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Lab 14 Writeup

2. The endogenous variables, meaning the variables whose values are determined by the model, are log(Q) and log(Pw) as they pertain to the wine. The exogenous variables, which aren't determined by the model, are log(S) log(Pb) log(A) and log(Y) respectively.

3. See lab output for details. In any OLS regression, we observe simultaneity bias, and this example is no different.

4. Here we run the system of linear equations for demand by IV. For supply, we run Pb, A, and Y separately three times as IV, and for the last one, we use all as IV, reaching different conclusions based on this factor. We have the strongest f-value for the model by using all. Using all, with our two tailed t-test we have absolute values greater than 3, so we reject the null hypothesis.

5. Here we are estimating by 2sls but we are going to print out the first stage estimates and test for overidentification. Our f-value result for overidentification is low but has a high Pr value, but being low we can conclude there is not a large amount of overidentification restrictions.