University of CA, Davis
Department of Economics

Home Assignment 1 [HA1] Answer Key

1. I provide only the answer to 1.4 and 1.6, and a sample of how Table for 1.5 should look. The numbers for all other sub-points differ with student.

	$/£	Price of £5.6 UK book	Price of £8 UK book	price of UK/US books	£/$	Price of $10 US book	Price of UK exports US imports	Price of US exports UK imports	£ against $ & $ against £
				(relative)			Relative to A		
A	1.50	$8.4	$12	0.84	0.67	£6.7			
B	1.25	$7↓	$10	0.7↓	0.80	£8↑	↓	↑	↓ & ↑
C	1.75	$9.8↑	$14	0.98↑	0.57	£5.7↓	↑	↓	↑ & ↓

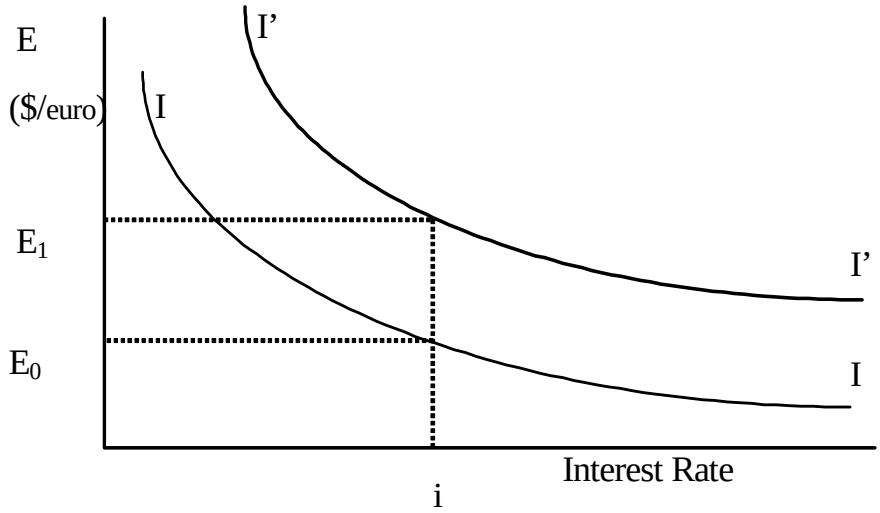
1.4 Answer: *The prices for KO can differ, because of market segmentation of UK and US students. There are artificial barriers, which limit arbitrage possibilities. For example, it is prohibited to import more than one copy of KO international edition into US. KO international edition and KO for US are identical in its context, but international edition has a soft cover and is substantially cheaper.*

1.6 Answer: *The prices for Harry Porter in UK and US should be equal, because of it is easy to arbitrage, and difficult to impose (and to justify the imposition) of export/ import restrictions. In this case, we will say that so called purchasing power parity (PPP) holds. We will address PPP in chapter 14.*

2. KO, Chapter 12, problem 2

Equation 12-2 can be written as CA = (S^p - I) + (T - G). Higher U.S. trade barriers may have little or no impact upon private savings, investment, and the budget deficit. If there were no effect on these variables, the current account would not improve with the imposition of tariffs or quotas. One could tell stories in which the effect on the current account goes either way. For example, investment could rise in industries protected by the tariff, worsening the current account. (Indeed, tariffs are sometimes justified by the need to give ailing industries a chance to modernize.) On the other hand, investment might fall in industries facing a higher cost of imported intermediate goods as a result of the tariff. In general, permanent and temporary tariffs have different effects. The point of the question is that to predict policy effects on the current account a rigorous macroeconomic analysis is required.

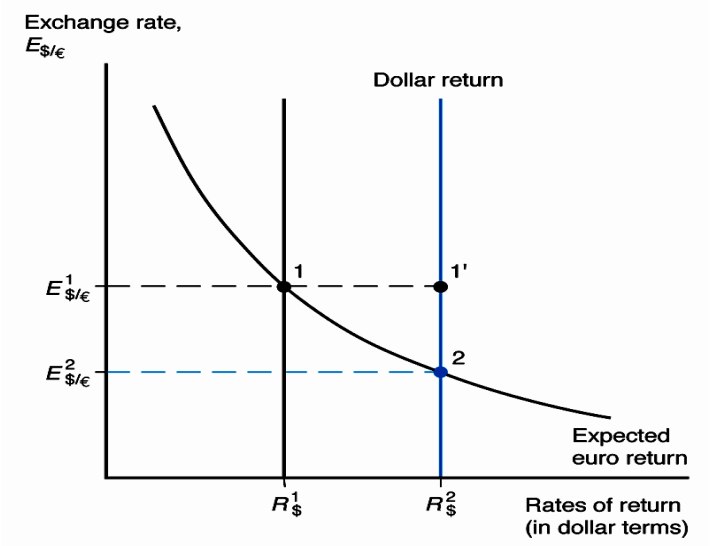
3. KO, Chapter 13, problem 6



If market traders learn that the dollar interest rate will fall soon, they revise upward their expectation for the dollar's depreciation in future. Thus, for the given current exchange rate and interest rate, there is a rise in the expected dollar return on euro deposits. The downward-sloping curve in the diagram above shifts to the right. Thus, there is an immediate dollar depreciation, as shown in the figure above where a shift in the interest-parity curve from II to I'I' leads to a depreciation of the dollar from E_0 to E_1.

