

Homework 5

1. Consider a large open economy with flexible prices. What would happen to the interest rate and exchange rate, if the following events occur?
 - (1) A business-friendly party wins the election and takes control of the government.
 - (2) In the name of “national security”, the government increases tariffs on goods from a major trading partner.
 - (3) After a terrorist attack, the country goes to war in the Middle East.
2. Suppose that the production function of the economy is Cobb-Douglas, $Y = K^\alpha L^{1-\alpha}$ and that there is no technological progress.
 - (a) Find the expressions for k^* , y^* , and c^* as functions of α, s, n, δ .
 - (b) What is the golden-rule level for k^* ?
 - (c) What is the golden-rule saving rate?
3. Suppose that differential equation characterizing the accumulation of per capita capital is $\dot{k}_t = h(k_t)$, where h is a differentiable function. If a steady-state k^* is stable, then $h'(k^*)$ should be negative or positive? Why?