

Multiple Choice (3 points each)

- _____ 1. What is the rate at which currency traders are willing to buy foreign currency?
- Bid-ask spread
 - Ask rate
 - Bid rate**
 - Cross rate
- _____ 2. If a dealer quotes a bid-ask spread of \$1.3115-\$1.3125/€, how many dollars will €1000 buy?
- 1311.50**
 - 1312.50
 - 762.49
 - 761.90
- _____ 3. The spot rate is ¥98/\$, and the 90-day forward rate is ¥100/\$. The yen is said to be selling at a forward
- annualized premium of approximately 2%.
 - annualized discount of approximately 2%.
 - annualized premium of approximately 8%.
 - annualized discount of approximately 8%.**
- _____ 4. If a U.S. firm is expecting payment in yen, it can hedge its foreign exchange risk by:
- buying yen forward.
 - selling yen forward.**
 - engaging in covered speculation.
 - arranging to have the yen paid to its German subsidiary.
- _____ 5. The sale of goods and assets by domestic residents to foreign residents are _____ because they cause a payment into the country.
- debit transactions.
 - credit transactions.**
 - current account transactions.
 - capital account transactions.
- _____ 6. If a U.S. investor sells shares of a French stock, and is paid with a dollar transfer to his checking account, the U.S. balance of payments accounts record:
- a debit on the current account, and a credit on the capital account.
 - a debit and a credit on the current account.
 - a debit and a credit on the capital account.**
 - a debit on the capital account and a credit on the current account.

- _____ 7. Under which of the following conditions will a country run a current account deficit?
- a. the nation's spending exceeds its income.
 - b. the nation's investment exceeds its saving.
 - c. the net foreign assets of the nation decline.
 - d. all of the above.**
- _____ 8. If a nation runs a balance of payments deficit
- a. the sum of its current account and regular capital account are in deficit; and, the nation's central bank is selling foreign reserves.**
 - b. the sum of its current account and regular capital account are in deficit; and, the nation's central bank is buying foreign reserves.
 - c. the sum of its current account and regular capital account are in surplus; and, the nation's central bank is buying foreign reserves.
 - d. the sum of its current account and regular capital account are in surplus; and, the nation's central bank is selling foreign reserves.
- _____ 9. Under which of these exchange-rate systems is it unnecessary for the central bank to buy or sell foreign exchange?
- a. crawling peg
 - b. target zone
 - c. floating exchange rate**
 - d. currency board
- _____ 10. The exchange rate between German and Italian currency is:
- a. determined by a fully floating exchange rate.
 - b. fluctuates in a target zone.
 - c. one.**
 - d. set by the governments of Germany and Italy.
- _____ 11. Sterilized intervention
- a. changes the central bank's foreign reserves, but not the money supply.**
 - b. changes the central bank's foreign reserves and the money supply.
 - c. does not change either the central bank's foreign reserves or the money supply.
 - d. changes the money supply, but not the central bank's foreign reserves.

- _____ 12. If F_t is the forward exchange rate, and S_t the spot exchange rate (both expressed as the price of foreign currency), i_t is the domestic interest rate, and i_t^* is the foreign interest rate, which of the following correctly expresses covered interest parity?
- $F_t = \frac{1}{S_t} \left(\frac{1+i_t}{1+i_t^*} \right)$
 - $F_t = \frac{1}{S_t} \left(\frac{1+i_t^*}{1+i_t} \right)$
 - $F_t = S_t \frac{1+i_t}{1+i_t^*}$
 - $F_t = S_t \frac{1+i_t^*}{1+i_t}$
- _____ 13. If the spot rate for the U.K. pound is \$1.50/£, and the forward rate is \$1.55/£, then covered interest parity tells us:
- the U.S. dollar interest rate must be higher than the U.K. pound interest rate.**
 - the U.S. dollar interest rate must be lower than the U.K. pound interest rate.
 - the pound is expected to appreciate.
 - the pound is expected to depreciate.
- _____ 14. Suppose uncovered interest parity and covered interest parity both hold. Which of these statements is true? (Assume the exchange rate, S_t , and the forward rate, F_t are expressed as dollars per euro (that is, \$/€).)
- $E_t(S_{t+1}) = F_t$
 - $E_t(S_{t+1})(1+i_t(\text{€})) = F_t(1+i_t(\text{\$}))$
 - $E_t(S_{t+1})(1+i_t(\text{\$})) = F_t(1+i_t(\text{€}))$
 - $E_t(S_{t+1}) = S_t$
- _____ 15. If the expected \$/€ exchange rate 90 days from now is \$1.45/€, and the 90-day forward rate is \$1.43/€, an investor expects to profit by
- selling euros on at the 90-day forward rate, and planning to buy euros on the spot market in 90 days.
 - buying euros at the 90-day forward rate, and planning to sell euros on the spot market in 90 days.**
 - selling euros at the 90-day forward rate, and buying euros on the spot market today.
 - buying euros at the 90-day forward rate, and selling euros on the spot market today.

