

**form=f/chisquared**

Described earlier—it affects only the test statistic, not the restricted regression.

**coeff=VECTOR** for restricted coefficients

**covmat=SYMMETRIC** for restricted covariance matrix

You can use these options to save the restricted coefficient and/or covariance arrays. The REPLACE option is equivalent to the pair of options COEFF=%BETA and COVMAT=%XX.

### Examples

Suppose you have the following equation:

$$y_t = \beta_0 + \beta_1 x_{1t} + \beta_2 x_{2t} + \beta_3 x_{3t} + u_t$$

which can be estimated using:

```
linreg y
# constant x1 x2 x3
```

We want to test the simple hypothesis that  $\beta_1 = \beta_2$ . **RESTRICT** operates by testing whether a linear combination of coefficients is equal to a specific value, so we need to rewrite this hypothesis in this form:  $\beta_1 - \beta_2 = 0$

We are testing the second and third coefficients here, so the **RESTRICT** would be:

```
restrict 1
# 2 3
# 1.0 -1.0 0.0
```

If you want to *compute* the restricted regression, do:

```
restrict(create) 1
# 2 3
# 1.0 -1.0 0.0
```

The following estimates the translog cost function

$$\log(C/Q) = \alpha + \sum_i \alpha_i \log w_i + \sum_j \sum_{j \leq i} \gamma_{ij} (\log w_i) (\log w_j)$$

and tests (jointly) the following combination of restrictions

$$\begin{aligned} \alpha_1 + \alpha_2 &= 1.0 \\ \gamma_{11} + 0.5\gamma_{12} &= 0.0 \\ \gamma_{22} + 0.5\gamma_{12} &= 0.0 \end{aligned}$$

```
set logulc = log(ulc)
set logw1 = log(w1)
set logw2 = log(w2)
```