Homework 2 – Macro-Finance

Group: Shayan Abbasi, Lino Vitale

Country: Australia

First Approach: We calculated and double checked the variables as it was told in the homework. As we expected, the model does not satisfy the real data. Surprisingly, with gamma=10 and delta=0.01, we have negative rates and unexpectedly small risk premium.

Ingredients:

mean_real_consumption_growth	variance_real_consumption_growth	consumption_beta
0.01110095	0.003273458	0.1119876

Model variables:

model_implied_risky_rate	model_implied_safe_rate	model_risk_premium
-0.03899751	-0.04266337	0.003665867

Real data variables:

data_risky_rate	data_safe_rate	data_risk_premium
0.08386252	0.02018873	0.06367379

Second Approach: We changed delta to 0.1 and beta=2 manually. This could mean that either we should estimate impatience better in the future and measure consumption better(better beta). We can argue that the model would work if we have the right input. On the contrary, we can suggest that model is totally wrong and make no comment about the inputs.

Ingredient:

mean_real_consumption_growth	variance_real_consumption_growth	consumption_beta
0.01110095	0.003273458	0.1104585

Model variables:

model_implied_risky_rate	model_implied_safe_rate	model_risk_premium
0.1139441	0.04733663	0.06660743

Real data variable:

data_risky_rate	data_safe_rate	data_risk_premium
0.08386252	0.02018873	0.06367379