

Econometrics II - Problem Set 6

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06/2024

Question 1

The average biases for each model are as follows:

Table 1: Average bias for each model			
OLS	WG	Diff	AH
0.0015171	-0.0002359	-0.0002359	0.0000003

We can see that the sanity checks pass: OLS has a upward bias, WG and Diff have the same downward bias, and AH has very little bias.

The proportion of WG estimators greater than the OLS ones was decently low, approximately 9%.

Question 2

The deciles of the 1st stage F-stat are as follows, which can be easily compared with the benchmarks $F = 10$ and $F = 104.7$.

Table 2: Deciles of the 1st stage F-stat								
10%	20%	30%	40%	50%	60%	70%	80%	90%
0.024	0.102	0.264	0.455	0.799	1.315	2.032	3.110	6.674

And the average bias was approximately 0.027, which is indeed larger.