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Lab 9 Writeup

2. We get the coefficient of unem estimated at .46763 with a t-value of 1.62. Therefore, this value is not statistically significant compared to other values we have obtained in previous labs.

3. When we run the Durbin-Watson test, we get the Durbin-Watson D value of 0.803 and the first order autocorrelation and .572. We can draw the conclusion that there is some serial correlation in our regression analysis

4. Using the autoreg procedure and dwprob here instead of dw, we get a near exact DW value of 0.8027 however we can notice that the p-value for probability of negative autocorrelation is 1.0, meaning that the regression is estimating with 100% certainty that there is negative serial correlation in our regression.

5. After running our Cochrane-Orcutt method, we get the coefficient on unem (in this case dunem) to be -.27981 with a t-value of -0.87 and a probability value of 38.92%. This means that not only is this not a statistically significant and not a very strong estimate either.

6. When we run autoreg to refit the model by Maximum Likelihood Estimates, to allow AR1, we get a parameter estimate of -.70 with a much higher absolute value t-value of 2.02 and a probability of 4.9%, meaning this is a much stronger estimate and much more statistically significant than without allowing for AR1.