14.11: Solutions to CH 11 Exercises

Question 1

See discussion in Ch 11.

Question 2

A managed floating system means that currency prices are predominantly determined by supply and demand conditions in an open market (the floating part). However, governments can (and do) occasionally intervene in the currency markets (either directly or indirectly) to try to support a currency that they believe is falling too rapidly or to pressure a currency that is rising too rapidly. Governments typically can't counter market forces for an infinite amount of time so usually this is a temporary tactic designed to reduce extreme swings. The "floating" part of the managed floating system is far more prevalent than the "managed" part as government intervention is usually minimal.

In addition, not all countries choose to follow the managed floating system. Instead, some operate on a fixed (pegged) exchange rate system while others adopt a policy (either officially or unofficially) of dollarization. The advantage of both of these systems is greater currency stability. However, in a policy of pegged exchange rates the country gives up the ability to use monetary policy as an economic tool and instead must use it as a currency tool. In an official dollarization policy, the country gives up control of a currency system (and their monetary policy is determined indirectly by the US).

Question 3

A spot rate of exchange is the exchange rate in place today for transactions that are taking place now. If I want to convert US Dollars into Euros today, I would be using the spot rate of exchange.

A forward rate of exchange is the exchange rate in place today for transactions that will take place at a later date. For instance, let's assume that I am selling material to a customer in Japan and the price is set in yen. If I give them 30-days to pay, I am exposed to currency risk. If the dollar gets weaker relative to the yen, the yen that they pay me will be worth more dollars and I will have a currency gain. On the other hand, if the dollar gets stronger relative to the yen, the yen that they pay me will be worth fewer dollars and I will have a currency loss. If I want to eliminate this currency risk, I can sell yen in the forward market (one month forward). I will agree to sell yen for dollars at a rate agreed upon today, but not actually carry out the transaction for one month. That way, when my customer pays me in yen, I already know what I will get in dollars and have eliminated the currency risk.

Question 4

Since Citi is lending in Euros and will receive interest and principal repayment in euros, they will benefit from a weaker US dollar. A weaker US dollar means each euro that they receive from the loan will buy more dollars when converted. They will earn the return from the loan, plus a bonus return from the exchange rate. On the other hand, a stronger US dollar would mean that each euro received would buy fewer dollars. Thus, the would earn the return from the loan, but lose money from the exchange rate.

Question 5

Part 5a

The US investor is primarily concerned with her return in US dollars. As the foreign investments would offer investment income (dividends, capital gains, interest) in foreign currency, this investment income would have to then be converted into dollars. With a stronger US dollar, the US investor would be able to purchase fewer dollars with the foreign currency earned on her investment and thus would make a lower return than anticipated. A stronger US dollar would have a negative impact on dollar-based returns from foreign investments.

Part 5b

This would work in an opposite manner as above. The foreign investor would be concerned with his return in his home currency. As his investment income would be in dollars, each dollar received would now buy more of the home currency. This would mean a higher rate of return in his home currency. A stronger US dollar would have a positive impact on foreign- currency based returns from investments within the US.

Part 5c

A stronger US dollar means that foreign manufacturers would be able to charge less in US dollars and still get the same amount of foreign currency after currency conversion. US manufacturers would also feel price pressures on products sold in the US as they would need to keep prices down to stay competitive. Therefore, a stronger US dollar is likely to lead to lower inflation in the US.

Part 5d

As with the US-based investor, the US-based manufacturer is concerned about cash flows in dollars. As selling items outside the US results in receiving revenues in foreign currencies, these currencies must be converted to US dollars. A stronger US dollar means each unit of foreign currency will buy fewer dollars. Thus, a stronger US dollar will tend to hurt US-based manufacturers that sell their products internationally.

Part 5e

A foreign-based manufacturer is concerned about their cash flows in their home currency. A stronger US dollar means that each dollar earned in revenues will translate into more of their home currency. Thus, a stronger US dollar will tend to help foreign-based manufacturers that sell their products in the US.

Problem 1

(2,000,000 Euros)($1/0.7347 Euros) = $2,722,199.54

Problem 2

($455)(3.0875 Pesos/$) = 1404.81 pesos

Problem 3

Last year, $1 could buy 1.0422 Canadian Dollars. Now, $1 can buy 1.1304 Canadian Dollars. Since each $1 is buying more Canadian Dollars, then the US $ has gotten stronger relative to the Canadian Dollar.

Problem 4

Last year, 1 baht could buy $0.0267. Now, 1 baht can buy $0.0308. Since each baht is buying more dollars, the Thai baht is stronger relative to the US dollar ⇒ the US dollar is weaker relative to the Thai baht.

Problem 5

(118.43 yen/$)($1/10.998 pesos) = 10.768 yen/peso
(10.998 pesos/$)($1/118.43 yen) = 0.0929 peso/yen
