KOFA HIGH SCHOOL SOCIAL SCIENCES DEPARTMENT

AP ECONOMICS

EXAM PREP WORKSHOP # 6 > GLOBAL TRADE

NAME:	DATE:	•

Comparative Advantage:

For questions one and two below, decide whether a problem is an output or input problem. Then calculate the opportunity cost of each product and indicate the product with the lower opportunity cost for each person, firm, or country.

1. Anna and Barry can grow the following amounts of potatoes and cabbage with the same amount of labor:

<u>Person</u>	<u>Potatoes</u>	<u>Cabbage</u>	
Anna	100	200	
Barry	120	150	

2. Acres to produce 100 bushels:

<u>Country</u>	<u>Corn</u>	<u>Rice</u>	
India	9	3	
China	8	2	

Economic Efficiency And Gains From Trade:

3. The following tables gives the number of hours it takes in the United States and Scotland, using the same amount of resources, to produce a ton of oats or one bagpipe.

<u>Country</u>	<u>Oats</u>	<u>Bagpipes</u>	
United States	3 Hours	2 Hours	
Scotland	4 Hours	5 Hours	

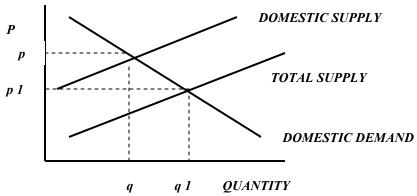
- A. Which country has an absolute advantage in the production of oats?
- B. Which country has an absolute advantage in the production of bagpipes?
- C. Which country has a comparative advantage in the production of oats and why?
- D. country has a comparative advantage in the production of bagpipes and why?
- E. Based only on the data above and comparative advantage considerations, the United States should specialize in what?



- F. Based only on the data above and comparative advantage considerations, the Scotland should specialize in what?
- G. Suppose that Scotland and the United States agree to specialize according to comparative advantage and to the following terms of trade: one ton of oats for one bagpipe. In a production period there are 60 hours, and before specialization Scotland produced 7.5 tons of oats and six bagpipes. After specialization and trade with the United States, Scotland wants to maintain the six bagpipes. How many tons of oats will it have? What are the gains from trade?

Barriers To Trade:

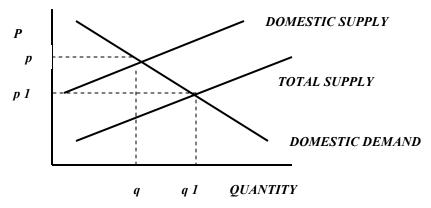
1. Use the graph below to demonstrate what will happen to the domestic price, domestic production, and the amount of imports if a quota is removed. The domestic supply and total supply curves on the graph are without any barrier to trade imposed. Be sure to show on the graph the supply curve with the quota as it is not on the graph now.



- 2. Write a paragraph summarizing the advantages and disadvantages of a quota to the domestic economy.
- 3. If a quota is imposed, explain the methods people would use to circumvent the effects of the quota.

A tariff is a tax on an import. The imposition of a tax increases the cost of each unit, which is represented by a decrease in supply. This would result in an increase in equilibrium price and a decrease in equilibrium quantity.

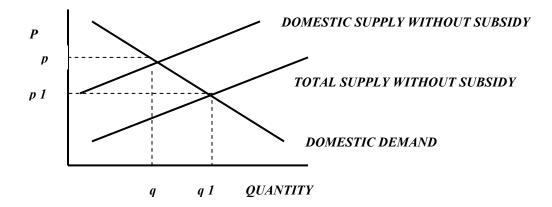
4. Modify the graph below to show the effect of an import tariff of \$ T per unit. Be sure to shoe on the graph the amount of the tariff. add one curve to the graph and label it "total supply with tariff". After the imposition of the tariff, label the new equilibrium price P T and the equilibrium quantity Q T.



- 5. What is the effect of the tariff on the equilibrium price and quantity for domestic consumers compared with the free trade levels?
- 6. What are the similarities between the effects of a quota and those of a tariff?
- 7. What is the primary difference between the effects of a quota and those of a tariff?
- 8. Suppose a country can impose either a quota that raises the domestic price to P 2, or a tariff that raises the domestic price to P 2. Explain whether domestic consumers would prefer a tariff or a quota and why?

Nations may choose to assist domestic industries by providing subsidies to an industry. The subsidies would lower the costs and permit the industry to sell at a lower price. This assistance is called an export subsidy because the industry can now compete on the world market and export some of its product to other nations.

9. Modify the graph below to show the effects of an export subsidy on domestic producers. Indicate as PS and QS the equilibrium price and quantity for domestic consumers after an export subsidy. Add tow curves to the graph; a domestic supply with subsidy, and a total supply with subsidy curve.



