THE HONG KONG POLYTECHNIC UNIVERSITY
HONG KONG COMMUNITY COLLEGE

Subject Title : International Finance **Subject Code** : CCN2122

Session : Semester One, 2016/17

Numerical Answers

Question B1

(a) e = 1.11/1.07 – 1 = 0.0374

(b)
Inflation in US = 1.11/1.02 - 1= 8.82%
Inflation in SG = 1.07/1.02 -1 =4.9%

e = 1.0882/1.049 - 1 = 0.0374
$0.70 × (1 + 0.0374) = $0.7262

Question B2

(a)
Premium received per unit:
$0.02
Payoff per unit:
($1.77 - $1.83) = $-0.06
Net loss per unit:
$0.02-$0.06 = -$0.04
Net loss = 50,000 units x (-$0.04) = -$2,000

(b)
The maximum profit he could earn by selling the call option is the premium, which is $0.02 x 50,000 units = $1,000

Question C1

(a)
e = 1.03/1.05 – 1 = -1.90%
One year spot = $1.2 x (1-1.9%) = $1.1771

(b)
1. Convert dollars to pounds $100,000/ $1.2 = 83,333.33 pounds
2. Invest pounds for 1 year and receive 83,333.33 pounds x 1.05 = 87,500 pounds
3. Convert pounds back to USD and receive 87,500 x $1.1 = $96,250
The percentage return is $96,250/100,000 -1 = -3.75%

(c)
Beth's strategy would be successful if the spot rate of the pounds in one year is greater than $1.1771.

Question C2

(a)(i)
Forward hedge:
Sell S$500,000 × $0.62 = $310,000

(a)(ii)
Money market hedge:

1. Borrow S$471,698 (S$500,000/1.06 = S$471,698)
2. Convert S$471,698 to $283,019 (at $0.60 per S$)
3. Invest the $283,019 at 8% to earn $305,660 by the end of the year

(c)

Possible Spot Rate	Total Amount Received for S$500,000	Probability
$0.61	**$305,000**	20%
$0.63	**$315,000**	50%
$0.67	**$335,000**	30%

Expected value = $305,000 x 0.2+$315,000 x 0.5+$335,000 x 0.3 = **$319,000**