# PS 7

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## **Summary Statistics**

The missing rate for the variable *logwage* is 25 percent. I believe that this variable is missing not at random, as it may be missing specifically from individuals who are still in school.

Table 1: Sumamry Statistics

	Unique (#)	Missing (%)	Mean	SD	Min	Median	Max
logwage	670	25	1.6	0.4	0.0	1.7	2.3
hgc	16	0	13.1	2.5	0.0	12.0	18.0
tenure	259	0	6.0	5.5	0.0	3.8	25.9
age	13	0	39.2	3.1	34.0	39.0	46.0

### Regression Table

As more precise methods are used to fill in missing variables, regression coefficients tend to become larger and closer to their true values. The multiple imputation regression model is a powerful tool for handling missing data, providing more accurate estimates and greater statistical power compared to methods such as listwise deletion or single imputation.

The estimated  $\hat{\beta}_1$  using the assumption of missing at random (filling in missing values with predicted values) is 0.534, which is statistically significant from zero. The estimated  $\hat{\beta}_1$  using the multiple imputation regression method is 0.609, which is also statistically significant from zero and closer to the true value than other methods.

Table 2: Table 2: Regression Model

	Listwise deletion	Fill mean	Fill predicted	Mice
Intercept	0.534***	0.708***	0.534***	0.609***
	(0.146)	(0.116)	(0.112)	(0.138)
hgc	0.062***	0.050***	0.062***	0.060***
	(0.005)	(0.004)	(0.004)	(0.006)
college	0.145***	0.168***	0.145***	0.118***
	(0.034)	(0.026)	(0.025)	(0.032)
tenure	0.050***	0.038***	0.050***	0.041***
	(0.005)	(0.004)	(0.004)	(0.005)
$tenure^2$	-0.002***	-0.001***	-0.002***	-0.001***
	(0.000)	(0.000)	(0.000)	(0.000)
age	0.000	0.000	0.000	0.000
	(0.003)	(0.002)	(0.002)	(0.003)
married	-0.022	-0.027*	-0.022+	-0.018
	(0.018)	(0.014)	(0.013)	(0.017)
Num.Obs.	1669	2229	2229	2229
Num.Imp.				5
R2	0.208	0.147	0.277	0.224
R2 Adj.	0.206	0.145	0.275	0.222
AIC	1179.9	1091.2	925.5	
BIC	1223.2	1136.8	971.1	
Log.Lik.	-581.936	-537.580	-454.737	
RMSE	0.34	0.31	0.30	
0.4.5	k . 0 0 = ++	0.01 ***	. 0.001	

<sup>+</sup> p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

## Final Project

For my final project, I intend to investigate whether the dismissal of audit committee members can be considered a reliable indicator of low financial reporting quality. To accomplish this, I plan to utilize data on directors and committees obtained from Boardex to determine the timing of audit committee member turnover. Additionally, I will control for various director characteristics that may impact financial reporting quality.

To investigate this relationship, I will employ a logistic regression model, with the dependent variable being an indicator variable for financial statement restatement. By doing so, I hope to uncover any potential association between audit committee member dismissal and financial reporting quality, while accounting for any confounding factors that may be present in the data.