

Postestimation commands

The following postestimation commands are available after `pwmean`:

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

Remarks and examples

In *Pairwise differences of means* of [R] `pwmean`, we computed all pairwise differences in mean wheat yields for five fertilizers.

```
. use https://www.stata-press.com/data/r19/yield
(Artificial wheat yield dataset)
. pwmean yield, over(fertilizer)

Pairwise comparisons of means with equal variances
Over: fertilizer
```

yield	Contrast	Std. err.	Unadjusted [95% conf. interval]	
fertilizer				
10-08-22 vs 10-10-10	3.62272	1.589997	.4869212	6.758518
16-04-08 vs 10-10-10	.4906299	1.589997	-2.645169	3.626428
18-24-06 vs 10-10-10	4.922803	1.589997	1.787005	8.058602
29-03-04 vs 10-10-10	-1.238328	1.589997	-4.374127	1.89747
16-04-08 vs 10-08-22	-3.13209	1.589997	-6.267889	.0037086
18-24-06 vs 10-08-22	1.300083	1.589997	-1.835715	4.435882
29-03-04 vs 10-08-22	-4.861048	1.589997	-7.996847	-1.725249
18-24-06 vs 16-04-08	4.432173	1.589997	1.296375	7.567972
29-03-04 vs 16-04-08	-1.728958	1.589997	-4.864757	1.406841
29-03-04 vs 18-24-06	-6.161132	1.589997	-9.29693	-3.025333

After `pwmean`, we can use `testnl` to test whether the improvement in mean wheat yield when using fertilizer 18-24-06 instead of fertilizer 29-03-04 is significantly different from 10%.

```
. testnl (_b[4.fertilizer] - _b[5.fertilizer])/_b[5.fertilizer] = 0.1
      (1)  (_b[4.fertilizer] - _b[5.fertilizer])/_b[5.fertilizer] = 0.1
              chi2(1) =          1.57
              Prob > chi2 =          0.2106
```

The improvement is not significantly different from 10%.

Also see

[R] [pwmean](#) — Pairwise comparisons of means

[U] [20 Estimation and postestimation commands](#)

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