- _____ 16. According to the capital asset pricing model, an asset tends to have a positive excess return when its return
- has a greater variance than the variance of the return on the market portfolio.
 - has a smaller variance than the variance of the return on the market portfolio.
 - is positively correlated with the return on the market portfolio.***
 - is negatively correlated with the return on the market portfolio.
- _____ 17. The relationship that says the price of a good should be equal when sold in different locations is called:
- the Law of One Price.***
 - Covered Interest Parity.
 - Uncovered Interest Parity.
 - Relative Purchasing Power Parity.
- _____ 18. In actual tests of the forward-rate unbiasedness hypothesis in which the *ex post* rate of change of the exchange rate is regressed on the forward premium, the slope coefficient
- tends to be close to one in the data, as in the unbiasedness hypothesis.
 - tends to be negative in the data, while in the unbiasedness hypothesis it should be one.***
 - tends to be one in the data, while in the unbiasedness hypothesis it should be negative.
 - tends to be negative in the data, as in the unbiasedness hypothesis.
- _____ 19. According to the theory of Absolute Purchasing Power Parity,
- a country's real exchange rate should equal one.***
 - a country's real exchange rate should equal a constant.
 - a country's real interest rate should equal one.
 - a country's real interest rate should equal a constant.
- _____ 20. If a firm follows a local-currency pricing strategy for its exports, the short-run pass-through of the exchange rate to the buyer's price of the export is:
- zero***
 - 100%
 - 50%
 - 100%

Questions (5 points each)

1. Suppose the 30-day forward rate for euros is \$1.3105/€, and the spot rate is \$1.2995/€. Is the euro at a forward premium or discount? Express the forward premium or discount on the euro as a percentage per annum for a 360-day year..

The euro is at a forward premium.

$$\frac{1.3105 - 1.2995}{1.2995} \times 1200 = 10.16\%$$

2. Suppose an American bank sells investment advice to a British citizen, and is paid in British pounds. Is there a debit, credit, neither, or both recorded on the U.S. current account? Is there a debit, credit, neither, or both recorded on the U.S. regular capital account? What, if anything, is recorded on the official reserves transactions balance? How does this transaction affect the U.S. “balance of payments”?

Credit is on U.S. current account

Debit is on U.S. capital account

Nothing is recorded on the official reserves transactions.

The “balance of payments” is not affected.

3. Suppose the country of Graingerino has established a target zone for its currency, the knetter, in relationship to the U.S. dollar, with a range of \$0.99/knetter to \$1.01/knetter. As the exchange rate falls to \$0.99/knetter, what must the central bank of Graingerino do to keep the exchange rate in its target zone? How does this action affect Graingerino’s balance of payments?

The central bank must buy knettters using dollars.

Because Graingerino’s central bank is selling dollars, it records a surplus on its official reserve transactions, or a deficit on the balance of payments.

4. Display the balance sheet for a typical central bank. Display the main categories of assets and liabilities. List some types of Foreign Reserves.

<i>Assets</i>	<i>Liabilities</i>
<i>Domestic Assets</i> <i>Foreign Reserves:</i> <i>Foreign currency</i> <i>Gold</i> <i>IMF assets</i>	<i>Currency</i> <i>Deposits of banks at central bank</i>

5. Suppose the return on a 90-day safe U.S. dollar Treasury bill is 4.200% at an annualized rate. The return on a 90-day safe U.K. pound Treasury bill is 5.000%, again at an annualized rate. The current spot exchange rate is \$1.50/£. Using the formula for covered interest parity, what is the 90-day forward rate, \$/£? Show your calculations.

The annualized rate on U.S. Treasury bills is $4.2/4 = 1.05\%$

The annualized rate on U.K. Treasury bills is $5.0/4 = 1.25\%$

$$F = 1.50 \times \frac{1.0105}{1.0125} = 1.497$$

6. What does it mean for the forward exchange rate for a particular horizon, such as 90 days, to be an unbiased predictor of future spot exchange rates?

This means that $F_t = E_t(S_{t+90})$. The forward rate incorporates all time t information to make a forecast of the future spot exchange rate. The forecast is neither systematically too high or too low – the average difference between the forward rate and the realized future spot exchange rate is zero.

7. List four reasons why the law of one price might be violated.

- 1. Tariffs and other taxes*
- 2. Transportation costs*
- 3. Monopoly power/ pricing to market*
- 4. Sticky prices*
- 5. Other reasons*

8. What does “pricing to market” mean?

Pricing to market simply refers to the situation in which a firm sets different prices in different markets, so the law of one price may be violated.