4. Discusses the effects of a rise in the interest rate paid by euro deposits on the exchanger rate. Please, illustrate your answer with a graph.

Answer: For a given euro interest rate and constant expected exchange rate, a rise in the interest rate offered by dollar deposits causes the dollar to appreciate.



5. Explain what a "vehicle currency" is. Why is the U.S. dollar considered a vehicle currency?

Answer: A vehicle currency is one that is widely used to denominate international contracts made by parties who do not reside in the country issuing the vehicle currency.

Over than ninety percent of foreign exchange transactions involve exchanges of foreign currencies for U.S. dollars; therefore, the dollar is considered a vehicle currency.

6. What are the factors affecting the demand for foreign currency?

Answer: Three factors affect the demand for foreign currency. They are expected return, risk, and liquidity.

7. There are two investors interested in GM stock which is priced at $100/share as of today. Mr. Right and Mr. Wrong forecast (i.e., expect) that the stock value will be $80/share and $120/share respectively in 1 month. Mr. Right short sells GM stock such that he agrees to sell 10,000 GM shares for $90/share in 1 month. Mr. Wrong buys this contract.

a) What are the expected profits of the two investors per share?
[[One can rephrase this as: How much does each investor expects to make from the contract?]]

b) Suppose that the price realization was $85/per share, calculate the losses or profits of the two investors.

Note: Short selling is a promise (contract) to sell on a future date specified by the contract some asset, which you possibly (and likely) do not own at the time of your promise (i.e., when you sign the contract).

7a) Answer
Expected Mr. Wrong earnings per share=$120 -$90=$30
Expected Mr. Right earnings per share=$90-$80=$10

*Expected profit of Mr. Wrong = (120 - 90)*10,000=$300,000*
*Expected profits of Mr. Right = (90-80)*10,000=$100,000*

Mr. Wrong believes that he will be able to buy the GM stock from the market at the price of $80/share and sell this stock for $90/share to Mr. Wrong. Thus, Mr. Right expects to make a profit of $100,000, and his expected per share profit is $10. Mr. Wrong thinks that he can sell the GM stock that he can buy at $90/share for $120/share and this will result in $30 profit per share.

b) If the actual price realization for MG stock (at the date when the contract between Mr. Wrong and Mr. Right expires) is $85/share, actual gains / losses are:
7b) Answer: As we have learned on Lecture 8, at the expiration date of the contract short selling an asset (in this problem GM stock is this asset), the value of the contract is equal to the market price of the underlying asset. The calculation below demonstrates the intuition behind this statement.

*Actual profits of Mr. Right = (90-85)*10,000=$50,000*
*Actual losses of Mr. Wrong = (90-85)*10,000=$50,000*

Mr. Wrong ends up paying more than the market price and incurs a loss of $50,000. Mr

Right sold GM stock short above the realized market price and he would make profit. .Notice, that with such a contract the gain of one investor (Mr. Right) is equal to the loss of another one (Mr. Wrong).

8. Multiple Choice Questions:
Please, record your answers in the table below (second column). Leave the third empty column for grading.

Question #	Correct Answer	Relevant KO pages
1	**E**	**297**
2	**E**	**298**
3	**A**	**298**
4	**C**	**300**
5	**C**	**302**
6	**B**	**304**
7	**C**	**307**
8	**B**	**304**
9	**A**	**305**
10	**B**	**305**
11	**E**	**327**
12	**A**	**327**
13	**E**	**331**
14	**D**	**332**
15	**A**	**333-334**
16	**A**	**339**
17	**A**	**339**
18	**A**	**331, footnote 4**
19	**C**	**332**
20	**A**	**327**

Chapter 12:
1) The GNP of the United States in 2000 was about
A. 7 trillion dollars.
B. 1 trillion dollars.
C. 5 trillion dollars.
D. 6 trillion dollars.
E. 10 trillion dollars.

2) National income equals GNP
A. less depreciation, less net unilateral transfers, less indirect business taxes.
B. less depreciation, plus net unilateral transfers, plus indirect business taxes.
C. less depreciation, less net unilateral transfers, plus indirect business taxes.
D. plus depreciation, plus net unilateral transfers, less indirect business taxes.
E. less depreciation, plus net unilateral transfers, less indirect business taxes.

3) GDP is supposed to measure
A. the volume of production within a country's borders.
B. the volume of services generated within a country's borders.
C. the volume of production of a country's output.
D. GNP plus depreciation.
E. None of the above.

