PS 7 for Dr Ransom

Alex Hinshaw

12 March 2019

1 Summary Statistics of Wage Data

Table 1:

Statistic	N	Mean	St. Dev.	Min	Pctl(25)	Pctl(75)	Max
logwage	1,686	1.622	0.388	0.005	1.358	1.936	2.261
hgc	2,244	13.099	2.521	0.000	12.000	15.000	18.000
tenure	2,231	5.978	5.510	0.000	1.583	9.333	25.917
age	2,246	39.153	3.060	34	36	42	46

The project is going fine. I found an API that will allow me to extract contract data as well as the NFL API for extracting stats. Still early, but I'm finding lots of good data. Still working on the modeling. I want to start but running a regression with all the applicable stats (individually) against some part of the contract. I don't know if it should be a dollar amount, contract length, or whatever else.

Table 2:

	Dependent variable:
	logwage.mean.imp
hgc	0.050^{***}
	(0.004)
collegenot college grad	0.168^{***}
	(0.026)
tenure	0.038^{***}
	(0.004)
I(tenureˆ2)	-0.001^{***}
	(0.0002)
age	0.0002
	(0.002)
marriedsingle	-0.027^{**}
	(0.014)
Constant	0.708^{***}
	(0.116)
Observations	2,229
R^2	0.147
Adjusted R^2	0.145
Residual Std. Error	0.308 (df = 2222)
F Statistic	63.973^{***} (df = 6; 2222)
Note:	*p<0.1; **p<0.05; ***p<0.01

Table 3:

	Dependent variable:		
	logwage	logwage.mean.imp	logwage.pred.imp
	(1)	(2)	(3)
hgc	0.062***	0.050***	0.059***
	(0.005)	(0.004)	(0.004)
collegenot college grad	0.145***	0.168***	0.177***
	(0.034)	(0.026)	(0.025)
tenure	0.050***	0.038***	0.047***
	(0.005)	(0.004)	(0.004)
I(tenureˆ2)	−0.002***	−0.001***	−0.002***
	(0.0003)	(0.0002)	(0.0002)
age	0.0004	0.0002	0.0003
	(0.003)	(0.002)	(0.002)
marriedsingle	−0.022	−0.027**	−0.028**
	(0.018)	(0.014)	(0.013)
Constant	0.534***	0.708***	0.563***
	(0.146)	(0.116)	(0.112)
Observations	1,669	2,229	2,229
R^2	0.208	0.147	0.223
Adjusted R^2	0.206	0.145	0.221
Residual Std. Error	0.344 (df = 1662)	0.308 (df = 2222)	0.299 (df = 2222)
F Statistic	72.917*** (df = 6; 1662)	63.973*** (df = 6; 2222)	106.573*** (df = 6; 222
Note:			*p<0.1; **p<0.05; ***p<0.0