisons of parameters
`test`	Wald tests of simple and composite linear hypotheses
`testnl`	Wald tests of nonlinear hypotheses

Remarks and examples

▷ Example 1

In example 2 of [R] **proportion**, we computed the proportions of cars with different repair records for each group, foreign or domestic. We use `test` to test whether the proportion of cars with repair record equal to 4 is the same for domestic and foreign cars.

```
. use https://www.stata-press.com/data/r19/auto
(1978 automobile data)
. proportion rep78, over(foreign)
  (output omitted)
. test 4.rep78@0.foreign=4.rep78@1.foreign
 ( 1)  4.rep78@0bn.foreign - 4.rep78@1.foreign = 0
       F(  1,    68) =    3.92
            Prob > F =    0.0518
```

There is not a significant difference between those proportions at the 5% level.

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▷ Example 2

Continuing with `auto.dta` from example 1, we generate a new variable, `highprice`, that indicates if the price is larger than $5,000 and then use `proportion` to see the proportion of cars with high price among domestic and foreign cars separately.

```
. generate highprice = price>5000
. proportion highprice, over(foreign)
Proportion estimation                           Number of obs = 74
```

	Proportion	Std. err.	Logit [95% conf.	interval]
highprice@foreign				
0 Domestic	.5576923	.0688744	.4195373	.6874611
0 Foreign	.3636364	.1025593	.191094	.5802222
1 Domestic	.4423077	.0688744	.3125389	.5804627
1 Foreign	.6363636	.1025593	.4197778	.808906

We will compute the odds ratio of having a high price in group `Foreign` to having a high price in group `Domestic`. Usually, odds ratios are computed by using the `logistic` command, but here we will perform the computation by using `nlcom` after `proportion`.

```
. nlcom OR: (_b[1.highprice@1.foreign]/_b[0.highprice@1.foreign])/(_b[1.highpri
> ce@0.foreign]/_b[0.highprice@0.foreign])
         OR: (_b[1.highprice@1.foreign]/_b[0.highprice@1.foreign])/(_b[1.high
> price@0.foreign]/_b[0.highprice@0.foreign])
```

Proportion	Coefficient	Std. err.	z	P>|z|	[95% conf.	interval]
OR	2.206522	1.155825	1.91	0.056	-.0588533	4.471897

This is the same odds ratio that we would obtain from

```
. logistic highprice foreign
```

The odds ratio is slightly larger than 2, which means that the odds of having a high price among foreign cars are more than twice that of having a high price among domestic cars.

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Also see

[R] **proportion** — Estimate proportions

[U] 20 Estimation and postestimation commands