

proportion postestimation — Postestimation tools for proportion

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Postestimation commands

The following postestimation commands are available after `proportion`:

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

Remarks and examples

[stata.com](#)

► 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/r15/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.



► 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[Domestic]/[_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.



Also see

- [R] **proportion** — Estimate proportions
- [SVY] **svy postestimation** — Postestimation tools for svy
- [U] **20 Estimation and postestimation commands**