4) In open economies,
A. saving and investment are necessarily equal.
B. as in a closed economy, saving and investment are not necessarily equal.
C. saving and investment are not necessarily equal as they are in a closed economy.
D. saving and investment are necessarily equal contrary to the case of a closed economy.
E. None of the above.

5) The CA is equal to
A. Y – (C-I+G).
B. Y + (C+I+G).
C. Y – (C+I+G).
D. Y – (C+I-G).
E. Y – (C+I+G) = -CA, (i.e., minus the CA).

6) For open economies
A. S = I.
B. S = I +CA.
C. S = I – CA.
D. S > I + CA.
E. S < I + CA.

7) Ricardian equivalence argues that when the government cuts taxes and raises its deficit,
A. consumers anticipate that they will face lower taxes later to pay for the resulting government debt.
B. consumers anticipate that they will receive better services from the government.
C. consumers anticipate that they will face higher taxes later to pay for the resulting government debt.
D. consumers anticipate it will affect their future taxes, in general in the direction of lowing future taxes.
E. None of the above.

8) A closed economy
A. can save either by building up its capital stock or by acquiring foreign wealth.
B. can save only by building up its capital stock.
C. can save only by acquiring foreign wealth.
D. cannot save either by building up its capital stock or by acquiring foreign wealth.

E. None of the above.

9) Government savings, S^g, is equal to

A. T – G.
B. T + G.
C. T = G.
D. T + G – I.
E. None of the above.

10) In a closed economy, private saving, S^p, is equal to

A. I - (G – T).
B. I + (G – T).
C. I + (G + T).
D. I - (G + T).
E. I + (G – T) + C.

Chapter 13:

11) When a country's currency depreciates,
A. foreigners find that its exports are more expensive, and domestic residents find that imports from abroad are more expensive.
B. foreigners find that its exports are more expensive, and domestic residents find that imports from abroad are cheaper.
C. foreigners find that its exports are cheaper; however, domestic residents are not affected.
D. foreigners are not affected, but domestic residents find that imports from abroad are more expensive.
E. None of the above.

12) Which one of the following statements is the most accurate?
A. A depreciation of a country's currency makes its goods cheaper for foreigners.
B. A depreciation of a country's currency makes its goods more expensive for foreigners.
C. A depreciation of a country's currency makes its goods cheaper for its own residents.
D. A depreciation of a country's currency makes its goods cheaper.
E. None of the above

13) Which one of the following statements is the most accurate? The term spot exchange rate is
A. misleading because even spot exchanges usually become effective only three days after a deal is struck.
B. misleading because even spot exchanges usually become effective only four days after a deal is struck.
C. misleading because even spot exchanges usually become effective only five days after a deal is struck.
D. misleading because even spot exchanges usually become effective only six days after a deal is struck.
E. misleading because even spot exchanges usually become effective only two days after a deal is struck.

14) Forward and spot exchange rates
A. are necessarily equal
B. do not move closely together
C. The forward exchange rate is always above the spot exchange rate.
D. while not necessarily equal, do move closely together.
E. None of the above.

15) An American put option on foreign exchange
A. gives the buyer the right to sell the foreign currency at a known exchange rate at any time during the period of the option.
B. gives the seller the right to sell the foreign currency at a known exchange rate at any time during the period of the option.
C. gives the buyer the right to sell the foreign currency at a known exchange rate at a specific time in the future.
D. obligates the buyer to sell the foreign currency at a known exchange rate at any time during the period of the option.
E. None of the above.

16) If the dollar interest rate is 10 percent, the euro interest rate is 6 percent, and the expected return on dollar depreciation against the euro is zero percent, then
A. an investor should invest only in dollars.
B. an investor should invest only in euros.
C. an investor should be indifferent between dollars and euros.
D. It is impossible to tell given the information.
E. All of the above.

17) If the dollar interest rate is 10 percent, the euro interest rate is 12 percent, and the expected return on dollar depreciation against the euro is negative 4 percent, then
A. an investor should invest only in dollars.
B. an investor should invest only in euros.
C. an investor should be indifferent between dollars and euros.
D. It is impossible to tell given the information.
E. All of the above.

18) Which one of the following statements is the most accurate? Trades of U.S. dollars for Canadian dollars in New York are executed with
A. a one-day lag.
B. a two-day lag.
C. a three-day lag.
D. a four-day lag.
E. a zero-day lag.

19) A foreign exchange swap
A. is a spot sale of a currency.
B. is a forward repurchase of the currency.
C. is a spot sale of a currency combined with a forward repurchase of the currency.
D. is a spot sale of a currency combined with a forward sale of the currency.

E. None of the above.

20) How many British pounds would it cost to buy a pair of American designer jeans costing $45 if the exchange rate is 2.00 dollars per British pound?
A. 22.5 British pounds
B. 32.5 British pounds
C. 12.5 British pounds
D. 40 British pounds
E. 30 British pounds