

## Problem Set B1

### Econ 302 - Haworth

**Due date:** Tuesday, July 28 (by 11:59pm)

1. Use the model of the small open economy to predict what would happen to the trade balance, real exchange rate and the nominal exchange rate in response to each of the following events.

- Decrease in consumer confidence about the future leads consumers to spend less and save more.
- A tax reform bill increases the incentive for businesses to build new factories.
- The introduction of a new, higher quality set of automobiles within one (foreign) country makes some (domestic) consumers prefer foreign cars over domestic cars.
- The Central Bank sharply increases the money supply.
- New regulations restrict the use of credit cards, which increases money demand.

2. Consider an economy described by the following equations.

$$Y = 5000$$

$$G = 1000$$

$$T = 1000$$

$$C = 250 + 0.75(Y - T)$$

$$I = 1000 - 50r$$

$$NX = 500 - 500\varepsilon$$

$$r = r^* = 5$$

$$Y = \text{real GDP}$$

$$G = \text{Govt Spending}$$

$$T = \text{Taxes}$$

$$C = \text{Consumption}$$

$$I = \text{Investment, } r = \text{real interest rate}$$

$$NX = \text{Net Exports, } \varepsilon = \text{real exchange rate}$$

$$r^* = \text{world interest rate}$$

a. In this economy, solve for national saving, investment, the trade balance and the equilibrium (real) exchange rate.

b. Assume that  $G$  increases by 250. Now, solve for national saving, investment, the trade balance and the equilibrium (real) exchange rate again. Explain your result.

c. Assume that the  $G$  remains at 1000 and that the world interest rate increases from 5% to 10%. Solve one more time for national saving, investment, the trade balance and the equilibrium (real) exchange rate. Explain your result.

3. Assume that Congress passes a law that makes it more difficult for firms to fire workers. If this law reduces the rate of job separation without affecting the rate of job finding, then how would the natural rate of unemployment change? When you consider how the real world likely operates, is it likely that this law doesn't affect the rate of job finding at all? Explain your answer.