

# PS12

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- The mean value of exper is almost half of the mean value of hgc. The median value of exper is exactly half of the median value of hgc.
- lowage is missing at a rate of 31%. I think that it might be MAR
- The value of b1 using the listwise deletion and mean imputation is the same: 0.059. The value of b1 using the Heckman method is 1.104. There is a 0.032 difference between the true value of b1 and b1 in the first two methods, while there is a 1.195 difference between the true value of b1 and b1 in the last method. I can conclude that mean imputation and listwise deletion seem to be more accurate in this case compared to the Heckman method.
- Probit model: The counterfactual policy did not have a significant effect the mean probability changed from 0.2373 to 0.2278. I think that the model estimated above is not realistic because the probability should be higher and a counterfactual policy should have had a bigger effect.

	Unique (#)	Missing (%)	Mean	SD	Min	Median	Max
logwage	1546	31	1.7	0.7	-1.0	1.7	4.2
hgc	14	0	12.5	2.4	5.0	12.0	18.0
exper	1932	0	6.4	4.9	0.0	6.0	25.0
kids	2	0	0.4	0.5	0.0	0.0	1.0

	(Listwise Deletion)	(Mean Imputation)	(Heckman Selection)
(Intercept)	0.834	0.834	0.446
	0.834	0.834	20.553
	(0.113)	(0.113)	(0.122)
	(0.113)	(0.113)	(1.111)
hgc	0.059	0.059	-1.104
	0.059	0.059	0.091
	(0.009)	(0.009)	(0.010)
	(0.009)	(0.009)	(0.066)
union1	0.222	0.222	-1.113
	0.222	0.222	0.186
	(0.087)	(0.087)	(0.084)
	(0.087)	(0.087)	(0.213)
college1	-0.065	-0.065	-0.565
	-0.065	-0.065	0.092
	(0.106)	(0.106)	(0.100)
	(0.106)	(0.106)	(0.227)
exper	0.050	0.050	-0.506
	0.050	0.050	0.054
	(0.013)	(0.013)	(0.012)
	(0.013)	(0.013)	(0.030)
	-0.004	-0.004	-0.002
	(0.001)	(0.001)	(0.001)
married1			-2.275
			(0.162)
kids			0.495
			(0.114)
invMillsRatio			-0.695
			(0.060)
sigma			0.696
rho			-0.998
Num.Obs.	1545	1545	2229
R2	0.038	0.038	0.092
R2 Adj.	0.035	0.035	0.088
AIC	3182.4	3182.4	
BIC	3219.8	3219.8	
Log.Lik.	-1584.189	-1584.189	
F	12.106	12.106	
RMSE	0.67	0.67	0.66