PS7

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1 Summary Statistics

Table 1:

Statistic	N	Mean	St. Dev.	Min	Max
logwage	1,669	1.625	0.386	0.005	2.261
hgc	2,229	13.101	2.524	0	18
tenure	2,229	5.971	5.507	0.000	25.917
age	2,229	39.152	3.062	34	46

Whether logwage is missing does not appear to depend on other values; therefore, the data is MCAR.

2 Regression Comparison

The highest hgc coefficient is found using the complete cases regression. This makes some sense because using complete cases as opposed to other imputation methods does not reduce the variation in the dependent variable for which the explanatory variables can account. The two imputation methods produced the same coefficient and a similar R-squared that is lower than that of the complete cases. The other coefficients in these two imputation methods are similar, as well. It seems that complete cases comes closest to the true value of Beta1.

3 Project Progress

I am going to continue to refine my analysis of Government Restrictions on Religion. I will look closer into economic variables and the GRI, and I will also add the Social Hostilities Index from Pew as an explanatory variable. I want to try different cleaning methods on the data from what I did when I first conducted my analysis, so I will be pulling data from Pew, the UN, and the World Bank and trying out the imputation methods from this homework.

Table 2:

	Dependent variable:		
	logwage		
	(1)	(2)	(3)
hgc	0.062***	0.049***	0.049***
	(0.005)	(0.004)	(0.004)
collegenot college grad	0.146***	0.160***	0.161***
	(0.035)	(0.026)	(0.026)
tenure	0.023***	0.015***	0.015***
	(0.002)	(0.001)	(0.001)
age	−0.001	−0.001	−0.001
	(0.003)	(0.002)	(0.002)
marriedsingle	−0.024	−0.029**	−0.029**
	(0.018)	(0.014)	(0.014)
Constant	0.639***	0.833***	0.834***
	(0.146)	(0.115)	(0.115)
Observations	1,669	2,229	2,229
R^2	0.195	0.132	0.131
Adjusted R^2	0.192	0.130	0.129
Residual Std. Error	0.346 (df = 1663)	0.311 (df = 2223)	0.311 (df = 2223)
F Statistic	80.508*** (df = 5; 1663)	67.496*** (df = 5; 2223)	66.909*** (df = 5; 2223)
Note:			*p<0.1; **p<0.05; ***p<0.01