

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

- a.** A fall in consumer confidence about the future induces consumers to spend less and save more.
- b.** A tax reform increases the incentive for businesses to build new factories.
- c.** The introduction of a stylish line of Toyotas makes some consumers prefer foreign cars over domestic cars.
- d.** The central bank doubles the money supply.
- e.** New regulations restricting the use of credit cards increase the demand for money.

**2.** Consider an economy described by the following equations:

$$Y = C + I + G + NX$$

$$Y = 8000$$

$$G = 2500$$

$$T = 2000$$

$$C = 500 + \frac{2}{3}(Y - T)$$

$$I = 900 - 50r$$

$$NX = 1500 - 250\epsilon$$

$$r = r^* = 8$$

- a.** In this economy, solve for private saving, public saving, national saving, investment, the trade balance, and the equilibrium exchange rate.
- b.** Suppose now that  $G$  is cut to 2,000. Solve for private saving, public saving, national saving, investment, the trade balance, and the equilibrium exchange rate. Explain what you find.
- c.** Now suppose that the world interest rate falls from 8 to 3 percent. ( $G$  is again 2,500.) Solve for private saving, public saving, national saving, investment, the trade balance, and the equilibrium exchange rate. Explain what you find.

3. The country of Leverett is a small open economy. Suddenly, a change in world fashions makes the exports of Leverett unpopular.

- a. What happens in Leverett to saving, investment, net exports, the interest rate, and the exchange rate?
- b. The citizens of Leverett like to travel abroad. How will this change in the exchange rate affect them?
- c. The fiscal policymakers of Leverett want to adjust taxes to maintain the exchange rate at its previous level. What should they do? If they do this, what are the overall effects on saving, investment, net exports, and the interest rate?

4. What will happen to the trade balance and the real exchange rate of a small open economy when government purchases increase, such as during a war? Does your answer depend on whether this is a local war or a world war?

5. The president is considering placing a tariff on the import of Japanese luxury cars. Using the model presented in this chapter, discuss the economics and politics of such a policy. In particular, how would the policy affect the U.S. trade deficit? How would it affect the exchange rate? Who would be hurt by such a policy? Who would benefit?

6. Suppose China exports TVs and uses the yuan as its currency, whereas Russia exports vodka and uses the ruble. China has a stable money supply and slow, steady technological progress in TV production, while Russia has very rapid growth in the money supply and no technological progress in vodka production. On the basis of this information, what would you predict for the real exchange rate (measured as bottles of vodka per TV) and the nominal exchange rate (measured as rubles per yuan)? Explain your reasoning. (*Hint:* For the real exchange rate, think about the link between scarcity and relative prices.)