

Homework II

International Macroeconomics

Ethan Kaplan

(1.) Empirical Section

- a. Take a currency pair run the Fama regression at the monthly level. Now switch the home and foreign currencies. Rerun the regression. Is the regression coefficient on the interest rate differential in the new regression the multiplicative inverse of the same coefficient in the old regression? Why or why not? – 5 points

$$S_{t+1} - S_t = \alpha + \beta(i_t - i_t^*) + \varepsilon_{t+1}$$
$$\frac{1}{S_{t+1}} - \frac{1}{S_t} = \gamma + \mu(i_t - i_t^*) + \delta_{t+1}$$

- b. Replicate the Meese-Rogoff forecasting exercise for an AR(1) model of the exchange rate (with 5 years of prior data and 4 years of forecasting); now try it first differencing the exchange rate; compare the coefficients between the two models. Also, compare the out-of-sample prediction error between the two models and a random walk model. Are your results sensible? Why or why not? Explain.– 5 points:

$$S_{t+1} = \beta S_t + \varepsilon_{t+1}$$
$$S_{t+1} - S_t = \beta(S_t - S_{t-1}) + \delta_t$$

(2.) Chapter 8 #1 – 2 points

(3.) Chapter 8 #5 – 2 points

(4.) Chapter 8 #7 - 3 points

(5.) Chapter 8 #8a,8b - 2 points

(6.) Sketch a model (no need to solve the model) of why developing countries default on their debt so much more often than developed countries. – 6 points