

TOWSON UNIVERSITY
COLLEGE OF BUSINESS AND ECONOMICS
FIN435.101

Dr. M. Rhee
Fall 2009

1. Describe how the changes in the following macroeconomic variables effect the exchange rates? (provide logical rationale and use diagrams)

a) higher interest rate in Germany

=> Higher German interest rates

=> Demand for euro increases to invest more in Germany

=> (\$) price of euro=exchange rate increases, stronger euro & weaker \$

b) Comment on the statement, "a stronger economy has a stronger currency" Is that true? Why and why not? Let's examine what happens if the US economy get stronger

1) Consumption side

=> Greater demand for foreign goods (as well as US) products

=> Demand for FC increases

=> (\$) price of FC (index, average value of all FCs)=exchange rate increases, weaker \$

2) Investment side

=> Increased investment in the stronger US economy

=> Demand for US\$ increase=supply of FC increases

=> (\$) price of FC=exchange rate drops, strong \$

Between 1) Consumption side and 2) Investment side, Investment side tends to be a dominant force

=> (\$) price of FC index=exchange rate drops, strong \$ (Stronger economy has a stronger currency)

c) Comment on the following statement.

"An increase in the US interest rate would result in an influx of foreign capital as everyone wants to invest in the US for a higher return. The demand for US \$ will increase as a result. The demand for \$ is the same as the supply of a foreign currency. An increase in the supply of a foreign currency would decrease the \$ price of a foreign currency, i.e., the exchange rate. A decrease in the exchange rate would, however, causes an increase in the demand for the foreign currency, causing the foreign currency stronger and the US\$ gets weaker. The conclusion is that an increase in the US interest rate would result in weaker US\$."

=> Everything is fine until the phrase "A decrease in the exchange rate would, however, causes an increase in the demand for the foreign currency, causing - --". The sentence alone may be ok without having it in the context of a shift of the supply of a foreign currency as we are now on a new supply curve and we cannot continue talking about "moving along the same old supply or demand curve." We should have stopped right after the sentence "An increase in the supply of a foreign currency would decrease the \$ price of a foreign currency, i.e., the exchange rate."

2. a) How many dollars does it take to get 10 SFs if SF/\$=1.4?

=> SF 10 * (1/1.4) (\$/SF) = \$7.14

b) If the price of a twinkie drops 25%, how much the dollar has gained its value?

=> Let's say $P_0 = \$1/TW$, 25% drop of TW price = $\$.75/TW$ (75 cents). \$ value appreciation = $(S_0 - S_1)/S_1 = (1 - 0.75)/0.75 = 33.3\%$

c) yen/\$ was 201.6 in 1948 and it is now 108.2. How much yen has appreciated from 1948?

=> Yen appreciation rate against \$ = $(S_1 - S_0)/S_0$, since we have European terms, we can instead use $(201.6 - 108.2)/108.2 = 86.32\%$. Otherwise, we can determine the American term exchange rates $S_0 = 1/201.6 = 0.00496$, $S_1 = 1/108.2 = 0.00924$, and the yen appreciation rate = $(0.00924 - 0.00496)/0.00496 = 86.29\%$

d) yen/\$ = 108.2, BP/\$ = 0.548. What is the BP/yen?

=> BP/yen = $(BP/\$)*(\$/yen) = 0.548*(1/108.2) = 0.005065$

3. A MNC has the following cash flows from their operations around the world. What is the \$ amount of total cash flows from all the operations?

US operation: \$100m, Canadian operation: C\$150m, Japanese operation: 12billion yen, UK operation: 70m pounds

CAD/USD=1.2783, GBP/USD=0.8702, JPY/USD=112.3968

If C\$ and Japanese yen have depreciated 10% against the US\$, what would be the new \$ amount?

=> \$ amount of total cash flows = \$100m + C\$150m*(1/1.2783) + BP70m*(1/0.8702) + yen 12,000m*(1/112.3968) = US\$404.55m

=> \$100m + C\$150m*(1/1.2783)*0.9 + BP70m*(1/0.8702) + yen 12,000m*(1/112.3968)*0.9 = US\$382.14m

4. Using the information given in the table below, provide your answers.

1) What is the US\$/yen exchange rate?

=> 0.008593

2) What would be the Can \$/AU\$ exchange rate?

=> C\$/A\$ = (C\$/US\$)*(US\$/A\$) = 1.1170*(1/1.3303) = 0.83966

Currency	U.S. \$	¥en	Euro	Can \$	U.K. £	AU \$	Swiss Franc
Last Trade	N/A	11:29am ET	11:29am ET	11:29am ET	11:29am ET	11:29am ET	11:29am ET
1 U.S. \$ =	1	116.3750	0.7844	1.1170	0.5262	1.3303	1.2382
1 ¥en =	0.008593	1	0.006740	0.009598	0.004521	0.011431	0.010640
1 Euro =	1.2749	148.3607	1	1.4239	0.6708	1.6960	1.5785

5. a) Differentiate between gold standard and gold exchange system.

=> All currencies are fully convertible into gold in case of classical gold standard. In case of gold exchange, only us\$ is fully convertible into gold and other currencies values are pegged (fixed) relative to the US\$.

b) Identify the problem associated with bimetallism and explain how you might be able to save the system.

=> Gresham's Law. Discoveries of gold mines toward the end of 19th century made gold relatively abundant. At the 16:1 ratio between silver and gold, please prefer using relatively abundant gold as money. Silver disappeared as money. Let the market determine the fair exchange rates between the two metals so that people could have found that the value of the two metals at the market rate is almost equal.

c) J curve?

=> It takes time to see an improvement in trade balance as the domestic currency value gets lowered. Initially, the trade balance gets worsened until the exchange rate change has an impact on the consumption and production of the economy. It is like our spending on oil. When the price of oil goes up, we spend more money on oil (increased price x quantity used) until the consumption of decreases substantially in response to increased price.

d) SDR?

=> Official currency created by IMF.