Title

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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
`estat vce`	variance–covariance matrix of the estimators (VCE)
`estat (svy)`	postestimation statistics for survey data
`estimates`	cataloging estimation results
`lincom`	point estimates, standard errors, testing, and inference for linear combinations of coefficients
`nlcom`	point estimates, standard errors, testing, and inference for nonlinear combinations of coefficients
`test`	Wald tests of simple and composite linear hypotheses
`testnl`	Wald tests of nonlinear hypotheses

Remarks and examples

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▷ 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 http://www.stata-press.com/data/r14/auto
(1978 Automobile Data)
. proportion rep78, over(foreign)
  (output omitted)
. test [_prop_4]:Domestic=[_prop_4]:Foreign
 ( 1)  [_prop_4]Domestic - [_prop_4]Foreign = 0
       F(  1,    68) =    3.75
            Prob > F =    0.0569
```

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
      _prop_1: highprice = 0
      _prop_2: highprice = 1
     Domestic: foreign = Domestic
      Foreign: foreign = Foreign
```

Over	Proportion	Std. Err.	[95% Conf.	Interval]
_prop_1				
Domestic	.5576923	.0695464	.4182157	.6886264
Foreign	.3636364	.1049728	.1879015	.5852765
_prop_2				
Domestic	.4423077	.0695464	.3113736	.5817843
Foreign	.6363636	.1049728	.4147235	.8120985

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: ([_prop_2]_b[Foreign]/[_prop_1]_b[Foreign])/([_prop_2]_b[Domestic]/
> [_prop_1]_b[Domestic])
          OR:  ([_prop_2]_b[Foreign]/[_prop_1]_b[Foreign])/([_prop_2]_b[Domesti
> c]/[_prop_1]_b[Domestic])
```

Proportion	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
OR	2.206522	1.178522	1.87	0.061	-.1033393	4.516383

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

[SVY] **svy postestimation** — Postestimation tools for svy

[U] 20 Estimation and postestimation commands