

5 Two-Stage Least Squares (2SLS)

Suppose now we have 1 more IV

$z_3 = \text{cost of input}$

$$\text{corr}(z_3, u_1) = 0$$

$$\text{corr}(z_3, y_2) \neq 0$$

We know that if $\text{corr}(z_1, y_2) \neq 0$, $\text{corr}(z_2, y_2) \neq 0$, $\text{corr}(z_3, y_2) \neq 0$, we can write:

The 2SLS method

Stage 1:

Stage 2:

STATA Command: