## Week 3 Homework

Chapter 7) **Covered Interest Arbitrage** Assume the following information:

Spot rate of Mexican peso	<u>\$.100</u>
<u>180-day forward rate of Mexican</u> peso	<u>\$.098</u>
180-day Mexican interest rate	<u>6%</u>
180-day U.S. interest rate	<u>5%</u>

7) Given this information, is covered interest arbitrage worthwhile for Mexican investors who have pesos to invest? Explain your answer.

First we will look at the conversion from peso to dollar and invested at US interest,

100,000 x.100 = 10,000

Then we add the interest gained

10,000 x (1.05)= 10,500

Now we convert back to pesos

10,500/.098 = 107,142.86

Now we look at the interest gained in Mexican currency then converted 180 days later.

100,000 x (1.06)= 106,000

The interest gained over the course of 180 days is greater by investing through the US instead locally.

13) **Interest Rate Parity** Consider investors who invest in either U.S. or British one-year Treasury bills. Assume zero transaction costs and no taxes.

13a) If interest rate parity exists, then the return for U.S. investors who use covered interest arbitrage will be the same as the return for U.S. investors who invest in U.S. Treasury bills. Is this statement true or false? If false, correct the statement.

True

13b) If interest rate parity exists, then the return for British investors who use covered interest arbitrage will be the same as the return for British investors who invest in British Treasury bills. Is this statement true or false? If false, correct the statement.

True

27) **Interpreting Changes in the Forward Premium** Assume that interest rate parity holds. At the beginning of the month, the spot rate of the Canadian dollar is \$.70, while the one-year forward rate is \$.68. Assume that U.S. interest rates increase steadily over the month. At the end of the month, the one-year forward rate is higher than it was at the beginning of the month. Yet the one-year forward discount is larger (the one-year premium is more negative) at the end of the month than it was at