- A. According to your modification of the graph above, what would be the equilibrium price and quantity point for a completely closed economy (no imports and no subsidy)?
- B. According to your modification of the graph above, what would be the equilibrium price and quantity point for an open economy (completely free trade) with no export subsidy?
- C. An open economy with a domestic export subsidy?
- 10. What is the effect of an export subsidy on the equilibrium price and quantity for domestic consumers relative to the free trade equilibrium without a subsidy?
- 11. If an industry receives a subsidy, what will happen at the equilibrium to domestic production and the amount of imports?

- 12. One of the goals of the European Union is the elimination of trade barriers among the member nations. Which groups of people would benefit from this and which would not?
- 13. Identify four of the arguments frequently used to impose some type of trade barrier. Be sure to discuss the pros and cons of the arguments.

Imbalance Of Payments:

To make sure that you understand the components of the current account, the capital account and the difference between a credit (transaction that earns foreign exchange) and a debit (transaction that sues foreign currency), identify each of the following transactions on the U.S. balance of payments. Complete the chart by putting "X" marks in the appropriate boxes for credit or debit and for capital or current account. The first one, as an example, has been done for you.

Transaction Current Capital

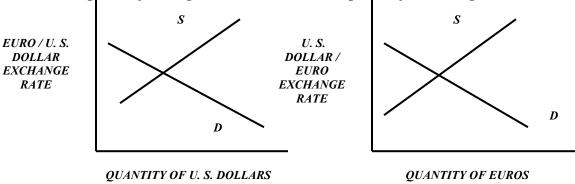
<u>Credit Debit Account Account</u>

- 1. Harley Davidson USA purchases \$ 25 million in production machinery from a Japanese company X
- 2. A U. S. entrepreneur invests \$ 50 million to develop a theme park in Malaysia
- 3. A Chinese company sells \$ 1 million worth of berets to the U. S. Army
- 4. BMW pays \$ 1 million to a U. S. shipper for Transporting cars from Germany to the United States
- 5. Each month, an immigrant sends half her paycheck to her sister in Poland
- 6. Bank of America pays \$ 5 million in interest to French depositors
- 7. A Spanish citizen buys a shopping center in Florida
- 8. A Brazilian investor buys five \$ 10,000 U.S. Treasury bonds
- 9. German tourists spend \$ 3 million in the United States; U. S. tourists spend \$ 5 million in Germany
- 10. A London record store spends \$ 10,000 on CD s by a U. S. pop group
- 11. A U. S. coal industry executive buys stock in a Chilean coal company

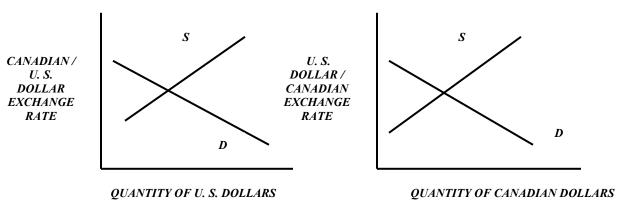
Displaying The Effects Of Changes In Supply And Demand For Currencies:

Consider the following situations. In each case, an underlying event causes a change in the supply and demand for currencies. Indicate, by making changes to each graph and providing an rationale / explanation, the impact of each scenario on each currency.

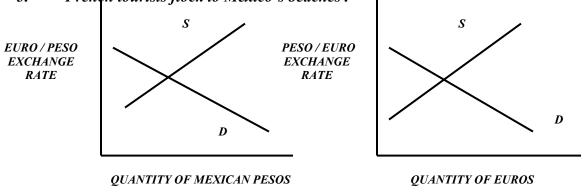
1. The prices of U. S. goods rise relative to the prices of German goods.



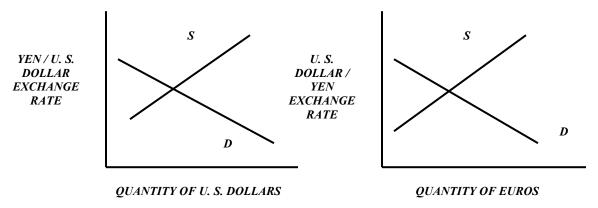
2. Interest rates in the United States rise faster than interest rates in Canada.



