FIGURE 7.1 95% Confidence Set for Coefficients on STR and Expn from Equation (7.6)

for the coefficients on STR (β_1) and Expn (β_2) is an ellipse. The ellipse contains the pairs of values of β_1 and β_2 that cannot be rejected using the F-statistic at the 5% significance level. The point $(\beta_1, \beta_2) = (0, 0)$ is not contained in the confidence set, so the null hypothesis H_0 : $\beta_1 = 0$

and $\beta_2 = 0$ is rejected at

the 5% significance level.

The 95% confidence set

Coefficient on $Expn(\beta_2)$ 8 95% confidence set 6 5 3 $\hat{\beta}_1, \hat{\beta}_2 = (-0.29, 3.87)$ $(\beta_1, \beta_2) = (0, 0)$ 0 -2.0-1.5-1.0-0.50.0 0.5 1.0 1.5 Coefficient on STR (β_1)