PS7$_{C}arpenter$

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March 2020

1 Project Update

Currently, my decision stands to replicate a known stock portfolio optimization model that is dynamic to any chosen stock. I will likely need to create this model in julia with the JuMP file. The calculations are extensive in matrix algebra and linear optimization. Overall, I know that this idea is possible, but I will likely need to come see you for ideas on how to manipulate some of the tables to allow for the optimization. I have created this model in excel, but it is a bear to update and keep up with. If I can create the framework, then updating this will allow the user to easily update their portfolio on a day-to-day basis. This project will not only create value for me, but could also be of extreme use for other users. This model is one that many individuals on Wall Street use. The end result would be to create a method that accepts stock inputs, then computing the optimal allocation of each stock for your portfolio. The final optimization calculations rely on constrained optimizations that JuMP easily handles. If their is something similar to the JuMP function in R, I may use that because I have already set up some of the framework. I will plan to swing by your office soon.

2 PS7 Answers

Table 1:

Statistic	N	Mean	St. Dev.	Min	Pctl(25)	Pctl(75)	Max

I am unsure why the table did not include any information

Table 2: Regression Results from Finding Missing Values

	Dependent variable:	
	logwage	
	(1)	(2)
hgc	0.062***	0.050***
	(0.005)	(0.004)
collegenot college grad	0.145***	0.168***
	(0.034)	(0.026)
tenure	0.050***	0.038***
	(0.005)	(0.004)
I(tenureˆ2)	-0.002***	-0.001***
	(0.0003)	(0.0002)
age	0.0004	0.0002
	(0.003)	(0.002)
marriedsingle	-0.022	-0.027**
	(0.018)	(0.014)
Constant	0.534***	0.708***
	(0.146)	(0.116)
Observations	1,669	2,229
R^2	0.208	0.147
Adjusted R^2	0.206	0.145
Residual Std. Error	0.344 (df = 1662)	0.308 (df = 2222)
F Statistic	72.917*** (df = 6; 1662)	63.973*** (df = 6; 2222)
Note:		*p<0.1; **p<0.05; ***p<0.01

The intercept seemed to change the most among estimations.