3. French tourists flock to Mexico's beaches.



4. Japanese video games become popular with United States citizens.

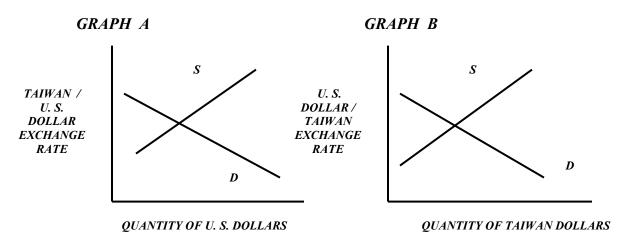


How Monetary And Fiscal Policies Affect Exchange Rates:

Changes in a nation's monetary and fiscal policies affect its exchange rates and its balance of trade through the interest rate, income, and price level. Changes in the value of a country's currency may affect the balance of trade and aggregate demand. The value of real output and price levels may also be affected. Domestic policies influence currency values, and currency values influence domestic policies. The complexity of the connection leads to careful evaluation of any change in domestic policy goals. Policy makers cannot ignore the international effects of changes in monetary and fiscal policies.

A series of situations are presented below. In each case:

- > Evaluate the expected effects on exchange rates in the United States and the other country. Use the currency graphs provided to reflect changes in the currency values.
- Analyze the impact of the currency changes on the U.S. economy as it applies to net exports, balance of trade, aggregate demand, and price levels. Work out the situations in the short run only.
- 1. The United States government initiates a personal income tax reduction plan, leaving every tax paying American with more disposable income.
 - A. What will happen as a result to trade between the United States and Taiwan?

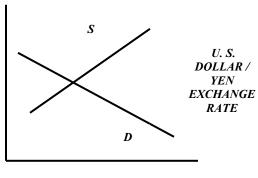


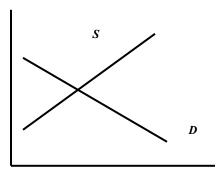
B. In graph A, what happens to the U.S. dollar?

- C. In graph B, what happens to the Taiwanese dollar?
- D. As a result of the fiscal policy,
 - 1. The United States aggregate demand shifts (left / right)
 - 2. Price levels in the United States (rise / fall)
 - 3. United States imports (increase / decrease). Explain why.
- 2. Japan's fiscal policies lead to an increase in Japan's real GDP.
 - A. What will happen as a result to trade between the United States and Japan?

GRAPH A GRAPH B







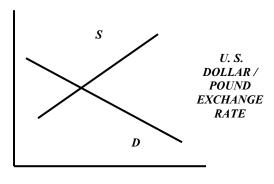
QUANTITY OF U. S. DOLLARS

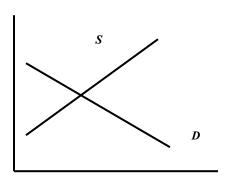
QUANTITY OF JAPANESE YEN

- B. In graph A, what happens to the United States dollar?
- C. In graph B, what happens to the Japanese yen?
- D. As a result of the changing value of the United States dollar,
 - 1. United States exports (increase / decrease). Explain why.
 - 2. United States imports (increase / decrease). Explain why.
 - 3. United States aggregate demand shifts (left / right).
 - 4. Price levels in the United States (rise / fall).
- 3. The United States federal budget deficit increases, which causes increases in the interest rate. (Assume trade with Great Britain)
 - A. What will happen as a result to trade between the United States and Great Britain?

GRAPH A GRAPH B

POUND / U. S. DOLLAR EXCHANGE RATE





QUANTITY OF U. S. DOLLARS

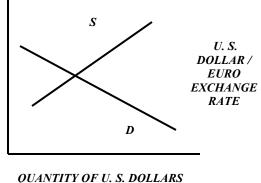
QUANTITY OF BRITISH POUNDS

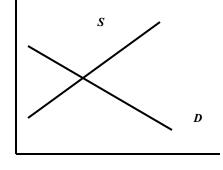
- B. In graph A, what happens to the United States dollar?
- C. In graph B, what happens to the British pound?
- D. As a result of the changing value of the United States dollar,
 - 1. United States exports (increase / decrease) Explain why.
 - 2. United States imports (increase / decrease). Explain why.
 - 3. United States aggregate demand shifts (left / right).
 - 4. Price levels in the United States (rise / fall).
- 4. Europe's interest rates are increasing, while the United States interest rate remains relatively constant.
 - A. What will happen as a result to trade between the United States and Europe?

GRAPH A

GRAPH B







QUANTITI OF U.S. DULLAR

QUANTITY OF EUROS

- B. In graph A, what happens to the United State dollar?
- C. In graph B, what happens to the Euro?
- D. As a result of the changing value of the United States dollar,

- 1. United States exports (increase / decrease). Explain why.
- 2. United States imports (increase / decrease). Explain why.
- 3. United States aggregate demand shifts (left / right).
- 4. Price levels in the United States (rise / fall).

The Global Way Of Thinking:

- 1. True, false, or uncertain and explain why? "Nations do not trade; people trade."
- 2. Assume the United States government has placed a high tariff on imported bicycles.
 - A. Use a supply and demand graph to show the effect of the tariff on the United States market for bicycles.
 - B. Explain the effects of the tariff on the price and quantity of bicycles available to United States consumers.
 - C. What are the effects of the tariff on:
 - 1. Foreign bicycle manufacturers?
 - 2. Domestic bicycle manufacturers?
 - 3. United States consumers?
- 3. The table below shows hoe much wine and cheese Germany and France can produce in a day.

<u>Country</u> Germany	<u>Wine</u>	<u>Cheese</u>	
	25 liters	30 kilos	
France	50 liters	40 kilos	

- A. Which country has an absolute advantage in wine production? Why?
- B. Which country has an absolute advantage in cheese production? Why?
- C. Which country has a comparative advantage in wine production? Why?
- D. Which country has a comparative advantage in cheese production? Why?
- E. Based on the data above and considering comparative advantage only, what should France import? What should France export?
- F. Based on the data above and considering comparative advantage only, what should Germany import? What should Germany export?
- 4. For each of the following situations, explain the effect of the event on the value of the United States dollar in relation to the Mexican peso. Draw a supply and demand graph to illustrate each situation.
 - A. Americans increase their demand for Mexican tomatoes.

- B. Inflation in Mexico rises at a higher rate than in the United States.
- C. Americans increase their investments in Mexico because they feel the Mexican economy will be strong.
- D. Interest rates rise in the United States and have become relatively higher than Mexican interest rates.
- E. Mexico becomes a much more popular tourist destination for Americans.
- 5. What might be the effect of a new law that would forbid United States citizens and businesses from trading with any other country?
- 6. Assume that the United States increases its federal budget deficit, which causes interest rates to rise.
 - A. What would be the effect of this on the international value of the dollar? Why?
 - B. What would be the effect of this on the United States balance of trade? Why?
 - C. Would the budget deficit and higher interest rates tend to increase or decrease aggregate demand? Why?
- 7. How could a nation have a negative balance of trade and still not have a deficit in its balance of payments?

REAL MACRO FRQs (09)

Section II Planning Time—10 minutes Writing Time—40 minutes each section

Directions: You have fifty minutes to answer the three questions. It is suggested that you spend approximately half your time on the first question and divide the remaining time equally between the next two questions. In answering the questions, you should emphasize the line of reasoning that generated your results; it is not enough to list the results of your analysis. Include correctly labeled diagrams, if useful or required, in explaining your answers. A correctly labeled diagram must have all axes and curves clearly labeled and must show directional changes.

- 1. Assume that the United States economy is in long-run equilibrium with an expected inflation rate of 6 percent and an unemployment rate of 5 percent. The nominal interest rate is 8 percent.
 - (a) Using a correctly labeled graph with both the short-run and long-run Phillips curves and the relevant numbers from above, show the current long-run equilibrium as point A.
 - (b) Calculate the real interest rate in the long-run equilibrium.
 - (c) Assume now that the Federal Reserve decides to target an inflation rate of 3 percent. What open-market operation should the Federal Reserve undertake?

- (d) Using a correctly labeled graph of the money market, show how the Federal Reserve's action you identified in part (c) will affect the nominal interest rate.
- (e) How will the interest rate change you identified in part (d) affect aggregate demand in the short run? Explain.
- (f) Assume that the Federal Reserve action is successful. What will happen to each of the following as the economy approaches a new long-run equilibrium?
 - (i) The short-run Phillips curve. Explain. (ii) The natural rate of unemployment
- 2. Assume that as a result of increased political instability, investors move their funds out of the country of Tara.
 - (a) How will this decision by investors affect the international value of Tara's currency on the foreign exchange market? Explain.
 - (b) Using a correctly labeled graph of the loanable funds market in Tara, show the impact of this decision by investors on the real interest rate in Tara.
 - (c) Given your answer in part (b), what will happen to Tara's rate of economic growth? Explain.
- 3. Assume that the reserve requirement is 20 percent and banks hold no excess reserves.
 - (a) Assume that Kim deposits \$100 of cash from her pocket into her checking account. Calculate each of the following.
 - (i) The maximum dollar amount the commercial bank can initially lend
 - (ii) The maximum total change in demand deposits in the banking system
 - (iii) The maximum change in the money supply
 - (b) Assume that the Federal Reserve buys \$5 million in government bonds on the open market. As a result of the open market purchase, calculate the maximum increase in the money supply in the banking system.
 - (c) Given the increase in the money supply in part (b), what happens to real wages in the short run? Explain.